

# Oral Health

## Oral Health: A National Challenge\*

Dental caries is the most common chronic disease of childhood in the United States. It affects half of children by middle childhood, and over 80% by late adolescence. The costs in monetary terms, human productivity and quality of life for individuals and society are staggering. Nationally, children lose an estimated 52 million hours of school due to dental problems and related care. Untreated caries is associated with childhood growth problems and may result in costly emergency room visits and hospitalization. Poor dental health is related to pain, poor nutrition, and the inability to accomplish tasks

of daily living. Chronic oral infections are associated with diabetes, heart disease, and prematurity and low birth weight.

Health problems and lower quality of life associated with poor oral health are greater in some racial/ethnic groups. Non-Hispanic blacks have twice the rate of untreated caries for all ages. Racial differences appear as early as age 2 to 4 where non-Hispanic blacks have 60% more untreated caries than white counterparts. Although differences tend to disappear at ages 6 to 8 when the adult teeth begin to emerge, differences are again obvious by age 15. Children's oral health sets the stage for adult oral health and function. Research shows that lack of treatment and lack of preventive services are the most likely causes for relatively higher rates of missing teeth in adult non-Hispanic blacks.

Costs of dental health care account for approximately 30% of family out of pocket expenditures for children's health care. There are 260% more children without dental insurance than there are children without medical insurance. Although appropriate use of

sealants and fluoride has been shown to reduce most dental caries, only 15% of 14 year old children have any sealants on

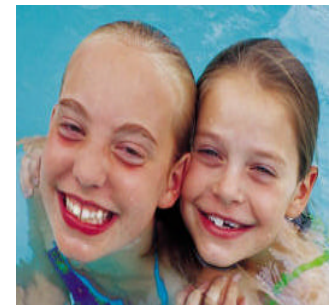
permanent molars. Low income, low education, minority status and low socioeconomic status are all associated with lower odds of having a dental visit. The resulting health disparities for children and adults and the economic drain on society are substantial.

Unfortunately, dental care continues to be the most frequent unmet health need of children. It is mistakenly regarded as medically unimportant for the child's well being. Despite state and federal financial support for dental services, many children continue to be neglected, particularly for preventive dental services. Although federal and state programs provide coverage for many poor children, federal and state health insurance programs (such as Medicaid) alone consistently failed to provide adequate access to dental services for children across the country. Nationwide, fewer than 1 in 5 Medicaid eligible children obtain basic preventive dental care. Simply increasing Medicaid reimbursement has not increased dentist participation anything but marginally.

Improving access to preventive dental services for children appears to yield dividends in reduced costs, improved health and enhanced quality of life.



Good oral health is directly linked to the overall health of children.



Dental caries can be prevented if intervention starts early. Evidence continues to mount showing that preventive programs in the form of sealants reduce cavities and other oral health problems. Dental Sealant programs have even been  
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\* From the Surgeon General's Report on Oral Health and the Surgeon General's Conference on the Children's Oral Health.

## Duval County Oral Health Report Card

Table 1

Number	Objectives		U.S.	FL	Duval	2010 Target
21-2.	Reduce the proportion of children, adolescents, and adults with untreated dental decay. (Age group 15 years old only)		20% <sup>1</sup>	39% <sup>2,5</sup>	29% <sup>2,5</sup>	15%
21-6.	Increase the proportion of oral and pharyngeal cancers detected at the earliest stage.		35% <sup>1</sup>	33% <sup>3</sup>	27% <sup>3</sup>	50%
21-8.	Increase the proportion of children who have received dental sealants on their molar teeth.	Age 8	23% <sup>1</sup>	30% <sup>2,5</sup>	19% <sup>2,5</sup>	50%
		Age 14	15% <sup>1</sup>	22% <sup>2,5</sup>	15% <sup>2,5</sup>	50%
21-9.	Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water.		62% <sup>1</sup>	64% <sup>4</sup>	99.8% <sup>4</sup>	75%
21-10.	Increase the proportion of children and adults who use the oral health care system each year.		44% <sup>1</sup>	9% <sup>2,5</sup>	10% <sup>2,5</sup>	56%

<sup>1</sup> Source: Healthy People 2010

<sup>2</sup> Source: Public Health Dental Program, Florida Department of Health, 2001

<sup>3</sup> Source: Florida Cancer Data System, 1998

<sup>4</sup> Source: State of Florida Duval County Quarterly Performance Report, 2001

<sup>5</sup> Medicaid Eligible only

The available statistics for Duval County give us important insights about our community's oral health status and what we may need to do. The Oral Health Report Card (Table 1) contains the current local level data for oral health issues for which we have data. Our oral health status and the needed direction becomes even clearer when we contrast the local data to state statistics and the national data found in Healthy People 2010.

