

Adult Oral Health Assessment Executive Summary



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Missouri Department of Health and Senior Services
Office of Primary Care and Rural Health
Oral Health Program
[www.dhss.mo.gov/oral health](http://www.dhss.mo.gov/oral%20health)

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Adult Oral Health Assessment Executive Summary

INTRODUCTION

In 2008, the Office of Primary Care and Rural Health (OPCRH), Missouri Department of Health and Senior Services (DHSS), was awarded “Grants to Support Oral Health Workforce Activities” from the Health Resources and Service Administration (HRSA). One component of this grant allowed for a statewide assessment to examine the oral health of specific adult populations throughout Missouri. The data collected through this grant opportunity is crucial, as adult and senior populations have largely been excluded from previous oral health surveillance activities due to current operational funding streams solely directed to populations birth to age eighteen. The following specific aims were established for the assessment:

- To provide a benchmark of the oral health of adult Missourians living independently and seeking services at a meal site/community center.
- To provide a benchmark of the oral health of adult Missourians requiring living assistance and thus residing in skilled nursing facilities.
- To provide a benchmark of the oral health of adult Missourians who are considered uninsured or under-insured.
- To identify access to dental care issues related to adult Missourians.

The data presented in this report provides a summary of the survey findings. The first section will describe the methods used in completing the assessment. The second section will discuss the findings of the assessment by population groups and the third section will provide summarization.

SECTION ONE: METHODOLOGY

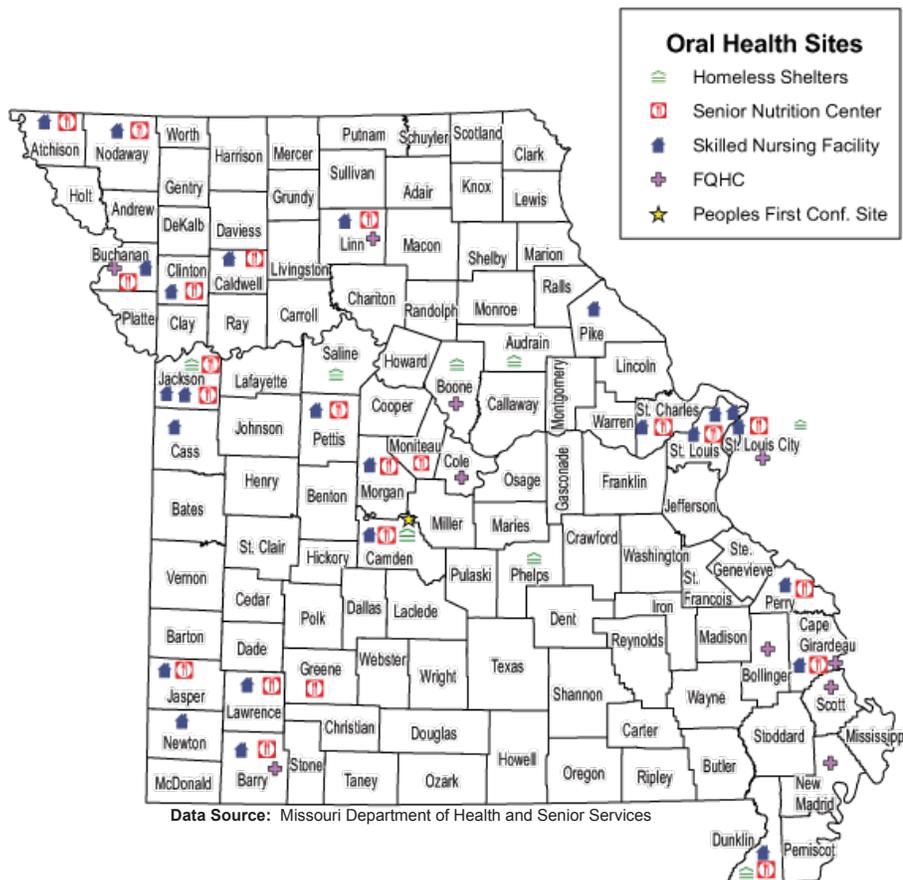
In January of 2009 OPCRH contracted with the University of Missouri Kansas City (UMKC), School of Dentistry to conduct a statewide assessment of adults by specific populations in Missouri. An assessment of this kind had not been done in any form previously. The populations to be examined included 1) adults living independently and seeking services at a meal site/community center sometimes referred to as “well elderly”; 2) adults requiring living assistance residing in skilled nursing facilities sometimes referred to as “ill elderly” and 3) adults who were considered underinsured and uninsured by virtue of the fact that they sought health and care services through homeless shelters or federally qualified health centers (FHQC).

