



# The Illinois Oral Health Surveillance System (IOHSS)

Burden Document  
2004-2006



# Table of Contents

- Acknowledgements . . . . . 1
- Introduction . . . . . 1
- Why oral health? . . . . . 1
- What is a burden document? . . . . . 1
- What is surveillance? . . . . . 2
- What is the National Oral Health Surveillance System? . . . . . 2
- What is the Illinois Oral Health Surveillance System? . . . . . 2
- What are the IOHSS indicators and its data sources? . . . . . 2
- Table 1: IOHSS Indicators by Data Sources . . . . . 3
- What can be learned from Behavioral Risk Factor Surveillance System data? . . . . . 4
- What is shown from Pregnancy Risk Assessment and Monitoring System? . . . . . 5
- What is the impact of oral cancer on Illinois as seen by the Illinois State Cancer Registry –  
oral and pharyngeal cancer data? . . . . . 6
- What insights come from the Illinois Department of Healthcare and Family Services data? . . . . . 11
- What insights come from the Illinois Department of Financial and Professional Regulation data? . . . . . 13
- Illinois Department of Public Health, Division of Oral Health . . . . . 14
  - What is monitored with the Illinois Fluoridation Reporting System data? . . . . . 14
  - What was learned from the Dental Sealant Grant Program data? . . . . . 16
  - What is provided by the Oral Health Needs Assessment and Planning Program data? . . . . . 17
  - How is Craniofacial Anomaly Program data used? . . . . . 18
  - Public Health Dental Clinics . . . . . 20
  - What is the oral health status of third grade children in Illinois? . . . . . 21
  - How does Illinois measure against federal guidelines for oral health? . . . . . 23
- Appendix 1: Useful links/Data resources . . . . . 24
- Appendix 2: Acronyms . . . . . 25

# Acknowledgements

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# Introduction

This document of oral health status in Illinois has been collected and provided to you through the Illinois Department of Public Health's Oral Health Surveillance Program. Through a cooperative agreement with the CDC, Illinois is working to collect and analyze data on the oral health of Illinoisans. By collecting oral health status, access and Medicaid data, it will be possible to monitor oral disease trends over time and to document improvement in oral health among Illinois residents.

# Why oral health?

The mouth is our primary connection to the world: it is how we take in water and nutrients to sustain life, our primary means of communication, the most visible sign of our mood, and a major part of how we appear to others. Oral health is an essential and integral component of people's overall health throughout life, and is much more than just healthy teeth. Oral refers to the whole mouth: the teeth, gums, hard and soft palate, linings of the mouth and throat, tongue, lips, salivary glands, chewing muscles, and upper and lower jaws. Not only does good oral health mean being free of tooth decay and gum disease, but it also means being free of chronic oral pain conditions; oral cancer; birth defects, such as cleft lip and palate; and other conditions that affect the mouth and throat. Good oral health also includes the ability to carry on the most basic human functions, such as chewing, swallowing, speaking, smiling, kissing, and singing.

Because the mouth is an integral part of the human anatomy, oral health is intimately related to the health of the rest of the body.

For example, mounting evidence suggests that infections in the mouth, such as periodontal (gum) diseases, can increase the risk for heart disease, can put pregnant women at greater risk for premature delivery, and can complicate control of blood sugar for people living with diabetes. Conversely, changes in the mouth often are the first signs of problems elsewhere in the body, such as infectious diseases, immune disorders, nutritional deficiencies, and cancer.

# What is a burden document?

This report summarizes the most current available information on the oral disease burden of people in Illinois. It also highlights groups and regions that are at highest risk for oral health problems. Comparisons are made to national data whenever possible and to Healthy People 2010 goals when appropriate. For some conditions, national data, but not state data, is available at this time. It is hoped that the information will help raise awareness of the need for monitoring the oral health burden in Illinois and guide efforts to prevent and treat oral diseases and enhance the quality of life of Illinois residents.

Describing the oral disease burden allows the state program to share information about oral health needs with state policy makers, the public health community, and other stakeholders and interested parties. The burden document describes the status of oral diseases (e.g., dental caries, periodontal disease, total tooth loss), including any disparities in oral disease status among population groups. It also discusses the ability of the state's program to meet these needs by including a description of existing oral health assets, such as professional dental and dental hygiene education programs and any intervention programs that focus on preventing oral diseases. It is important for this document to include the most current information; data preferably should be no older than five years.

## What is surveillance?

Surveillance is the ongoing, systematic collection, analysis, interpretation, and dissemination of data regarding a health-related event for use in public health action to reduce morbidity and mortality, and to improve health. Surveillance is a process that provides information for action. Three key aspects of a surveillance system highlight its importance: data collection, timely dissemination of findings, and putting data to action. Data disseminated by a public health surveillance system can be used for immediate public health action, program planning and evaluation, and formulating research hypotheses. Surveillance data can be a valuable tool to help target scarce resources.

## What is the National Oral Health Surveillance System?

The National Oral Health Surveillance System (NOHSS) is a collaborative effort between CDC's Division of Oral Health and the Association of State and Territorial Dental Directors (ASTDD). NOHSS is designed to help public health programs monitor the burden of oral disease, use of the oral health care delivery system, and the status of community water fluoridation on both the state and national level. NOHSS includes indicators of oral health, information on state dental programs, and links to other important sources of oral health information. More information about NOHSS can be found at [www.cdc.gov/nohss](http://www.cdc.gov/nohss).

## What is the Illinois Oral Health Surveillance System?

The U.S. Surgeon General Report and subsequent Call to Action to promote oral health formed vital influence as a base for the first Illinois Oral Health Plan (IOHP). One of the key priorities of the Illinois plan (published April 2002) was to develop an oral health

surveillance system. This priority, along with the collective wisdom of citizens, stakeholders and policy makers, has provided the vision and guidance of this system. Since 2000, the Illinois Department of Public Health, Division of Oral Health has been developing the Illinois Oral Health Surveillance System (IOHSS). IOHSS is guided by an advisory committee of key oral health stakeholders and epidemiology experts that help assure that IOHSS is addressing the needs of the communities. The committee's expertise also is beneficial in the promotion of surveillance information at the local level.

The goal of IOHSS is to monitor Illinois-specific, population-based oral disease burden and trends, measure changes in oral health program capacity, and monitor and report community water fluoridation quality. IOHSS is modeled after NOHSS and is funded by a cooperative agreement with the CDC. IOHSS helps monitor the progress toward reducing oral health disparities and gathers evaluation data for program improvement, decision-making, and policy development/enhancement. With IOHSS, Illinois is able to identify high-risk populations, allocate limited resources, and develop policies.

IOHSS indicators include NOHSS indicators. Additionally, the Illinois system has additional Illinois-specific indicators. As preparations are made for the second Illinois State Oral Health Plan, data from the surveillance system will provide guidance.

## What are the IOHSS indicators and its data sources?

IOHSS indicators are chosen so that IOHSS can comply with NOHSS and because they are needed to make program and policy decisions. As the surveillance system evolves, the data sources and their indicators will increase or expand to meet the needs of the communities. The decision to collect and track specific indicators is informed by the decision-making needs: Is this policy working? Are our programs

making a difference? What are the larger oral health problems that need to be addressed?

for IOHSS. The sources are highlighted in green along with its time interval for updates. Each data element is available as an indicator beneath its source.

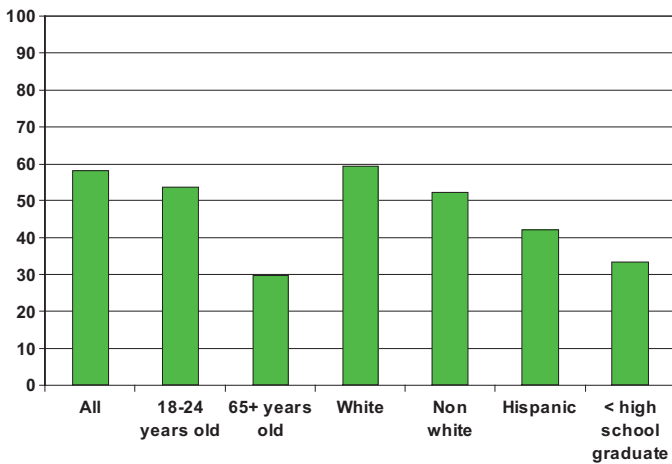
Table 1 provides a listing of the data sources and oral health indicators currently available

Table 1 – IOHSS Indicators by Data Sources	
<b>Illinois Department of Public Health Behavioral Risk Factor Surveillance System</b>	<b>Interval 2 years</b>
% of adults with dental visit in the past year % of adults with number of lost permanent teeth % of adults who have had teeth cleaning within the past year	
<b>Illinois Department of Public Health Pregnancy Risk Assessment and Monitoring System</b>	<b>Interval 1 year</b>
% of pregnant women who needed to see a dentist for a problem % of pregnant women who spoke with a dental/health care worker about care of gums and teeth % of pregnant women who visited a dentist or dental clinic	
<b>Illinois Department of Public Health Illinois State Cancer Registry</b>	<b>Interval 1 year</b>
Oral and pharyngeal cancer annual incidence rate % of oral and pharyngeal cancers detected at the earliest stages Oral and pharyngeal cancer incidence rate by county	
<b>Illinois Department of Healthcare and Family Services</b>	<b>Interval 1 year</b>
% of children using dental services by age % of diabetic adults with a dental visit # of children (0-18 years of age) enrolled in Title XIX Medicaid for at least one month of the year # of children enrolled in Title XXI State Children’s Health Insurance Program (SCHIP) for at least one month of the year % of adults (18-65 years of age) enrolled in Medicaid with dental visits % of adults (65+ years of age) enrolled in Medicaid with dental visits # of dentists enrolled as Medicaid providers # of dentists with at least one paid claim # of dentists with paid claims greater than \$10,000 # of Medicaid billing dentists who saw 50 or more beneficiaries younger than age 21 # of Medicaid billing dentists who saw 100 or more beneficiaries younger than age 21	
<b>Illinois Department of Financial and Professional Regulation</b>	<b>Interval 1 year</b>
# of licensed dentists and dental hygienists by county # of dentists and dental hygienists licensed by the IDFPR # of dentists and dental hygienists with a license and address in Illinois	
<b>Illinois Department of Public Health, Division of Oral Health</b>	<b>Interval 1 year</b>
# of sealants provided through Dental Sealant Grant Program # of counties with an Oral Health Needs Assessment completed # of newborns with craniofacial anomaly referred by Craniofacial Anomaly Program # of safety net clinics in Illinois by county % of people served by public water systems who receive fluoridated water	
<b>Statewide Third Grade Basic Screening Survey</b>	<b>Interval 5 years</b>
% of children with caries experience % of children with untreated decay % of children with sealants	

