

## ORAL HEALTH: A LINK TO GENERAL HEALTH

The "snapshot" of oral health status in Illinois has been collected and provided to you through the Oral Health Education Program at the Illinois Department of Public Health.

The Illinois Department of Public Health, through a cooperative agreement with the U.S. Centers for Disease Control and Prevention (CDC), is working to collect and analyze data on the oral health of Illinoisans. By collecting oral health status and access data, it will be possible to monitor oral disease trends over time and document improvement in oral health among Illinois residents.

## I. Children's Oral Health

## A. Project Smile

Project Smile, a statewide oral health survey of Illinois school children in grades one, two and eight was conducted during the 1993-1994 school year. The survey demonstrated that a large number of Illinois children still suffer from preventable oral disease. Project Smile provides the most reliable estimates of oral disease in children ever calculated in Illinois.

**Dental Decay:** (destruction of tooth surface caused by repeated acid attacks from a mixture of bacteria and food sources)



**54 percent** of the children had evidence of dental decay on either baby teeth or permanent teeth.



**38 percent** of 6- to 8-year-old children had **untreated** dental decay on their baby teeth or permanent teeth.



**30 percent** of 15-year-old children had **untreated** dental decay on their baby teeth or permanent teeth.

**Dental Sealants:** (plastic coatings placed on chewing surfaces of back teeth to help prevent dental decay)



13 percent of the children had at least one dental sealant on their permanent teeth.



**55 percent** of the children were **in need** of dental sealants.

**Gingivitis:** (common type of gum disease)



**42 percent** of the children had gingivitis.

#### **Project Smile Oral Health Disparities:**



The survey results demonstrated that white children had the highest decay free rate in permanent teeth (78%), followed by black children (76%) and Hispanic children (67%).



The presence of **sealants** on permanent teeth was most common in white children (18%). Only 4 percent of Hispanic children and 3 percent of black children had sealants.



Gingivitis was highest among black children (49%), followed by Hispanics (46%) and whites at (39%).

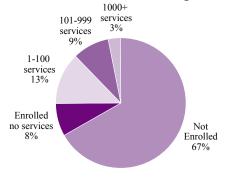
## **B.** Early Childhood Caries

Early Childhood Caries (ECC) is a form of dental decay found in infants and young children. It occurs when a child's teeth are frequently exposed to sugary liquids for long periods of time without adequate cleaning. In the fall of 2001, an ECC prevalence study was conducted among 2- to 4-year-old children enrolled in the Special Supplemental Program for Women, Infants and Children (WIC) program. It was found that 33 percent of 3-year-olds showed signs and symptoms of ECC. This translates to approximately 26,400 children in the WIC program who need dental care due to ECC.

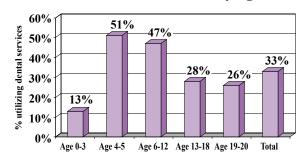
#### C. Access to Oral Health Care for Children

In Illinois, approximately 1.1 million children are enrolled in Medicaid/State Children's Health Insurance Plan (SCHIP). Children enrolled in Medicaid/SCHIP have difficulty accessing oral health care for a variety of complex reasons. In 2000, a study of access to oral health care for Illinois low-income children showed only 33 percent of children enrolled in Medicaid or SCHIP utilized oral health care during the year. The study also found that only 34 percent of active general and pediatric dentists were enrolled as Medicaid providers, and most of those who participated only provided a small volume of services (1-100 procedures during the year).

#### **Medicaid Provider Participation**

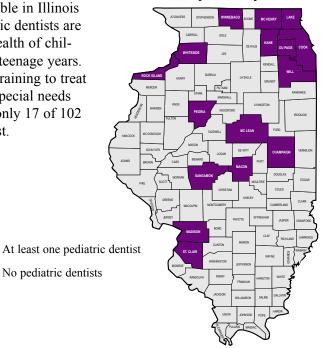


## Dental Services Use by Children Enrolled in Medicaid, by Age



The problem is further compounded by the lack of pediatric dentists available in Illinois to treat young children. Pediatric dentists are specialists who treat the oral health of children from infancy through the teenage years. Pediatric dentists also receive training to treat both children and adults with special needs and/or disabilities. In Illinois, only 17 of 102 counties have a pediatric dentist.