The “Urban-Rural Portion” for each county in Missouri was obtained using the “MABLE/Geocorr2K: Geographic Correspondence En-

gine with Census 2000 Geography” utility available from the Missouri Census Data Center (<http://mcdc2.missouri.edu/websas/geocorr2k.html>). Using the Urban-Rural Portion, the state was stratified into 3 categories: metro (< 50% of county population is rural), micro (50-99% of county population is rural), and rural (100% of county population is rural). The 494 skilled nursing facilities in Missouri were categorized as being metro, micro or rural, then twenty-six facilities were randomly selected proportional to the number of rural, micro and metro nursing facilities in the state. To reduce travel costs, a senior meal site in the same community as the randomly selected nursing facility was selected.

If a nursing facility refused, a replacement facility from the same sampling strata was selected. In addition to the twenty-six skilled nursing facilities, twenty-five community senior centers,

2009 Oral Health Assessment Sites



eight homeless shelters, and nine federally qualified health centers were selected for the assessments. Assessments at the sites did not include all clients. Some clients at skilled nursing facilities were not evaluated due to the inability to gain access to the mouth or restricted permission from care-givers. At the meal sites the attendance was often impacted by the weather, other competing programs, and type of meal being served. The map on the previous page displays the various sites where assessments were conducted.

UMKC recruited and trained a team of thirteen dental hygienists to conduct oral health screenings throughout the state of Missouri. All dental hygienists were licensed in the state of Missouri and the training session was designed by a dental educator from the UMKC School of Dentistry, Division of Dental Hygiene.

Two interview instruments for demographic information were developed for this activity. The first instrument was designed for use with the elderly adults. This included the “well elderly” living independently and seeking services at a meal site/community center and the “ill elderly” requiring assistance and living in a skilled nursing facility. The second instrument was designed to be used with the underinsured/uninsured adults and was used at the FQHCs and homeless shelters. These two instruments were developed by a dental educator in collaboration with the Association of State and Territorial Dental Directors consultant and reviewed for face validity by a team of dental hygiene faculty from UMKC.

The instruments were identical except for the depth of interview questions. Typically, the clients at the meal sites and shelters were able to be more conversant. Thus, the interview questions assessed for more detail than those questions asked of the skilled nursing facility clients.

Both instruments collected interview information from the subjects as well as intra-oral

screening data. Interview information included demographics such as age, ethnicity, type of dental insurance (if applicable) and reason for the last dental visit. The assessment for the FQHCs and the homeless shelters gathered information regarding current and past dental pain, types of services sought and barriers to dental care. The assessment for the skilled nursing facilities and the meal sites/community centers collected data regarding reasons for past dental visits and also categorized the alertness of the individual to discern for completeness of answers. Copies of the interview information can be found in Appendices A and B.

All intra-oral screenings were completed using a pen light and a mouth mirror. Clients were able to be assessed while in chairs, wheelchairs or while lying in bed. No dental radiographs (x-rays) were used. Gauze was used to clear the mouth of debris/saliva if oral debris made it difficult to view intra-oral conditions.

The screening looked at:

- the condition of the lips and tongue
- the presence of teeth in both arches
- the presence and condition of a denture
- untreated decay
- severe periodontitis as evidenced by mobility and visible furcation involvement
- candidiasis and other oral lesions
- saliva status
- oral cleanliness
- treatment urgency

A copy of the intra-oral screening form can be found in Appendix C.

The assessments were completed by the trained hygienist over a period of eight weeks, and then analyzed by the ASTDD consultant. Descrip-

SECTION TWO: FINDINGS

A total of 1,904 adults were assessed; 1,186 individuals in skilled nursing facilities (SNF), 464 from meal sites (senior centers), 124 from homeless shelters, and 130 at federally qualified health centers. The results will be reported in two parts:

- Part One: Key Findings from assessments of older adults living in skilled nursing facilities and seeking services at meal sites/community centers.
- Part Two: Key Findings from assessments of adults considered uninsured and underinsured.