# What can be learned from Behavioral Risk Factor Surveillance System data?

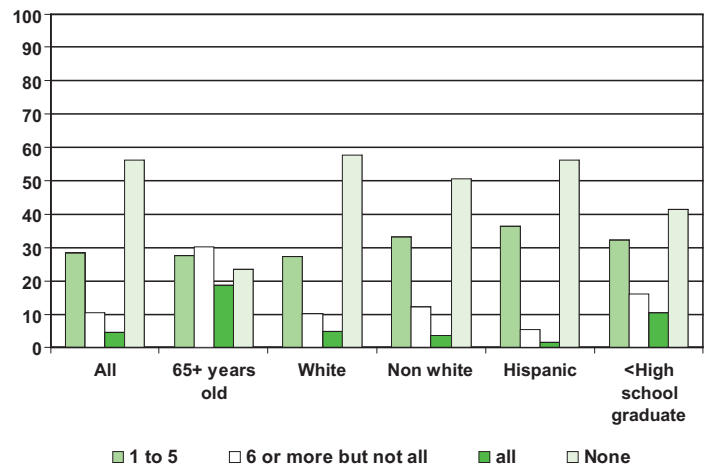
The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based program that gathers, through monthly telephone surveys, self-reported information on risk factors among Illinois adults 18 years of age and older. Established in 1984 in collaboration between the CDC and state health departments, BRFSS has grown to be the primary source of information on behaviors and conditions related to the leading causes of death for adults in the general population. The oral health questions are asked in a two-year cycle. A limitation of this survey is that BRFSS information is obtained through telephone interviews of a sample of non-institutionalized Illinois adults 18 years of age and older in residences with a telephone. People without phones or those refusing to participate are not represented in the assessment. More information about the Illinois BRFSS and oral health data on a county level can be found at <http://app.idph.state.il.us/brfss/>.

## Dental Insurance Coverage



Data Source: BRFSS 2003

## Loss of Permanent Teeth

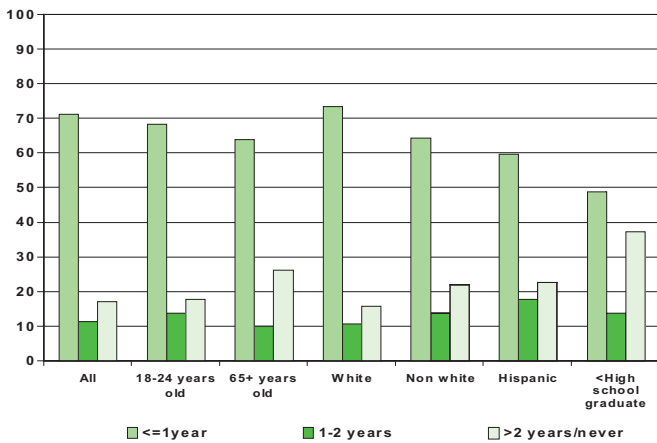


Data Source: BRFSS 2004

Based on BRFSS 2003 data, 42 percent of all Illinois adults, and 71 percent of those 65 years of age and older, do not have any form of dental insurance.

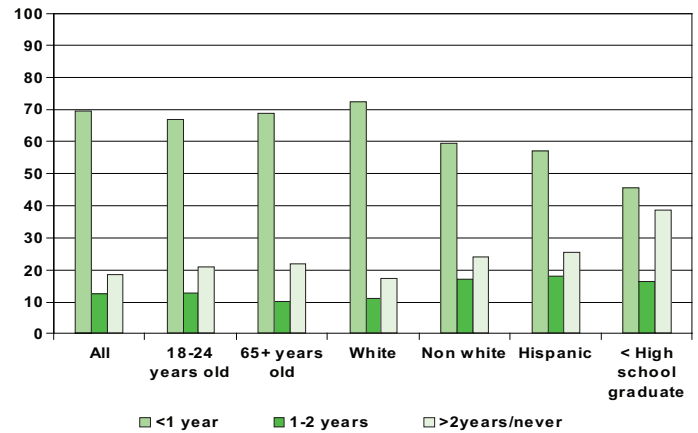
Based on BRFSS 2004 data, 5 percent of all the adults surveyed have lost all their teeth; 11 percent had lost six or more but not all. Among those 65 years of age and older, 30 percent had lost six or more teeth and 19 percent had lost all their teeth. The non-white subgroup includes black, multiracial and other racial categories.

## Time since last dental visit



Data Source: BRFSS 2004

## Time since teeth cleaned



Data Source: BRFSS 2004

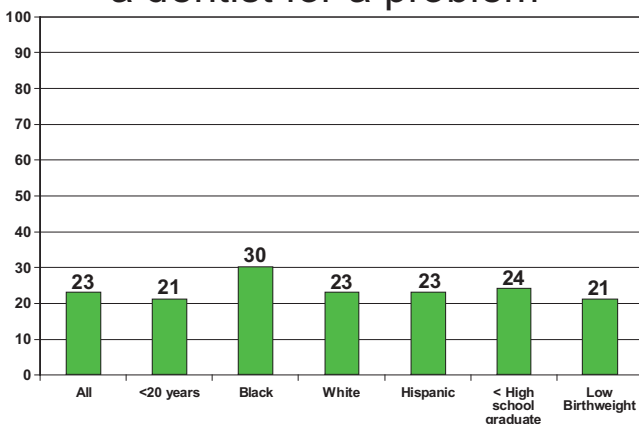
Twenty-six percent of adults 65 years of age and older and 39 percent of those with less than a high school education had their last dental visit more than two years ago or never. Sixty-nine percent of adults 18 years of age and older had their teeth cleaned within less than a year, 12 percent had their teeth cleaned in the past one or two years, and 18 percent had their teeth cleaned more than two years ago or never. Twenty-five percent of Hispanics and 38 percent of high school graduates reported having had their teeth cleaned more than two years ago or never.

**Illinois adults have a broad range of dental care experiences and oral health outcomes. Adults showing particular oral health inequalities include those with lower education, 65 years of age and older, non-white, and Hispanic.**

## What is shown from the Pregnancy Risk Assessment and Monitoring System data?

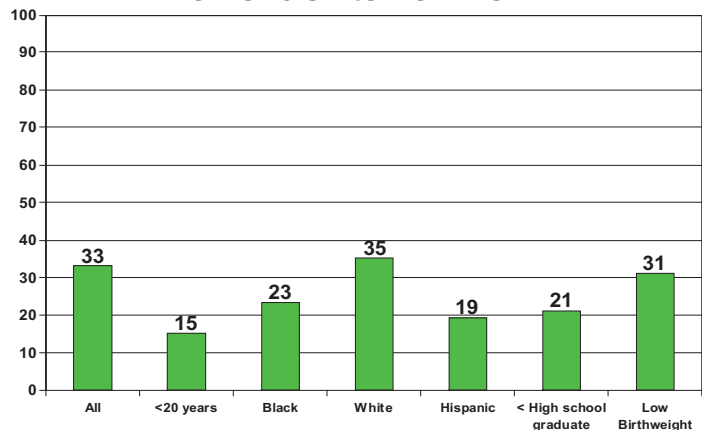
The Illinois Pregnancy Risk Assessment Monitoring System (PRAMS) is an ongoing population-based survey of women who have delivered a live born infant in Illinois that year. PRAMS collects information from mothers about behaviors and experiences before, during, and immediately following the birth of their baby.

### Pregnant women needed to see a dentist for a problem



Data Source: PRAMS 2003

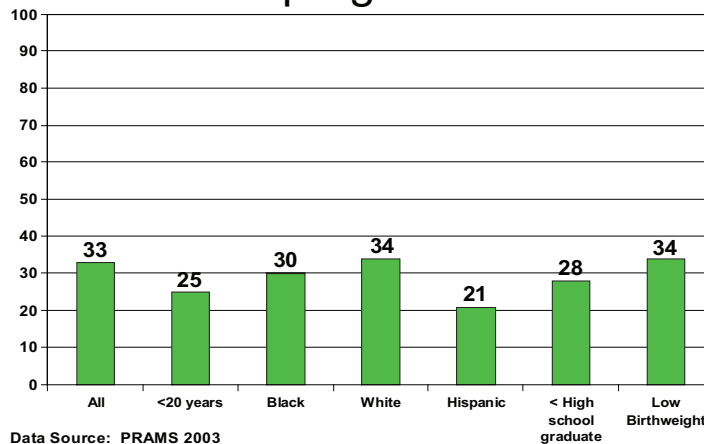
### Pregnant women visited a dentist or a dental clinic



Data Source: PRAMS 2003

PRAMS asked women about the care of their teeth and gums during their most recent pregnancy and found that 23 percent reported some type of dental problem for which there was a need to see a dentist; 35 percent of women went to a dentist or dental clinic during their pregnancy; and 34 percent reported being counseled by a dental or other health care worker about how to care for teeth and gums. Older women with higher income and women with higher education levels were more likely to have seen a dentist during pregnancy. Prenatal and postnatal oral health care and educational experiences are not equally obtained for all pregnant women in Illinois. Those women who are young, Hispanic and with less education are particularly vulnerable.