The state is developing an oral health surveillance system but it is yet to be implemented. Consequently, local data for oral health come from three major sources:

- the Florida Medicare & Medicaid Information System which is the primary source of data for people with low

income eligibility;

- the Florida Cancer Data System; and
- the County Health Department Health Clinic Management System.

Duval County appears to be a leader when comparing State and National data for fluoridation. Fluoridation is proven to reduce tooth decay and almost everyone in Duval County is covered because the public water sources are fluoridated.

Many of the oral health indicators are very much based on the system of dental and health services within the community. The community does not appear to be doing very well when reviewing these statistics. For example, one important indicator of oral health is

the rate that people have oral cancer diagnosed in its earliest stage. Only 27% of people in Duval County have the cancer diagnosed in the earliest most preventable state. To a large extent, early diagnosis is determined by the percentage of people who receive an oral exam from either a dentist or a physician. Low rates can be due to either people not seeking or not being able to get access to oral exams. Inadequate oral exams are another possible reason. Duval appears to lag behind the state and the country with its current rate of early diagnosis and the County is far short of the 2010 target of 50%. Facilitating greater access to and use of oral

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## Duval County Dental Services By Program Service Site

Table 2

	<i>Central Dental</i>	<i>Wesconnect</i>	<i>Royal Terrace</i>	<i>Dental Bus 1 (Happy Tooth)</i>	<i>Dental Bus 2 (Smile Express)</i>	<i>Total</i>
<b>New Patients</b>	1,836	1,160	841	3,529	3,349	10,715
<b>Unduplicated Patients</b>	2,181	1,387	1,009	3,933	3,600	12,110
<b>Cleanings</b>	1,845	965	1,130	3,472	2,927	10,339
<b>Fillings</b>	2,770	1,681	2,248	0	167	6,866
<b>Fluoride Treatments</b>	1,495	769	569	3	0	2,836
<b>Sealants</b>	1,535	116	918	3,441	3,600	9,610
<b>Total</b>	11,662	6,078	6,715	14,379	13,645	52,476

Source: Duval County Health Clinic Management System, 2001

exams by physicians and dentists is the main approach to improving this statistic.

The proportion of low income children and adults (those who are Medicaid eligible) who use the oral health care system appears to be particularly problematic. Only 9% of the States Medicaid eligible people access oral health services and Duval is fairly similar with a 10% rate. The overall rate for use of oral health services across the nation is 44% and the 2010 target is 56%. Clearly the Medicaid population suffers from inadequate care when it comes to regular oral health care.

On a positive note, the Duval County Health Department is the leader in the state for providing dental sealants to children. The DCHD provides over

twice as many sealants as the next closest County Health Department. The DCHD program provides these services when the child's permanent teeth have just emerged, providing an optimal protection and tooth decay prevention. The combination of fluoride and sealants provide a level of freedom from tooth decay that most adults never thought possible. Unfortunately, even with this large number of children reached through the Health Department program, the County falls below the state average for proportion of the low income children who receive sealants.

This data is somewhat misleading when it comes to the Healthy People 2010 objectives since the 50% target for Healthy People 2010 is based on any sealants by the age 14 (accumulative

measure). The data for Duval County, reflected in the report card is not cumulative. It only reflects the proportion of children who receive sealants while they are 8 and 14 years old. The County Health Department addresses this critical need by providing access to sealants for all low income eligible children in grades 2, 3, 7 and 8.

## Center For Health Statistics Reports

Why health statistics reports? The U.S. has the most advanced health care technology in the world. Like most countries, we have improved dramatically in health status over the last century. But, the U.S. lags behind many if not most developed countries throughout the world in its health as measured by various statistics. Of even greater concern is that we have been falling further behind many countries for the statistics that are frequently used to gauge overall health such as life span and infant mortality. Who is responsible for our health status, and what do we need to do to make it better?

The systems of delivering health care and the systems of delivering public health services vary from state to state and even from community to community. The federal government does not have a direct constitutional role in the health of states and communities. The federal government has a role where federal funds are used such as with Medicare or Medicaid. The federal government also has a role when the U.S. population's health is at risk, such as from epidemics or terrorism. Regulation of interstate commerce is another role, such as with drugs or foods that are sold across state borders. However, most of the responsibility for health is at the state and local level.

To be able to act responsibly, local communities must be well informed of health issues. They must have the best available data on health issues affecting their community. The purpose of these Center for Health Statistics Reports is to provide the best information possible. The Center for Health Statistics Reports are designed to hold up a clear mirror of

the community's health so that local officials can make the best decisions with the support of an informed citizenry.

### Best Data Available:

We are in a relatively new era of health data. A few decades ago, health statistics were limited to some infectious diseases and birth and death statistics. Cancer registry data systems just started to evolve in the 1960s and 70s. These systems are now a major source of im-



portant data. Health Behavior data systems are newly evolving. These data offer great potential for addressing health problems. More coordinated data systems for health care and health services also offer great potential for understanding health problems.