PART ONE: Key Findings of Oral Health Assessments of Older Adults Living in Skilled Nursing Facilities or Seeking Ser-

vices at Meal Sites/Community Centers.

DEMOGRAPHICS

The table below describes the demographics of adults representing the “ill elderly” and the “well elderly” of Missouri. It should be noted that seventy-three percent of the adults at the skilled nursing facilities and sixty-four percent at meal sites/community centers were female.

Of all of the individuals assessed, ninety-four percent of the individuals were Caucasian and approximately ninety percent were over the age of sixty, which is close to the statewide population rate of Caucasians 55 years old and over at ninety-one percent based on the DHSS Missouri Information for Community Assessment (MICA). This assessment did not include any individuals considered home bound. These demographics are illustrated in Table 1.

TABLE 1: DEMOGRAPHICS OF SENIORS ASSESSED IN SKILLED NURSING FACILITIES AND MEAL SITES

	Skilled Nursing Facilities Number of Participants	Meal Sites Number of Participants
Female	865 (73%)	298 (64%)
Male	316 (27%)	164 (35%)
Missing/Unknown	5 (<1%)	2 (<1%)
Race/ethnicity		
Caucasian	1108 (93%)	436 (94%)
African-American	59 (5%)	20 (4%)
Other	7 (<1%)	5 (<1%)
Missing/Unknown	12 (1%)	3 (1%)
Age Group		
<50	31 (3%)	9 (2%)
51to60	76 (6%)	15 (3%)
61to70	119 (10%)	109 (24%)
71to80	253 (21%)	178 (38%)
81to90	506 (43%)	137 (30%)
91+	163 (14%)	15 (3%)
Missing/Unknown	38 (3%)	1 (<1%)

KEY FINDING 1: Many older adults in Missouri are in need of dental care.

Twenty-four percent of older adults living in skilled nursing facilities reported having seen a dentist in the past year. This can be compared to the more than fifty percent of those assessed at meal sites/community centers. Twenty-six percent of adults in skilled nursing facilities were in need of either early or urgent dental care. Of those, fifteen adults in the skilled nursing facilities (2%) had pain or abscesses requiring urgent care. This can be compared to almost eighteen percent of adults assessed at meal sites/community centers required dental care with three adults (1%) noted with pain and/or abscesses requiring urgent care. Individuals who were noted to need early dental care were those with untreated decay or a need for denture fabrication or repair.

Forty-four percent of skilled nursing facility residents were assessed as having untreated decay and twenty-two percent having severe periodontal disease (mobile teeth and visible roots). Of the adults assessed at meal sites/community centers, twenty percent had untreated decay and

fourteen percent had severe periodontal disease. This information is illustrated in Table 2.

KEY FINDING 2: Missouri’s adults have limited oral function necessary to maintain health through proper diet and nutrition.

A complete and functioning dentition, whether of one’s own natural teeth or in the form of dentures, is important to maintaining good health through proper nutrition. Table 3 illustrates the percentage of individuals missing teeth (edentulous) in either upper or lower arch, the percentage of those who have dentures, and the percentage of those dentures that need to be repaired.

It should be noted that not all individuals missing teeth have those teeth replaced with a denture. Furthermore, of those dentures that do exist, twenty-one to thirty-eight percent require repair. Having no dentures to replace missing teeth or having dentures that need repair leads to loss of function and ultimately poor health because of improper diet and nutrition for these individuals.

TABLE 2: STATUS OF SENIOR/ADULTS NEED OF DENTAL CARE

	Skilled Nursing Facilities	Meal Sites
Untreated Dental Decay	44%	20%
Severe Periodontal Disease	22%	14%
Required Early Dental Care	37%	17%
Required Urgent Dental Care	2%	1%

KEY FINDING 3: The oral health of Missouri adults attending senior centers is better than that of adults residing in skilled nursing facilities.