### Dental/health care worker spoke about care of gums and teeth with the pregnant woman



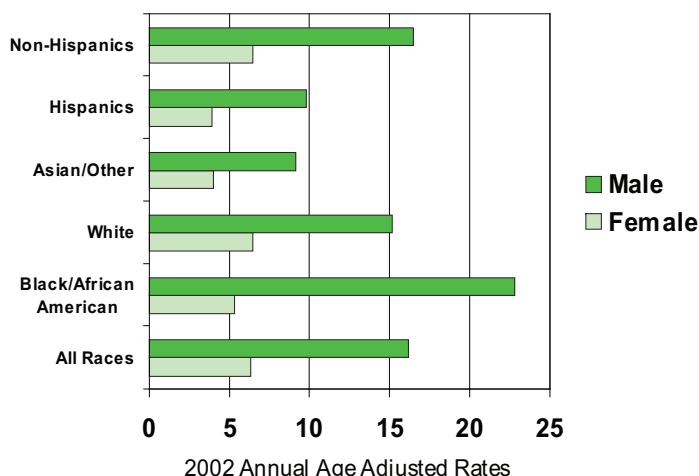
## What is the impact of oral cancer on Illinois as seen by the Illinois State Cancer Registry – oral and pharyngeal cancer data?

Cancer of the oral cavity or pharynx (oral cancer) is the fourth most common cancer in the United States in African-American males and the seventh most common cancer in white males. Nearly 90 percent of oral cancer cases in the United States occur among persons aged 45 years and older.

Illinois State Cancer Registry (ISCR) data are collected, processed, analyzed and reported as cancer statistics (Incidence and Mortality) in Illinois by race, ethnicity and region. The data collected also are used for research, planning, and evaluating programs to decrease the incidence of cancer.

There are disparities in the incidence rates of oral cancer. African-American males have the highest rate. Females have substantially lower incidence rates within every race/ethnic group as compared to males, while the rates among African-American women are lower than that of white women. During recent decades, however, tobacco use has increased among women and will likely result in higher oral cancer rates over time.

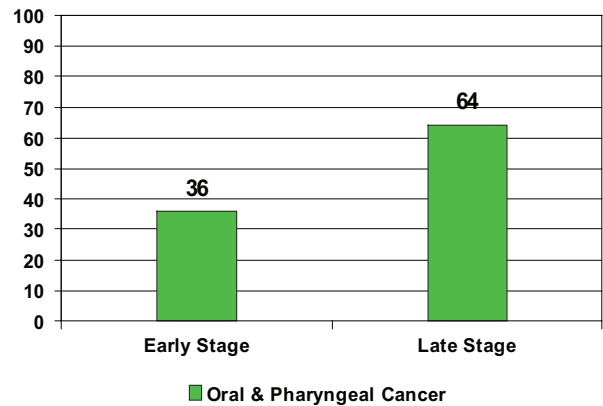
### Illinois Oral Cancer Incidence Rate 2002





Despite advances in surgery, radiation and chemotherapy, the five-year survival rate for oral cancer has not improved significantly over the past 25 years. More than 40 percent of persons diagnosed with oral cancer die within five years of diagnosis, although survival varies widely by stage of disease when diagnosed. The five-year relative survival rate for persons with oral cancer diagnosed at a localized stage is 81 percent. In contrast, the five-year survival rate is only 51 percent once the cancer has spread to regional lymph nodes at the time of diagnosis, and just 29 percent for persons with distant metastasis. Most of the oral and pharyngeal cancers are diagnosed or identified at the late stage.

## Stage at Diagnosis for Oral and Pharyngeal Cancer 1998-2002

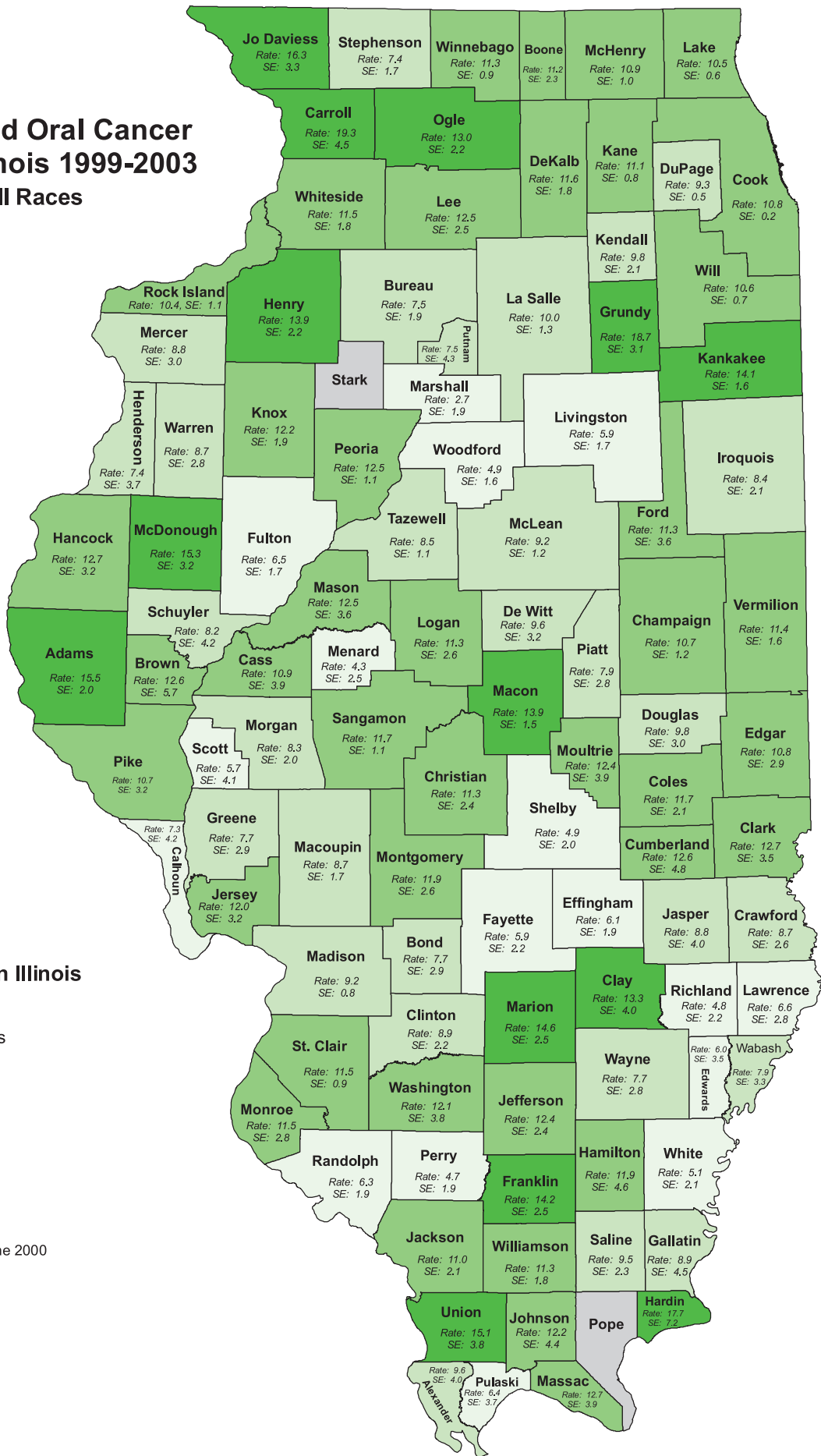


## Tobacco Use

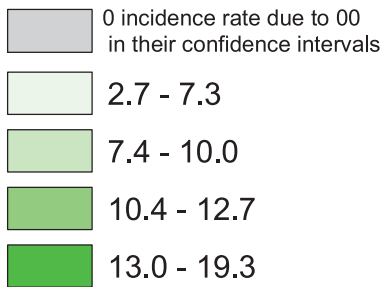
Tobacco use is one of the most common risk factors for oral cancer and other conditions in the mouth, such as periodontal disease, gingival recession, oral cancer, and caries. Alcohol and tobacco use are the major risk factors for oral cancer, accounting for 75 percent of all oral cancers. As per BRFSS 2004 data, statewide tobacco usage is 22 percent. Tobacco use was highest among the 18 to 24 age group at 31 percent.

# Five-year Age-adjusted Oral Cancer Incidence Rates in Illinois 1999-2003

## Both Genders, All Races



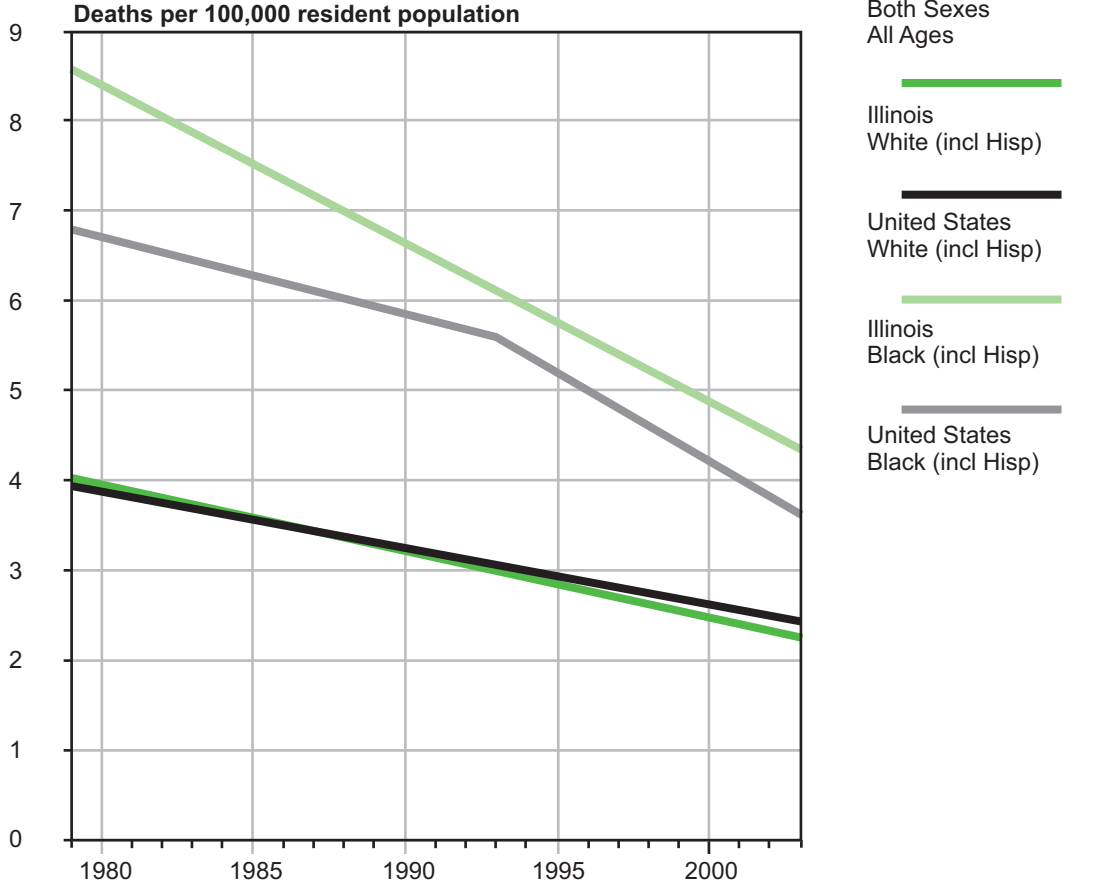
### Oral Cancer Incidence Rates in Illinois



Rates are per 100,000 and age-adjusted to the 2000 US Std Population standard.