Comparisons of data between communities, the state and the U.S. help provide a clearer picture of what our community's health could and should be. Comparisons require coordinated data systems so that the data are similar. The federal government has been attempting to coordinate public and private sector efforts to improve our country's health, including health data systems. Much of the current U.S. efforts

originated with the Healthy People Surgeon Generals Report published in 1979. More recent reports such as Healthy People 2000 and Healthy People 2010 are major national efforts to identify the important health issues and to mobilize efforts to address the problems. The data and the targets in Healthy People 2010 provide clear summaries of the health issues and what we should expect.

Unfortunately, many of our national statistics are derived from surveys and national studies that may or may not include local data. The result is that local data is not available for many important health issues. The Duval County Center for Health Statistics Reports will only include the data that is available at the local level. Important data on critical health issues may not be included, simply because there are no local data. Data that may violate confidentiality of health records will also not be included.

The Reports will attempt to clarify what the health issues are and how the city of Jacksonville is doing. We hope to identify both strengths and weaknesses. However, the purpose is not to focus on where we are. The purpose is to provide the best information to guide future decisions. The report will be presented to the community on a regular basis. Suggestions for improving these Reports are welcome.

## DCHD Accepts The Challenge by Dr. Steve Slavkin

The Duval County Health Department (DCHD) Dental program has three fixed site clinics and two mobile units (dental vans) that provide services to children. Since 1993 the dental program has expanded from one clinic, seeing 1,596 patients to five dental clinics (two mobile) having seen 14,104 patients in fiscal year 1999-2000. In 1993 the Dental program had generated revenue of \$30,000 with expenses of \$363,000, for a net loss of \$333,000. During fiscal year 1999 – 2000, it generated revenues of \$1,527,025 with expenses of \$1,484,759 for a net of \$42,266. According to the 2001 Public Health Dental Bureau Quality Improvement Report, Duval County Health Department has been the most proactive county health department in the state in addressing the oral health needs of low-income populations.

The utilization of fixed clinics in

conjunction with mobile units serves as a model for the state. Duval's performance is significantly above the state average. Patient visits are 18% above the state average, and procedures per dentist are 60% above.

The dental program has received many awards, the most recent being the 2001 Davis Productivity Award for improved service delivery. This award, presented by Florida Tax Watch, The Florida Council of 100, and the Davis family of Winn-Dixie recognize excellence and achievement in Florida Government.

In the future we hope to increase access to care for children by moving the Wesconnett Dental Center to a larger facility, doubling its capacity; opening a South Jacksonville Dental Center, which will be our first dental facility east of the river; and increasing access for uninsured and low-income adults. The non

profit corporation, Dentists Care Jacksonville, with the support of the Northeast District Dental Society, City of Jacksonville, and Duval County Health Department, allows dentists to volunteer at dental clinics around the county and over 90 dentists have signed up to participate. This will take care of an additional 1,000 people in Duval county needing dental care. We are committed to the people of Duval County and are looking for other opportunities to help with this tremendous need.

## Dental Health Services To Go

The Duval County Health Department dental program has three fixed site clinics and two mobile units (dental vans) that provide services to children. The dental van component is integrated with a well-developed community collaboration infrastructure that utilizes schools, public housing units and community based organizations. When school is in session, the vans concentrate on school visits where access to dental care is provided to large numbers of children. When school is not in session the vans are utilized to provide access for children through programs provided in conjunction with community based organizations, such as church activities, Urban League Head Start programs, day care centers, Police Athletic Leagues, or housing units. When conducted with community groups, the eligibility is expanded beyond the eligibility guidelines used in the schools. When the dental vans visit the

schools, the program is primarily directed at children who are eligible for the free or reduced lunch program. Parental permission is required to participate in the program.

The program primarily focuses on children in the second, third, seventh and eighth grades to facilitate the application of preventive services when the permanent teeth are accessible for most children. The program reaches approximately 10,000 low income children per year. This program provides more than twice the pit and fissure sealants of any other county in the state, addressing Healthy People 2010 objective 21-8. Even more impressively, the program provides more than 5 times the number of sealants of the next largest school/community-based, department of health program in the state of Florida. An overview of dental van services, as well as other clinics, are displayed in Table 2 on

page 3.



*"The utilization of fixed clinics in conjunction with mobile units serves as a model for the state."*

Florida Public Health Dental Bureau Quality Insurance, 2001

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## Oral Health: A National Challenge (continued from cover)

shown to reduce federal & state health care costs (Weintraub, AJPH, 2001). Research also shows that some specific delivery systems are effective in increasing access to and utilization of sealants and other dental health preventive services. The CDC reports that the use of school base programs substantially increased sealants. Mobile vans also have been shown to improve access to dental care.



*"Pregnant women with chronic gum disease during the second trimester are up to seven times more likely to give birth prematurely."*

Journal of the American Dental Association, 2001