When screened for oral cleanliness, lesions, or infection:

- 77 percent of skilled nursing facility residents had significant oral debris in their mouths
- 32 percent of skilled nursing facility residents had dry lips
- 7 percent of skilled nursing facility residents had oral lesions
- 4 percent of skilled nursing facility residents had a yeast infection or candidiasis

In comparison, findings at senior meal sites included:

- 43 percent of adults at senior meal sites had significant oral debris in their mouths
- 12 percent of adults at senior meal sites had dry lips
- 5 percent of adults at senior meal sites exhibited lesions
- 3 percent of the adults at senior meal sites had a yeast infection or candidiasis

This data is displayed in Table 4.

TABLE 3: STATUS OF EDENTULOUS IN SKILLED NURSING FACILITIES AND SENIOR MEAL SITES

	Skilled Nursing Facilities	Meal Sites/ Community Centers
Missing All Upper Teeth	56%	42%
Denture Replacing the Upper Teeth	81%	95%
Upper Dentures That Need Repair	21%	23%
Missing All Lower Teeth	44%	29%
Denture Replacing the Lower Teeth	74%	90%
Lower Dentures That Need Repair	34%	38%

TABLE 4: ORAL, CLEANLINESS, LESIONS AND INFECTION STATUS

	Skilled Nursing Facilities	Meal Sites/ Community Centers
Dry Lips	32%	12%
Some Areas With Oral Debris	62%	42%
Most Areas With Oral Debris	15%	1%
Dry, Sticky Tissues	35%	12%
Oral Lesions	7%	5%
Candidiasis	4%	3%

PART TWO: Key Findings of Oral Health Assessments of Missouri’s Uninsured and Underinsured

uninsured and underinsured adults in Missouri are in need of dental care.

DEMOGRAPHICS

Adults were assessed at homeless shelters and FQHC’s medical clinics to obtain oral health data of Missouri’s uninsured and underinsured. Table 5 describes the demographics of those adults screened. It should be noted that thirty-two percent of the adults assessed were female and seventy-two percent of the individuals were Caucasian. The age range of these adults (defined as age 21) was from 21 to 81+.

- About one-third (32%) of adults assessed in FQHC’s medical clinics reported having seen a dentist in the past year; and of those, only one-third (32%) went in for regular check-ups. Over forty percent of those having seen a dentist in the past year were seen because there was a specific dental treatment to be remedied such as tooth ache relief, broken tooth, or decay.
- Of the adults assessed in shelters approximately one-quarter (27%) reported a dental visit within the past year. Of those, thirty-six percent went for a routine check-up and at least one-third (31%) sought treatment when prompted by discomfort.

KEY FINDING 1: A large segment of

TABLE 5: DEMOGRAPHICS OF FQHC’S AND SHELTER PARTICIPANTS

		FQHC Number of Participants	Shelters Number of Participants
Gender	Female	42 (32%)	39 (32%)
	Male	88 (68%)	85 (68%)
Race/ethnicity	Caucasian	97 (75%)	85 (69%)
	African-American	23 (18%)	35 (28%)
	Other	10 (08%)	4 (04%)
Age Group	<21	7 (05%)	47 (38%)
	21to30	21 (16%)	22 (18%)
	31to40	21 (16%)	23 (18%)
	41to50	27 (21%)	22 (18%)
	51to60	20 (15%)	10 (08%)
	61to70	20 (15%)	
	71to80	11 (09%)	
	81+	2 (02%)	
	Missing/Unknown	1 (01%)	

Note: Percentages may equal more than 100% because of rounding.

- Both in the FQHC's and in the shelters approximately eleven to fourteen percent of adults needed urgent treatment. This classification of urgent care was assigned when the client was experiencing pain or had visible abscesses. These findings are illustrated in Table 6.

KEY FINDING 2: Uninsured and underinsured adults in Missouri are impacted by access issues.

- Of the adults assessed at the homeless shelters, sixty-nine percent reported having no dental insurance and almost fifty-two percent indicated that dental care had not been possible in the past twelve months.
- At the federally qualified health centers al-

most one-third of individuals reported not having dental insurance and being unable to get dental care in the last twelve months. The vast majority of these respondents reported a lack of affordability as the reason.

This finding is illustrated in Table 7.

KEY FINDING 3: Many of Missouri's uninsured and underinsured experience limited oral function necessary to maintain health through proper diet and nutrition.