# Historical Trends (1979-2003)

## Mortality, Oral Cavity & Pharynx Both Sexes, All Ages

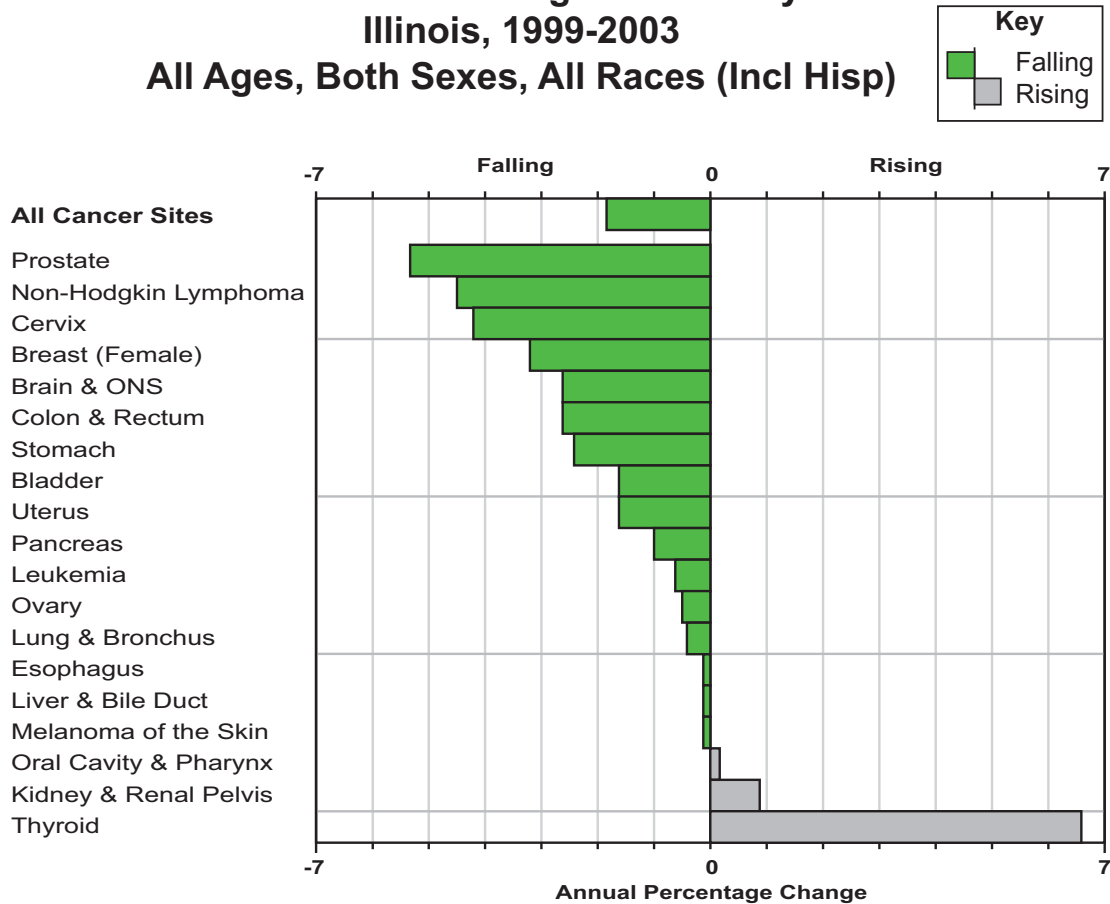


Created by statecancerprofiles.cancer.gov on 09/11/2006 11:09 a.m.  
Regression lines calculated using the Joinpoint Regression Program.

Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER\*Stat. Death rates are age-adjusted to the 2000 US standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by NCI.

The graph, provided by the Surveillance, Epidemiology, and End Results (SEER) Web site, shows mortality for oral and pharyngeal cancers for both sexes and all ages is lower in whites in Illinois as compared to whites nationally, whereas among blacks the mortality is higher in Illinois as compared to national figures. Generally, the oral cancer rates are improving.

## 5-Year Rate Changes - Mortality Illinois, 1999-2003 All Ages, Both Sexes, All Races (Incl Hisp)



Created by statecancerprofiles.cancer.gov on 12/19/2007 2:42 pm.  
 Annual Percent Change (APC) over the 5-year period calculated by SEER\*Stat.  
 Source: Death data provided by the National Vital Statistics System public use data file. Death rates calculated by the National Cancer Institute using SEER\*Stat. Death rates are age-adjusted to the 2000 US standard population by 5-year age groups. Population counts for denominators are based on Census populations as modified by NCI.

# - The annual percent change is significantly different from zero ( $p < 0.05$ ).

Although rates of oral cancer have been falling long-term, oral cancer is among those with rising five-year mortality rates in Illinois along with cancers of kidney, renal pelvis, and thyroid cancer. This is a small change, and it is not among those marked as significantly different from zero (statistically).

**African-American males have incidence rates of oral cancer that are significantly higher than other population groups in Illinois. However, rural areas have the highest rates.**

**Healthy People 2010 Objective: 21-6 – Increase the proportion of oral and pharyngeal cancers detected at the earliest stage. Target: 50%**

**Healthy People 2010 Objective: 21-7 – Increase the proportion of adults who, in the past 12 months, report having had an examination to detect oral and pharyngeal cancers. Target: 20%**

# What insights come from the Illinois Department of Healthcare and Family Services data?

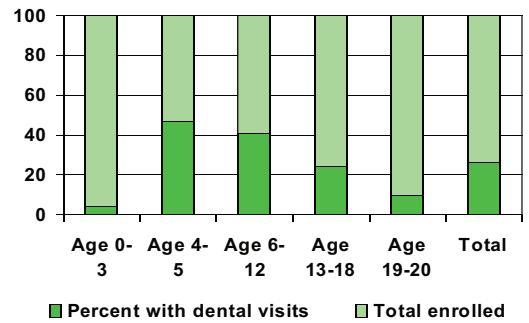
In Illinois, approximately 1.1 million children are enrolled in Medicaid/State Children’s Health Insurance Plan (SCHIP). In Illinois, Medicaid provides limited dental benefits for adult (21 years of age and older) men, non-pregnant women and women eligible for pregnancy-related services. As of 2005, only 33 percent of children enrolled in Medicaid/SCHIP utilized oral health care services during the year, and only 34 percent of active general and pediatric dentists were enrolled as Medicaid providers, with most providing only a small volume of services.

Both children and adult Medicaid/SCHIP enrollees do not access oral health care for a variety of complex reasons, including low value of oral health and lack of providers enrolled. As the table below indicates, out of 2,007 dentists enrolled as providers, only 1,615 are providing services. Also as shown, adult claims are low in both the 18-65 age groups, and especially those 65 years of age and older, likely due to the limited services available to elderly patients.

Indicator	2005
Number of children (0-18 years of age) enrolled in Title XIX Medicaid for at least one month of the year	1,300,681
Number of children (0-18 years of age) enrolled in Title XXI SCHIP for at least one month of the year	76,153
Percent of adults (18-65 years of age) enrolled in Medicaid with dental visits	15.15%
Percent of adults (65 years of age and older) enrolled in Medicaid with dental visits	4.73%
Number of dentists enrolled as Medicaid providers	2,007
Number of dentists enrolled as Medicaid providers with at least one paid claim	1,615
Number of Medicaid providers with paid claims > \$10,000	873
Number of Medicaid billing dentists who saw 50 or more beneficiaries under age 21	877
Number of Medicaid billing dentists who saw 100 or more beneficiaries under age 21	732
Percent of diabetic adults (139,149 in 2005) with a dental visit	17.7%

## Percent of children (0 -20 years of age) enrolled in Medicaid/SCHIP with dental services, 2005

The number of children enrolled in Medicaid/SCHIP is highest among the 4-5 years of age group, whereas it's the lowest among young children between 0 to 3 years of age.



**Illinois has a low number of enrolled Medicaid providers and those enrolled only provide a small scope of services. Medicaid enrollees are not accessing services, especially in the very young and elderly population groups. The highest utilization of services is seen in the 4-5 years of age and 6-12 years of age groups, possibly due to the new Illinois dental examination law and the statewide Dental Sealant Grant Program.**

# What insights come from the Illinois Department of Financial and Professional Regulation data?

The table provides a list of dentists and dental hygienists licensed by the Illinois Department of Financial and Professional Regulation, sorted by county where licensed as of December 2005. The number represents only licensed dentists and dental hygienists, and does not give details about their specialty and their practice status.