#### Pediatric Dentist Map by County



#### **Preventing ECC**

- Never put an infant or toddler to sleep with a bottle that contains milk, formula, juice or any other sugared liquid.
- Begin oral care early by wiping a baby's gums with a gauze pad or washcloth.
- Begin brushing with water as soon as the first tooth appears.
- Children should begin drinking from a cup by age 1.
- Talk with your child's dentist about scheduling a visit soon after the first tooth appears or no later than age 1. During the visit, the dentist can discuss his/her fluoride needs.

## Preventing Pre-term Low Birth Weight Babies

- Talk to an oral health professional as soon as you become pregnant about receiving an oral examination. It is a myth that women should avoid seeing a dentist during pregnancy. In fact, recent studies showed that women who received dental treatment for gum disease during their pregnancy decreased the risk for having a pre-term baby.
- Keep the mouth clean by brushing and flossing daily and review your technique when you have your appointment with an oral health professional.

## II. Pregnancy and Oral Health

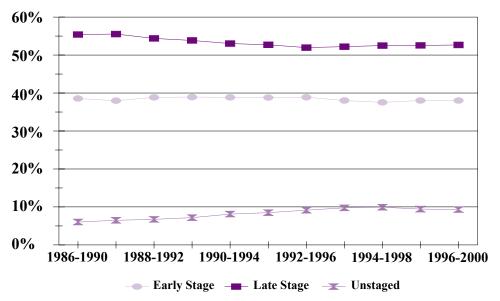
New research highlights the infectious and transmissible nature of oral bacteria. There is a strong link between the poor oral health of expectant mothers and preterm low birth weight babies. After the babies are born, mothers can also transmit decay causing bacteria through day-to-day care giving.

All pregnant women should see the dentist during their pregnancy for a preventative cleaning, yet only 38 percent of new mothers in Illinois reported going to the dentist during their pregnancy in the year 2000. Because such a small percentage of mothers are seeking dental care, they are not getting a chance to be counseled by dental care professionals on oral health care issues. Only 36 percent of new mothers reported that a dental or other care worker talked with them about how to care for their teeth and gums during their pregnancy.

## III. Oral Cancer

Among adults, oral cancer is also a significant concern. Survival and treatment outcomes depend largely on stage of diagnosis. Early detection has the potential to improve the prognosis and quality of life for those diagnosed with oral cancer. Illinois oral cancer statistics show that less than 40 percent of oral cancer cases are diagnosed at an early stage.

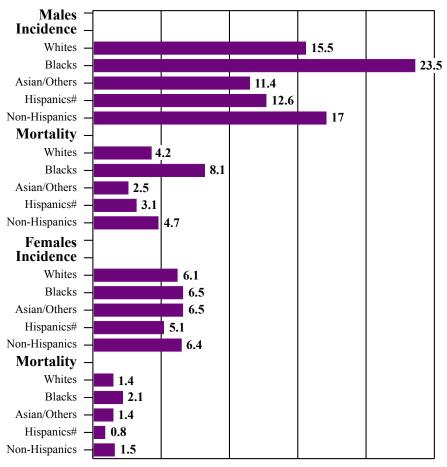
Stage at Diagnosis of Oral Cavity and Oropharyngeal Cancer Incidence Average Annual Percentages for Five-year Time Periods All Races, Both Sexes, Illinois, 1986-2000



#### **Oral Cancer Disparities**

As with most cancers, there is evidence of gender, race and ethnic disparities in the occurrence of oral cancer. **Black males have the highest number of new cases being diagnosed.** Women have substantially lower mortality within every race/ethnic group as compared to men. However, during recent decades tobacco use has increased among women and will likely result in higher rates over time.

## Oral Cavity and Oropharynx - Incidence and Mortality, 1996-2000 Five-year Average Annual Age-adjusted Cancer Rates by Gender, Race and Ethnicity



5 year Average Annual Age-adjusted Rates (2000 Standard)

#### IV. Oral Health and General Health

In addition to expectant mothers, other adults also are in need of oral care. Poor oral health has been linked to the following illnesses or conditions: diabetes, respiratory illness and cardiovascular disease. Despite the link of the above conditions to poor oral health, there are still many Illinoisans who do not receive oral health care.



72 percent of adults visited the dentist within the past year for any reason.



69 percent of adults had their teeth cleaned by a dentist or dental hygienist within the past year.



31 percent of adults had lost one to five teeth due to dental decay or gum disease.