A complete and functioning dentition, whether of one's own natural teeth or in the form of dentures, is important to maintaining good health through proper nutrition.

- Almost eighteen percent of individuals at

TABLE 6: STATUS OF UNINSURED AND UNDERINSURED NEEDING DENTAL CARE

	Homeless Shelters	FQHC
Dental Visit Within the Past Year	27%	32%
Main Reason for Visit		
Check up, exam or cleaning	36%	32%
Discomfort	31%	40 %
Needs Early Dental Care	29%	37%
Needs Urgent Dental Care	14%	11%

TABLE 7: FINDINGS AND ACCESS TO DENTAL CARE

	Homeless Shelters	FQHC
No Dental Insurance	69%	32%
Could not get dental care when needed during the past 12 months	52%	34%
Reason that dental care could not be secured		
Could not afford it	n=45	n=29
No Insurance	n=34	n=7
Other Family Needs	n= 2	

Note: Participants could select more than one option so percentages are not presented.

federally qualified health centers are edentulous, i.e. missing all teeth in both arches.

However, the encouraging news is that ninety-one percent of those individuals have dentures to replace the dentition.

Table 8 illustrates the percentage of individuals missing teeth in either the upper or lower arch, percent of those that have replacements in the form of dentures and the percentage of those dentures that need to be repaired.

Needing a repair or relining is indicative of a denture that is not functional. Therefore, one must not only consider the number of clients with dentures, but also the condition of the dentures as well.

SUMMARY

In conclusion, the Centers for Disease Control

and Prevention (CDC) report that nationally twenty-five percent of American adults over age 60 have lost all their teeth, primarily because of tooth decay, which affects more than ninety percent of adults over age 40, and advanced gum disease, which affects five-fifteen percent of adults.

In addition, oral cancers pose a threat to the health of U.S. adults. Healthy People 2010 and 2020 documents both address the need for early detection of oral cancer. While the picture for adults in general is serious, it is even more critical for seniors and for those adults who are underinsured/uninsured and lack the resources to get dental care.

According to the CDC, gum disease is associated with diabetes, and there is emerging evidence of the relationship between periodontal disease and cardiovascular disease and stroke.

TABLE 8: EDENTULOUS IN SHELTERS AND FQHC’S ASSESSMENT SITES

	Homeless Shelters	FQHC
Completely Edentulous	5%	18%
Missing All Upper Teeth	7%	20%
Denture Replacing the Upper Teeth	78%	89%
Upper Dentures That Need Repair	43%	26%
Missing All Lower Teeth	5%	19%
Denture Replacing the Lower Teeth	100%	84%
Lower Dentures That Need Repair	83%	38%

Note: Percentage of Individuals

All of this leads to higher healthcare costs.

Oral health problems also result in quality of life issues for seniors. Poor oral health causes needless pain and suffering; loss of self-esteem; and difficulty in speaking, chewing and swallowing. Furthermore, loss of function of teeth causes problems associated with poor nutrition.

SENIOR MISSOURIANS

The importance of this assessment for the future of senior oral health is underscored by the fact that there is a scarcity of Missouri-specific oral health data for older adults. Without such data, effective planning and resource development cannot occur.

In Missouri, the percentage of adults in general visiting the dentist in a year is below the national average, while the number of adults 65+ having all teeth extracted is above the national average (Data from Kaiser Family Foundation, 2008). The assessment of seniors in skilled nursing facilities and senior centers indicates that the number of seniors who have seen a dentist or have had all teeth extracted compares even

less favorably.