County	DDS	RDH
Adams	38	20
Alexander	2	1
Bond	3	8
Boone	16	25
Brown	1	2
Bureau	14	13
Calhoun	1	3
Carroll	4	6
Cass	3	7
Champaign	98	119
Christian	14	23
Clark	2	7
Clay	7	7
Clinton	9	26
Coles	26	42
Cook	4069	1599
Crawford	8	15
Cumberland	2	6
DeKalb	43	53
DeWitt	4	10
Douglas	7	19
DuPage	995	531
Edgar	7	14
Edwards	1	4
Effingham	18	32
Fayette	7	16
Ford	6	13
Franklin	20	21
Fulton	7	24
Gallatin	0	4
Greene	5	7
Grundy	13	15
Hamilton	1	6
Hancock	6	5

County	DDS	RDH
Hardin	0	2
Henderson	1	4
Henry	14	28
Iroquois	10	22
Jackson	27	36
Jasper	2	7
Jefferson	17	13
Jersey	13	19
Jo Daviess	10	17
Johnson	5	4
Kane	260	211
Kankakee	36	47
Kendall	26	58
Knox	22	27
Lake	573	427
La Salle	58	63
Lawrence	3	3
Lee	17	13
Livingston	14	21
Logan	13	15
Macon	54	72
Macoupin	14	31
Madison	223	144
Marion	16	19
Marshall	1	12
Mason	5	5
Massac	6	14
McDonough	13	9
McHenry	191	258
McLean	86	90
Menard	3	7
Mercer	2	9
Monroe	21	23
Montgomery	9	10

County	DDS	RDH
Morgan	17	6
Moultrie	3	11
Ogle	18	30
Peoria	126	121
Perry	9	30
Piatt	5	24
Pike	8	3
Pope	2	2
Pulaski	0	1
Putnam	2	4
Randolph	11	15
Richland	7	4
Rock Island	86	50
Saline	9	10
Sangamon	115	90
Schuyler	2	2
Scott	1	1
Shelby	3	18
St. Clair	147	94
Stark	0	3
Stephenson	25	44
Tazewell	61	125
Union	7	7
Vermilion	27	35
Wabash	5	8
Warren	7	10
Washington	5	7
Wayne	4	4
White	6	1
Whiteside	24	25
Will	299	441
Williamson	27	51
Winnebago	174	160
Woodford	9	38

**There are 102 counties in Illinois, but the three counties with the most dental licenses account for 84 percent of all dentists and the top three for hygienists account for 44 percent of all hygienists. Of the total 9,668 licensed dentists, 8,455 reside in Illinois. Similarly, out of 6,629 licensed dental hygienists, 5,883 reside in Illinois.**

# Illinois Department of Public Health, Division of Oral Health

The Division of Oral Health establishes programs designed to assure that the people of Illinois have access to population-based interventions that prevent and reduce oral disease and promote oral health as integral to health through organized community efforts. These oral health programs focus on community water fluoridation, dental sealants, early childhood caries, community needs assessment, school-based fluoride mouthrinse, craniofacial anomalies, orofacial injuries, oral cancer prevention, oral health surveillance, and a variety of educational programs designed to meet the oral health needs of specific population groups in Illinois. The goal of the Division of Oral Health is optimal oral health for all residents of Illinois.

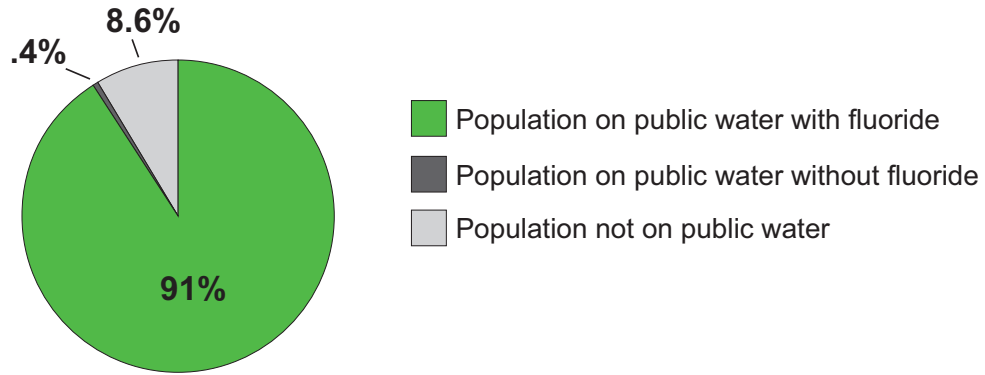
## What is monitored with the Illinois Fluoridation Reporting System data?

Fluoridation has been recognized by CDC as one of the 10 greatest public health achievements of the 20th century. Fluoridation is a safe, cost effective way of preventing tooth decay. The average cost to the water system is approximately 50 cents per person per year. Many Illinois communities began fluoridating their drinking water supplies as early as 1947. Today, more than 91 percent of the population in Illinois receives fluoridated drinking water. There are still a significant number of residents who may not receive the benefits of fluoride in their water, such as those living in 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. Testing kits can be obtained through the Department's Division of Oral Health or through the person's local health department.

The Illinois Fluoridation Statute was enacted in 1967 and requires all community water systems to adjust fluoride to optimal levels (0.90 - 1.20 milligrams per liter). The Division of Oral Health monitors community water supplies and provides education and technical expertise to water supply operators to ensure that fluoride levels are optimal. The Illinois Fluoridation Reporting System (IFRS) is a database that maintains records of fluoridation status for community water systems in Illinois. IFRS also reports annual fluoridation status for all community water systems to the Water Fluoridation Reporting System (WFRS) maintained by CDC and, through the Illinois Project for Local Assessment of Needs (IPLAN), to all local health departments in Illinois.



## Illinois Population on Fluoride



Total Illinois population:	12.7 million
Population on public water with fluoride	11.6 million (91%)
Population on public water without fluoride	45,500 (.4%)
Population not on public water systems	1.1 million (8.6%)

There are approximately **1,880** community water supplies in Illinois. The following is a breakdown and description of the systems:

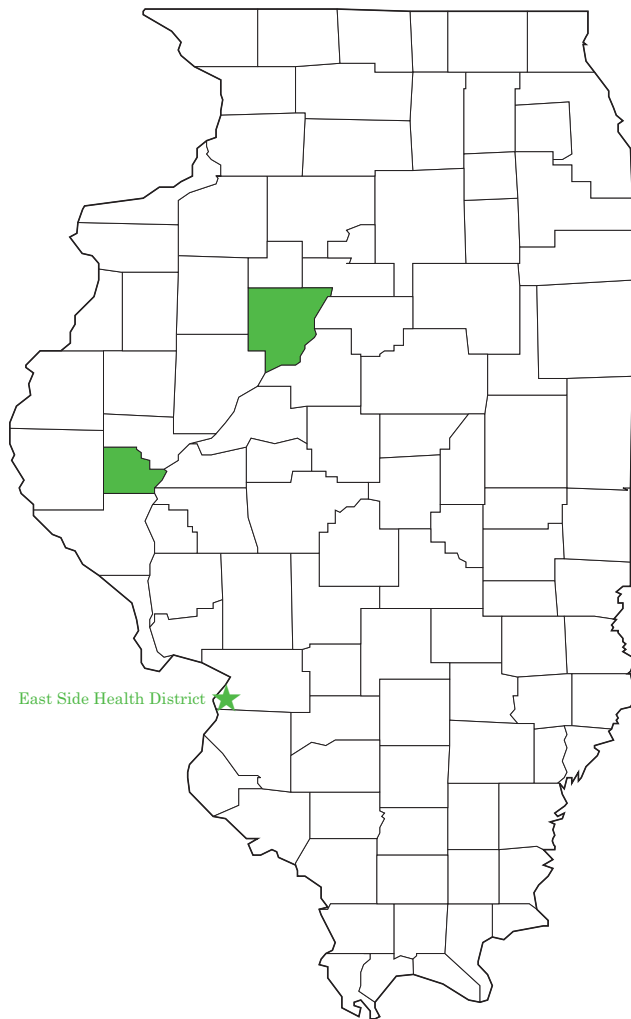
- 870** Adjust (systems that adjust fluoride)
- 618** Connect (purchase water from those adjusted systems)
- 156** Natural (have naturally occurring fluoride)
- 154** Exempt (systems exempt from the fluoridation statute i.e., mobile home parks and systems with <10 lots or properties)
- 80** Proposed (in process of becoming a water system), inactive, or no longer a water system

**Fluoridation of a community water supply is the single most effective public health measure to prevent tooth decay and maximum benefits are achieved when the levels are maintained in the optimal range. The Healthy People 2010 Objective for water fluoridation is 75 percent, which Illinois surpasses, yet some residents are not receiving community water fluoridation. They could benefit from the private well water testing program that includes education on sources of adequate fluoride.**

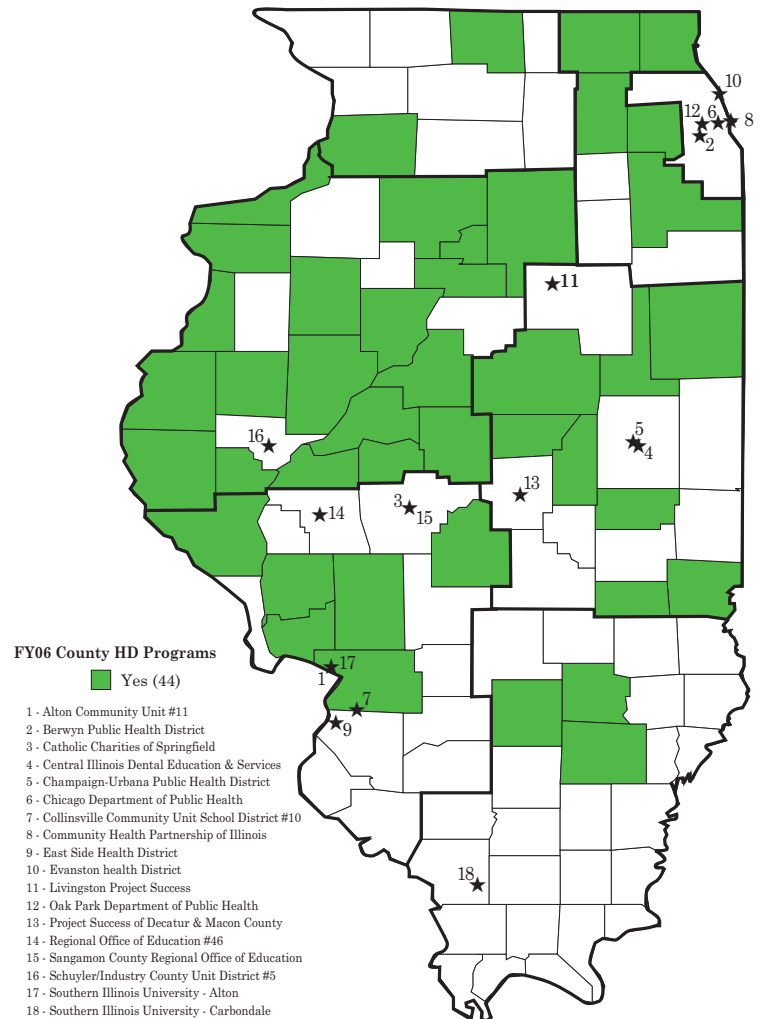
# What was learned from the Dental Sealant Grant Program data?