14 percent of Illinois adults needed to see a dentist during the past year, but could not afford to go because of cost.



More than **one-third** of Illinois adults **do not have any form of dental insurance**.

# Preventing Oral and Pharyngeal Cancer

- Tobacco use and alcohol use are the greatest risk factors for developing oral cancer, especially when someone is a user of both. Quitting tobacco and alcohol can significantly lower risk.
- ✓ The American Cancer Society recommends that adults between the ages of 18 and 39 should have an oral cancer exam once every three years. Adults 40 and older should be screened annually.
- Eat a healthy diet. Talk with your doctor if you feel that you are not getting all the vitamins that you need from foods. Recent studies show that certain vitamins may help prevent oral cancer.

## V. Safety Net Dental Clinics

Safety net dental clinics provide a much needed service to Illinois communities. The mission of the safety net dental clinic is to provide oral care to underserved populations such as those with low incomes, Medicaid recipients, the uninsured and underinsured. Without these important service providers, many Illinois residents would suffer from untreated dental problems. There are approximately 120 safety net dental clinics that have been developed in Illinois. However, more are needed to ensure that the underserved receive necessary oral health services.

## VI. Community Water Fluoridation

Fluoridation has been recognized as one of the 10

greatest public health achievements of the 20th century and is a safe, cost effective way of preventing tooth decay. The average cost to the water system for this effective preventive program is approximately 50 cents per person per year. Many Illinois communities began fluoridating their drinking water supplies as early as 1947. Today, more than 93 percent of the population in Illinois receives fluoridated drinking water. However, there are still a significant number of residents who may not receive the benefits of fluoride in their water, such as mobile home parks and individuals on private wells. Testing of private wells is an important step in determining if there is naturally occurring fluoride present in the water supply. Knowing this information will allow the private well owner to make decisions about supplemental fluoride usage. For more information about community fluoride levels, please visit the U.S. Centers for Disease Control and Prevention Web site at www.cdc.gov/oralhealth.

#### VII. IFLOSS Coalition



In 1998, a private-public partnership called the IFLOSS Coalition was formed by communities working to improve oral health in Illinois. The coalition was developed to help expand safety net clinics and outreach programs for uninsured

and under-insured individuals. Although the coalition is striving to become well established in Illinois, more partners are needed to form a statewide collaborative in order to reduce the burden of oral disease in this state. For more information on how to become a member, please contact the IFLOSS Coalition at 217-789-2182 ext.132 or www.IFLOSS.org.

#### VIII. State Oral Health Plan

Under the leadership of the Illinois Department of Public Health, the Illinois Oral Health Plan was developed as a response to the "Call to Action" outlined in the Surgeon General's Report (May 2000) for improving the nation's oral health. The plan outlines goals and strategies specific to Illinois in improving oral health for our residents. To learn more about the plan and how to obtain a copy, please contact the IFLOSS Coalition at 217-789-2182, ext. 132.



For more information about this document or other oral health education information, please call the Illinois Department of Public Health, Division of Oral Health at 217-785-4899. Or you may visit the Illinois Department of Public Health Web site at <a href="https://www.idph.state.il.us">www.idph.state.il.us</a>.

#### Sources

- 1. Illinois Department of Public Health, The Oral Health Status of Illinois Children 1985-1996.
- Illinois Department of Public Aid, Bureau of Rate Development and Analysis, October 2003
   Enrollment Status.
- 3. <a href="http://www.uic.edu/sph/irhwc/irha%20report%20gb%20final.pdf">http://www.uic.edu/sph/irhwc/irha%20report%20gb%20final.pdf</a>, Byck, Gayle R. Ph.D., Cooksey, Judith M.D. M.P.H., and Surrey Walton Ph.D. *Access to Oral Health Care for Medicaid Children in Illinois: A focus on Rural Illinois*, Illinois Center for Health Workforce Studies, Chicago, IL February 2001.
- 4. Illinois Department of Public Health, Center for Health Statistics, Illinois Pregnancy Risk Assessment Monitoring System 2000.
- 5. Illinois Department of Public Health, Illinois State Cancer Registry, Incidence Data January 2003 Mortality Data, Death Master File 1996-2000.
- 6. Illinois Department of Public Health, Center for Health Statistics, Illinois Behavioral Risk Factor Surveillance System 2001.