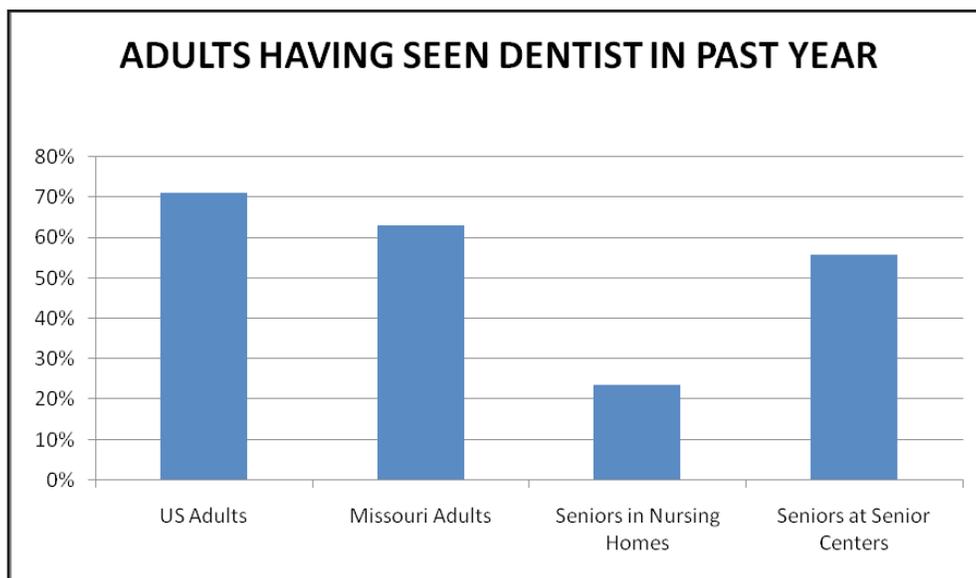
In Missouri thirteen percent of the state's population is age 65+, and of the 771,300 seniors in Missouri, 36,696 or five percent are in skilled nursing facilities. According to the CDC, being disabled, homebound or institutionalized are risk factors for poor oral health.

It should be noted that in the case of the assessment of seniors at skilled nursing facilities that because of cognitive function, not all of those assessed could self-report; seventy-four percent of the seniors assessed in skilled nursing facilities were described by the screeners as "alert", with twenty percent unable to give answers and four percent described as "unaware".

In addition, as was discussed earlier, the screening consisted of a visual examination only, with no dental radiographs or use of instruments.

Moreover, the assessment did not include homebound seniors. This leads to limitations in the data by virtue of the abilities of the population. Therefore, the actual need for care for seniors in Missouri is underestimated.

Given these qualifications, the following com-



parisons to the general adult population and to national data on seniors can be drawn:

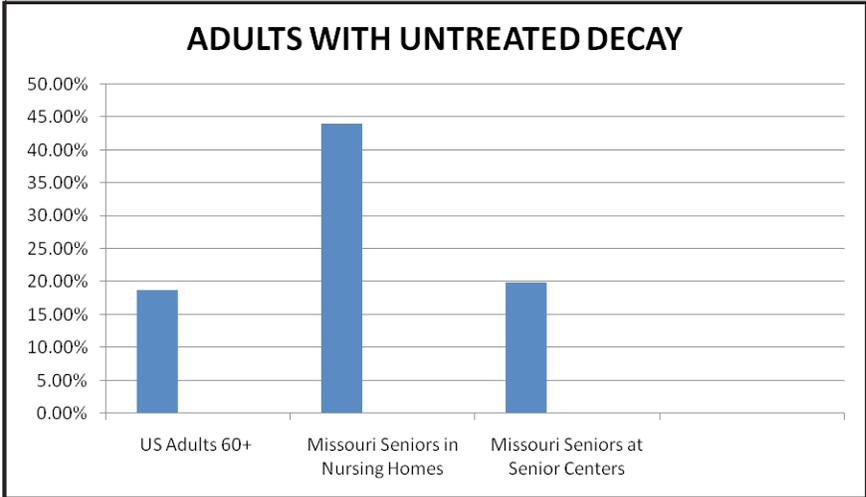
- Missouri’s seniors are not receiving as much dental care as the adult population in general. Both groups of seniors assessed in Missouri fall below the national average and the state average of adults overall who have seen a dentist in the past year. The Kaiser Family Foundation reports for 2008, the number of adults nationwide who have seen a dentist in the past year is seventy-one percent. In Missouri, among the general adult population, the Kaiser Family Foundation reports for 2008 that sixty-three percent visited a dentist in the past year.
- Moreover, the results for Missouri seniors in nursing homes do not compare favorably with national data on seniors. According to the Medical Expenditure Panel Survey (MEPS) 2006, forty-nine percent of those age 60-69 had at least one dental visit in the past year; forty-five percent of those age 70-79 had at least one

dental visit in the past year; and among those 80 and older, thirty-seven percent had a dental visit in the past year.