Evidence has shown the effectiveness of dental sealants to prevent and control dental caries with school-based/school-linked dental sealant delivery programs. The Illinois Dental Sealant Grant Program (DSGP) assists high-risk Illinois schoolchildren by granting funds and giving technical assistance to communities to develop and implement dental sealant programs. Since the program's inception in 1986, more than 978,600 dental sealants have been placed on more than 399,600 children.

**Dental Sealant Pilot Programs**



**FY06 Dental Sealant Grant Program**



**It is important that schools participate in DSGP in order to help meet the oral health needs of underserved children. Sixty grantees cover 55 of the 102 Illinois counties. More grantees are needed, especially in the southern portion of the state. Note: Some counties have multiple grantees.**

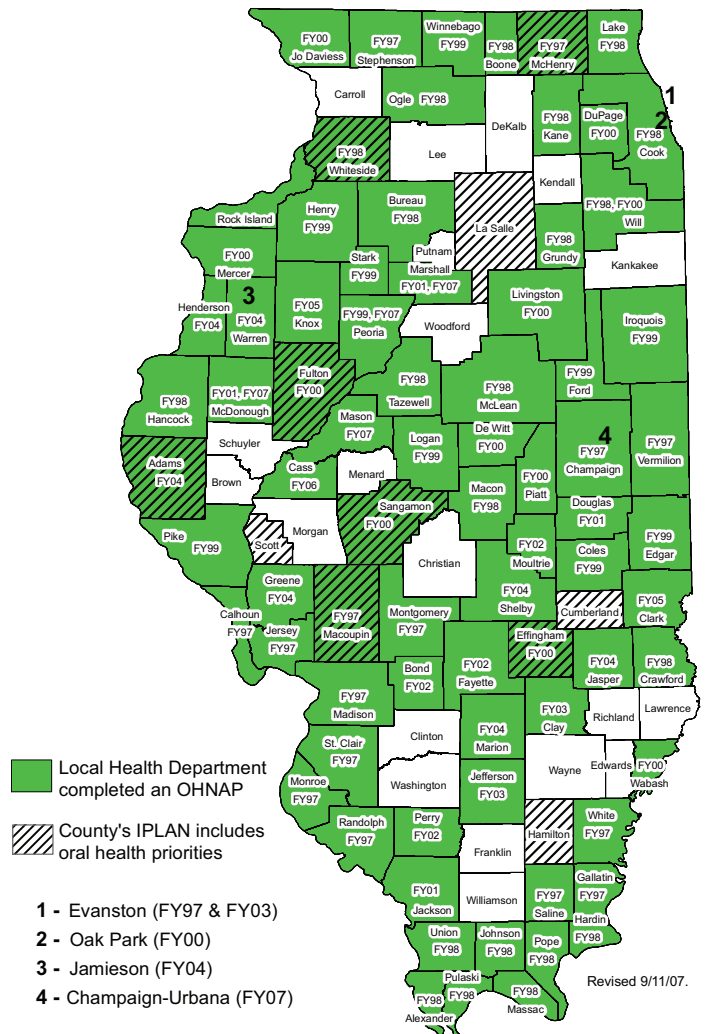
# What is provided by the Oral Health Needs Assessment and Planning Program data?

The Oral Health Needs Assessment and Planning Program (OHNAP) assists Illinois communities in determining oral health status and in helping plan comprehensive oral health programs to meet community needs. The OHNAP is based on the Association of State and Territorial Dental Directors (ASTDD) “Seven-Step Model,” which is a systematic data collection tool and analysis process used by the communities to complete an OHNAP. The Seven-Step Model is translatable into an action plan. The step-by-step model engages the community to provide integrated information about oral health. The process is completed with development of appropriate community intervention strategies and implementation of the action plan.

The Department’s Division of Oral Health leads state planning efforts through the statewide oral health plan, and provides training, technical assistance, and quality assurance to local health departments.

The Illinois Project for Local Assessment of Needs (IPLAN) is a community health assessment and planning process conducted every five years by local health jurisdiction. Communities identify oral health as one of their priorities under IPLAN. Access, oral health education and oral disease prevention were the most common priorities listed under OHNAP proposals among Illinois communities throughout the eight years of the program.

## Oral Health Needs Assessment and Planning Grant



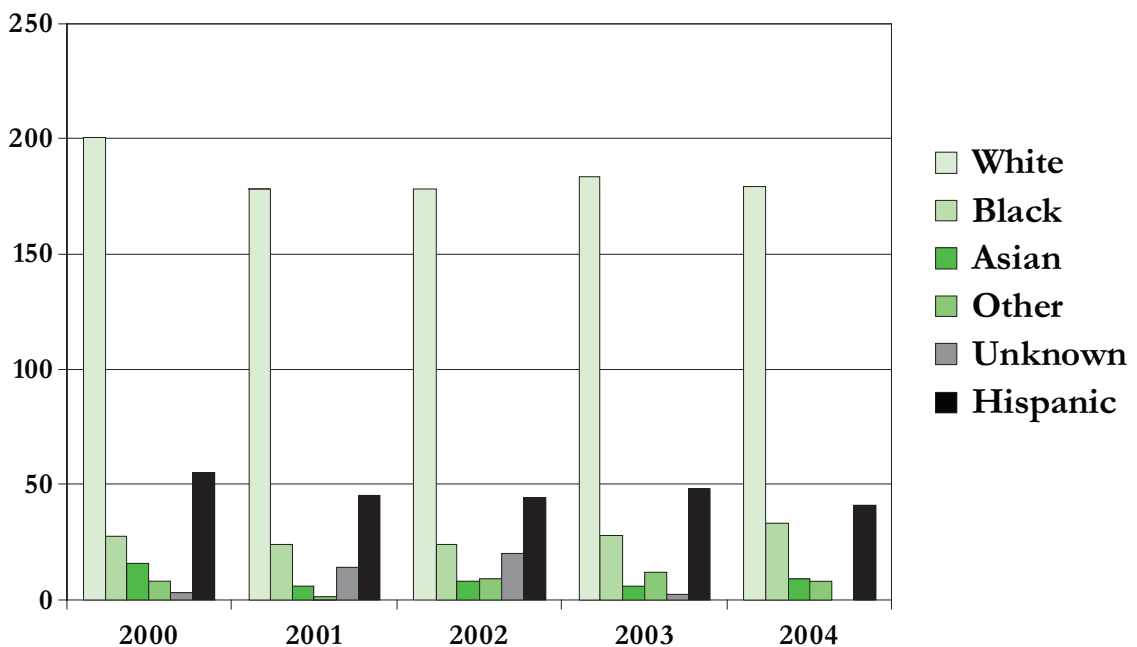
**Counties that participate in either IPLAN or OHNAP utilize the data for planning interventions, policy development, and health promotion. Most importantly, data are used to help bring needed resources to their communities.**

# How is Craniofacial Anomaly Program data used?

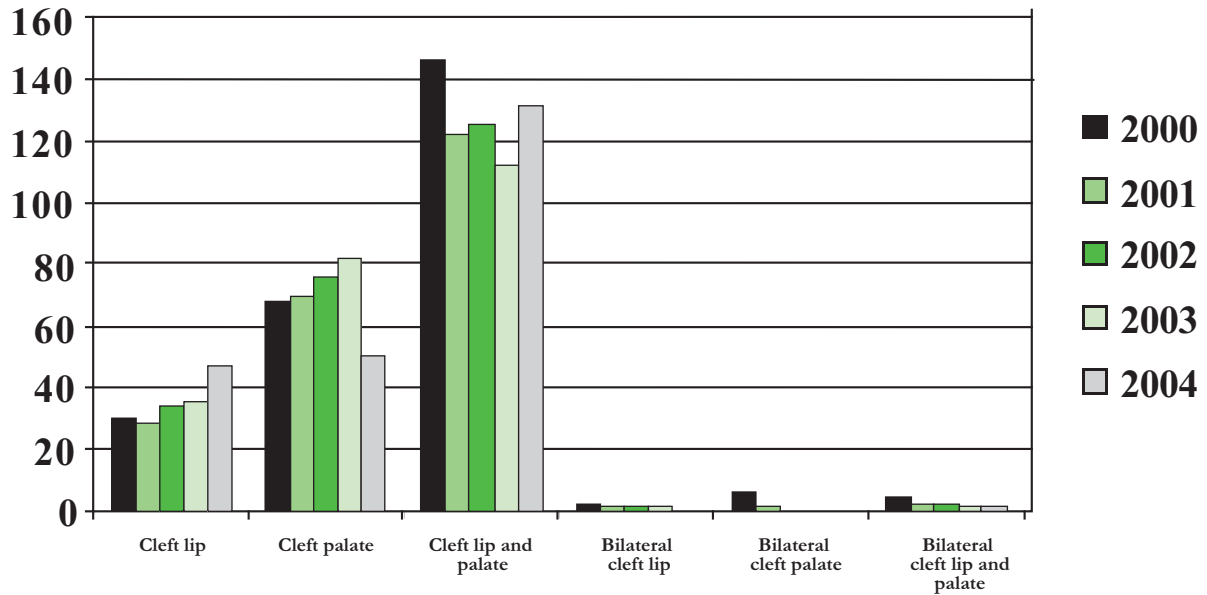
Craniofacial anomalies (cleft lip and cleft palate) are one of the most common congenital anomalies. These conditions may occur as isolated defects or as part of other syndromes. The Department's Adverse Pregnancy Outcomes Reporting System (APORS) and electronic birth certificates report identifies craniofacial anomalies, along with other birth data to the Department's Division of Vital Records. The Department's Division of Oral Health receives this data and operates an educational outreach program to families of children with this disease. The Craniofacial Anomaly (CFA) Program has three components: (1) education of parents of infants with craniofacial anomalies; (2) the development and distribution of educational materials for health professionals, including hospital staff; (3) education programs at local health agencies, pediatrician and dental offices, and 0-3 programs. Since the program's inception in 1986, it has served more than 4,500 families. The educational outreach of the program has increased the reporting of these anomalies to an average rate of 1.3 per 1,000 births from an initial rate of 0.67 per 1,000 births.

Based upon the request, the data collected in the Illinois CFA Program is reportable in many formats. The CFA Program collects ethnicity, race, type of anomaly, source of report, and geographic and hospital data. The geographic data elements are being used to improve the program.

## Counts of craniofacial anomalies referred by the CFA Program by race/ethnicity



# Birth by number of craniofacial anomalies, by year

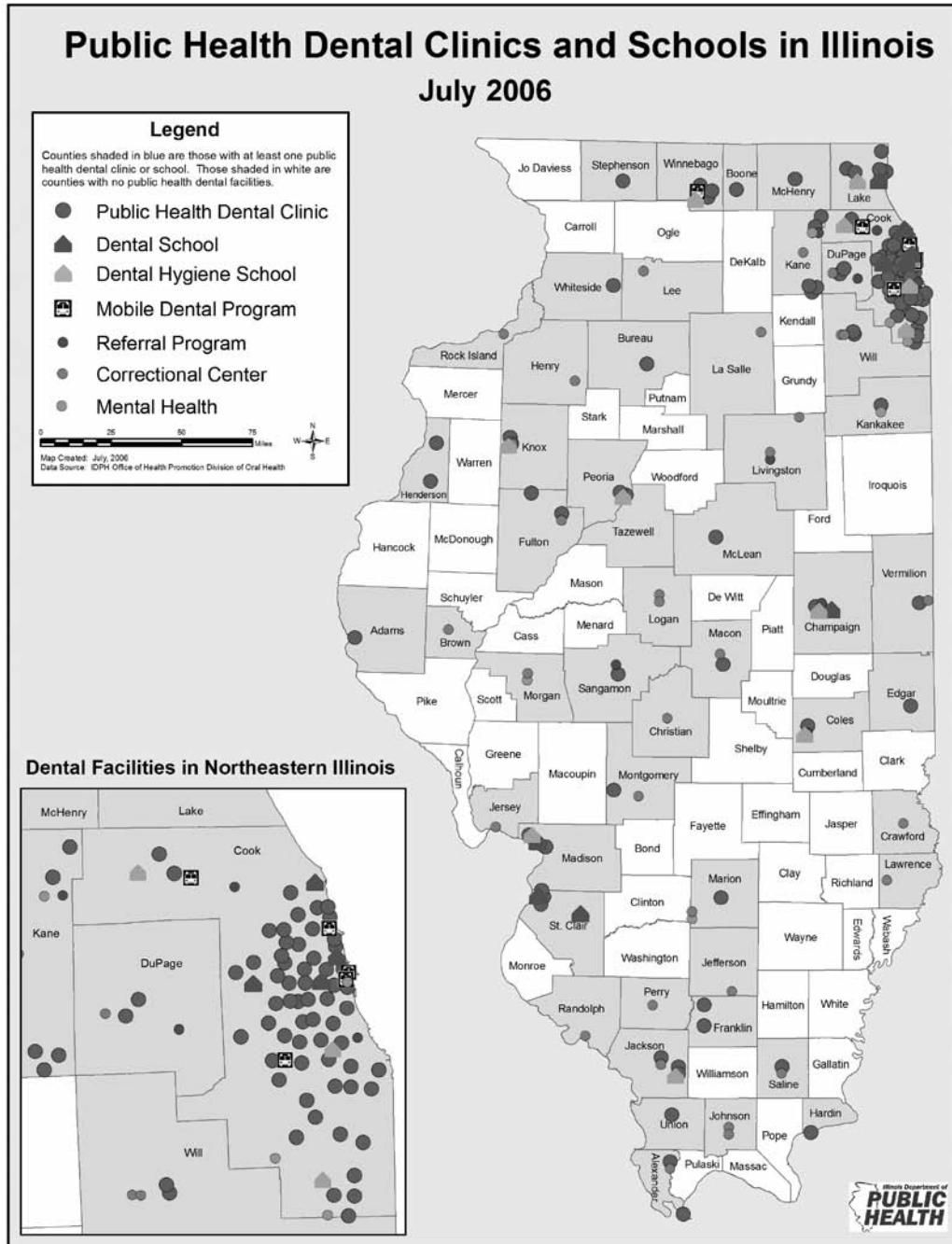


The Department is piloting local community health information sharing with families in fiscal year 2007. Community partners are from the local health agencies and the birthing hospitals network in Illinois.

The mission of the CFA Program is to reduce the long-term disabilities and trauma suffered by children and families affected by the craniofacial anomalies by assuring complete and coordinated care.

# Public Health Dental Clinics

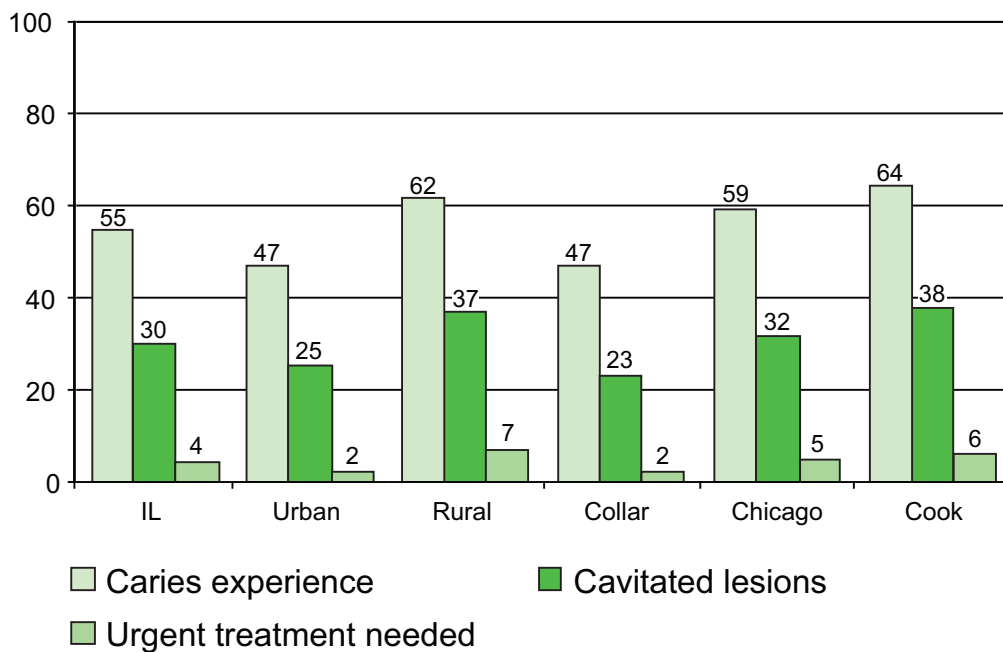
Safety net dental clinics provide a much-needed service to Illinois communities. The mission of a safety net clinic is to provide oral care to underserved populations, such as those with low incomes, Illinois Department of Healthcare and Family Services beneficiaries, the uninsured, and underinsured. These Illinois dental clinics provide a variety of services. Without these important services and providers, many Illinois residents would suffer from untreated dental problems. More are needed to ensure that underserved populations receive necessary oral health services, especially in the southern portion of the state, where there are very few clinic locations.



# What is the oral health status of third grade children in Illinois?

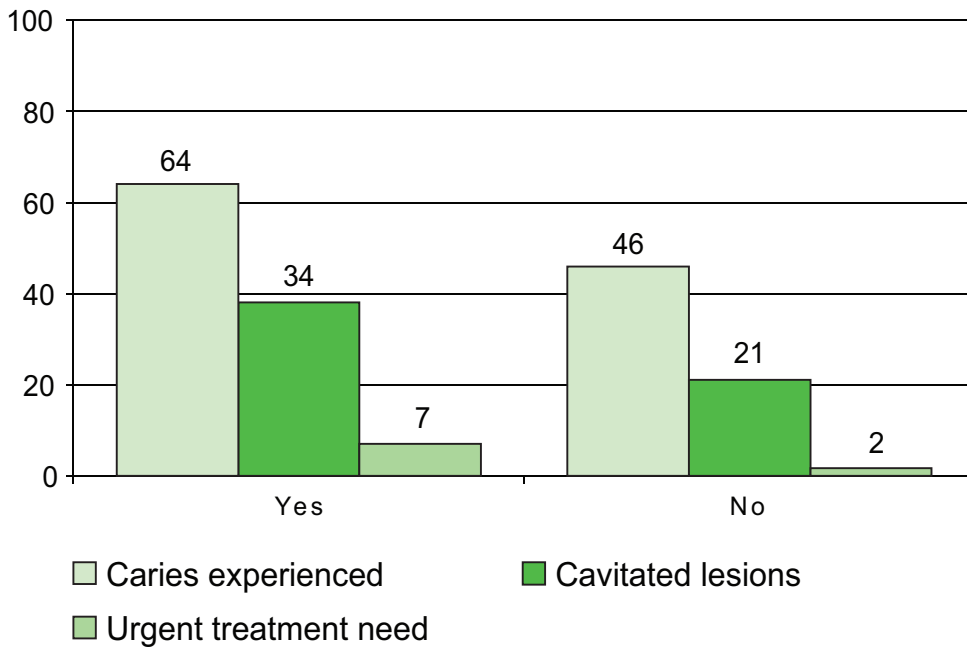
The Department's divisions of Oral Health and Chronic Disease Prevention and Control, collaborated to conduct the Healthy Smile Healthy Growth assessment for the 2003-2004 school year. Information collected included caries experience, cavitated lesions (cavities), treatment need, presence of sealants, and body mass index calculated from height and weight measurements. A total of 6,630 children were screened from the 9,000 eligible third-grade children from the sampled schools in Illinois.

Percentage with caries experience, cavitated lesions and urgent treatment need by urbanicity



Fifty-five percent of the third-graders have had dental caries experience that includes treated and untreated cavities. Of the 55 percent with caries experience, 30 percent have untreated cavities (cavitated lesions). Four percent of the children with untreated cavities need urgent dental treatment, indicating pain, abscess or severe decay. The numbers are higher among lower income, rural, and minority populations.

## Caries experience, cavitated lesions and urgent treatment need by free and reduced meals participation



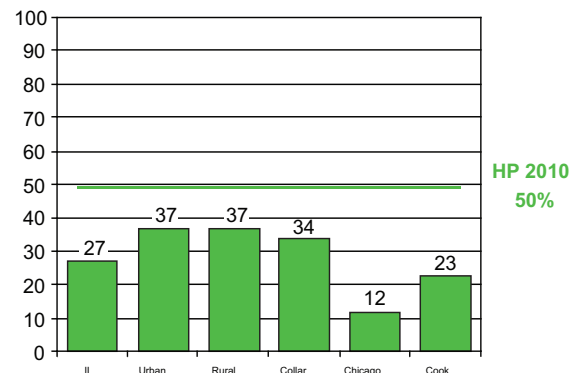
The disparities among disease rates exist by income stratification. Family socioeconomic status or income information is typically not available from schools. Use of free and reduced meals (FRM) information as a proxy for income, which is known to be strongly associated with oral health, helps protect family privacy, but allows targeting of oral health programs to schools with high FRM participation (not individual students). The disease rates and the treatment needs are higher among those who participate in the FRM programs.

Dental sealants are protective coatings applied on the chewing surfaces of teeth to prevent caries. The estimated percent of children with a dental sealant on a permanent molar in Illinois was 27 percent as compared to only 12 percent among Chicago children. The rural counties have 37 percent of third graders with a dental sealant.

Healthy People 2010 Target for sealants is 50 percent.

More information on this survey can be requested from Illinois Department of Public Health, Division of Oral Health.

## Percentage with Sealants





# How does Illinois measure against federal guidelines for oral health?

Healthy People 2010: The U.S. Department of Health and Human Services coordinates an effort to create a set of national health goals to be reached by the year 2010. The Illinois Oral Health Surveillance System monitors Illinois' progress toward Healthy People 2010 objectives. The following is the table of the Healthy People 2010 Oral Health Objectives along with Illinois' status on meeting these objectives. NA stands for data not available.

Objective	HP 2010 Target		Illinois	
	Age Group	Percent	Age or Population Group	Percent
Reduce the proportion of children with dental caries experience.	Preschool	11%		NA
	Elementary	42%	Third grade	55%
	Adolescents	51%		NA
Reduce the proportion of children and adults with untreated dental decay.	Preschool	9%		NA
	Elementary	21%	Third grade	30%
	Adolescents	15%		NA
Increase the proportion of adults who have never had a permanent tooth extracted because of caries or periodontal disease.	Adults	15%		NA
	Adults	42%	Adults	56.3
	Older Adults	20%	65+	18.8
Reduce the proportion of older adults who have had all their natural teeth extracted.	Gingivitis	41%	NA	NA
	Destructive PD	14%	NA	NA
Reduce periodontal disease.	Adults	50%	NA	NA
Increase the proportion of oral and pharyngeal cancers detected at the earliest stage.	Adults	20%	NA	NA
Increase the proportion of adults who, in the past 12 months, report having had an examination to detect oral and pharyngeal cancers.	Elementary	50%	Third grade	27%
Increase the proportion of children who have received dental sealants on their molar teeth.	Adolescents	50%	NA	NA
	All ages, residents on public water	75%	All ages, residents on public water	75%
Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water.	All ages	56%	NA	NA
Increase the proportion of children and adults who use the oral health care system each year.	Long-term care residents	25%	NA	NA
Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year.	< 19 years at or below 200% FPL	57%		
Increase the number of states that have a system for recording and referring infants and children with cleft lips, cleft palates, and other craniofacial anomalies to craniofacial anomaly rehabilitative teams.			Does your state have a system?	Yes
Increase the number of states that have an oral health surveillance system. An oral health surveillance system should contain, at a minimum, a core set of measures that describe the status of important oral health conditions to serve as benchmarks for assessment.			Does your state have a system to address this objective?	Yes

Rural Healthy People 2010 provides information about rural health conditions identified as priorities by rural health leaders. Oral health is named by more than 50 percent of the national and state experts as the rural health priority after access and mental health.

# Appendix 1: Useful links/Data resources

Illinois Oral Health Plan  
[www.ifloss.org/OralHealth/](http://www.ifloss.org/OralHealth/)

Safety Net Dental Clinic in Illinois  
[www.ifloss.org/Resources/documents/ClinicsListforWebsite.pdf](http://www.ifloss.org/Resources/documents/ClinicsListforWebsite.pdf)

A Compendium of Community Efforts to Improve Oral Health in Illinois  
[www.ifloss.org/Resources/documents/iflosscoalition\\_finallowres4-05-05.pdf](http://www.ifloss.org/Resources/documents/iflosscoalition_finallowres4-05-05.pdf)

IFLOSS: Coalition of Communities Working Together to Improve Oral Health in Illinois  
[www.IFLOSS.org](http://www.IFLOSS.org)

Illinois Oral Health Burden Document  
[www.idph.state.il.us/HealthWellness/oralhlth/BurdenDocument.pdf](http://www.idph.state.il.us/HealthWellness/oralhlth/BurdenDocument.pdf)

U.S. Centers for Disease Control and Prevention National Oral Health Surveillance System  
[www.cdc.gov/nohss](http://www.cdc.gov/nohss)

Healthy People 2010 Chapter 21 Oral Health  
[www.healthypeople.gov/document/pdf/Volume2/21Oral.pdf](http://www.healthypeople.gov/document/pdf/Volume2/21Oral.pdf)

Association of State and Territorial Dental Directors  
[www.astdd.org](http://www.astdd.org)

Surgeon Generals Report on Oral Health  
[www.nidcr.nih.gov/sgr/oralhealth.htm](http://www.nidcr.nih.gov/sgr/oralhealth.htm)

National Call to Action to Promote Oral Health  
[www.nidcr.nih.gov/AboutNIDCR/SurgeonGeneral/NationalCallToAction.htm](http://www.nidcr.nih.gov/AboutNIDCR/SurgeonGeneral/NationalCallToAction.htm)

Behavioral Risk Factor Surveillance System  
[www.cdc.gov/BRFSS/](http://www.cdc.gov/BRFSS/)

Illinois Behavioral Risk Factor Surveillance System  
<http://app.idph.state.il.us/brfsss/>

Economic Contribution of the Dentistry Profession in 2004  
[www.imakenews.com/eletra/go.cfm?z=iadr%2C114614%2Cb4RhSJDk%0D%0A%2C724108%2Cb73jFrD>](http://www.imakenews.com/eletra/go.cfm?z=iadr%2C114614%2Cb4RhSJDk%0D%0A%2C724108%2Cb73jFrD>)

Rural Healthy People 2010  
[www.srph.tamhsc.edu/centers/rhp2010/publications.htm](http://www.srph.tamhsc.edu/centers/rhp2010/publications.htm)

## Appendix 2: Acronyms

<b>APC</b>	Annual Percent Change
<b>APORS</b>	Adverse Pregnancy Outcomes Reporting System
<b>ASTDD</b>	Association of State and Territorial Dental Directors
<b>BRFSS</b>	Behavioral Risk Factor Surveillance System
<b>CDC</b>	U.S. Centers for Disease Control and Prevention
<b>CFA</b>	Craniofacial Anomaly
<b>DSGP</b>	Dental Sealant Grant Program
<b>FPL</b>	Federal Poverty Level
<b>FRM</b>	Free and Reduced Meals Program
<b>FY</b>	Fiscal Year
<b>HD</b>	Health Department
<b>HP</b>	Healthy People
<b>IDFPR</b>	Illinois Department of Financial and Professional Regulations
<b>IFLOSS</b>	Illinois Oral Health Coalition
<b>IFRS</b>	Illinois Fluoridation Reporting System
<b>IOHP</b>	Illinois Oral Health Plan
<b>IOHSS</b>	Illinois Oral Health Surveillance System
<b>IPLAN</b>	Illinois Project for Local Assessment of Needs
<b>ISCR</b>	Illinois State Cancer Registry
<b>NA</b>	Not Available
<b>NCI</b>	National Cancer Institute
<b>NOHSS</b>	National Oral Health Surveillance System
<b>OHNAP</b>	Oral Health Needs Assessment and Planning
<b>ONS</b>	Other Nervous System
<b>PD</b>	Periodontal Disease
<b>PRAMS</b>	Pregnancy Risk Assessment and Management System
<b>SCHIP</b>	State Children's Health Insurance Program
<b>SEER</b>	Surveillance Epidemiology and End Results
<b>WFRS</b>	Water Fluoridation Reporting System