Of those seniors assessed in skilled nursing facilities, forty-four percent had untreated decay; and of those assessed in senior centers, twenty percent had untreated decay. Nationally, according to the NHANES 1999-2002 Survey, nineteen percent of those ages 60 and over had dental caries. The CDC suggests that older adults may have new tooth decay at higher rates than children.

Of those seniors assessed in skilled nursing facilities, twenty-two percent had severe periodontitis. This number mirrors the findings of the CDC which estimates that twenty-three percent of adults 65-74 have severe periodontal disease. Seniors assessed at the meal sites, exhibited less severe periodontitis with fourteen percent.

Compared to seniors who attend meal sites, residents of skilled nursing facilities are statistically older, are medically compromised and



more frail. Therefore, findings illustrate that the oral health of residents of skilled nursing facilities tends to be worse.

According to the CDC, many of the medications taken by seniors can cause dry mouth and reduction of the flow of saliva increased the risk of oral disease. On average, the CDC estimates individuals in skilled nursing facilities take an average of eight drugs per day.

More Missouri seniors are missing all teeth than are seniors nationally. More than forty percent of seniors in the skilled nursing facilities were edentulous in both arches; and close to thirty percent of the seniors at the meal sites were missing all teeth.

MEPS 2006 reports that nationally, of those 60-69, sixteen percent are edentulous in both arches; among those 70-79, twenty-five percent are; and among those 80 and over, thirty percent are missing all teeth.

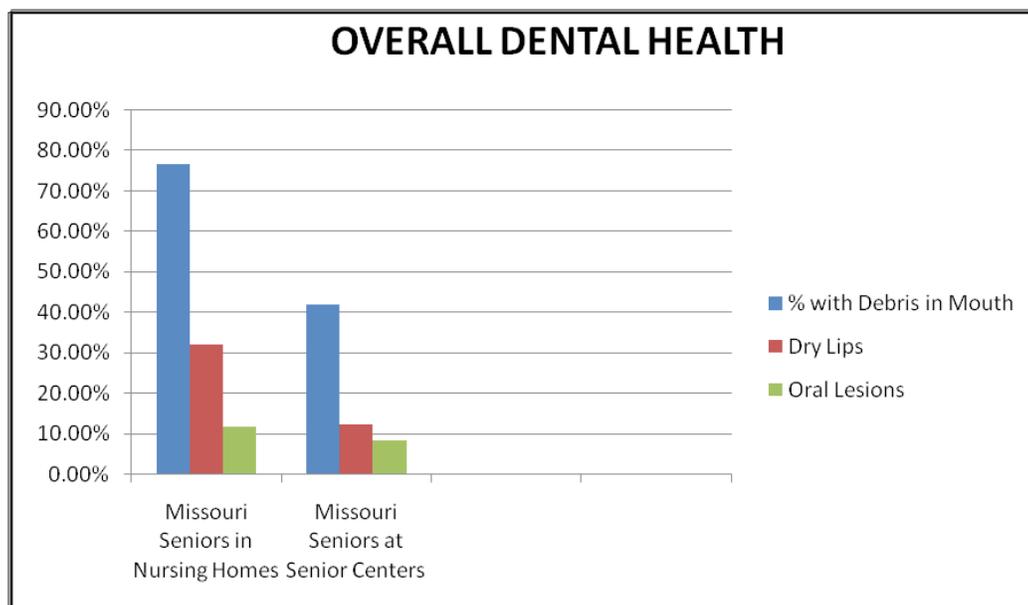
Approximately forty percent of the seniors

assessed in skilled nursing facilities need treatment – either early care or urgent care, as determined by the screeners.

UNISURED MISSOURIANS

The following facts underscore the access problem for many adults:

- Two-thirds of adults in the shelters reported having no dental insurance.
- Approximately half of adults in the shelters reported that dental care had not been possible in the past twelve months.
- Almost one-third of individuals at the FQHC's reported not having dental insurance.
- Almost one-third of individuals at the



FQHC's reported not being able to get dental care in the last twelve months; and the vast majority of these respondents reported a lack of affordability.

The impact of the access problem is demonstrated in their oral health. Of the individuals assessed at FQHC's forty-one percent had untreated decay; this percentage was higher still among residents of shelters, with forty-nine percent having untreated decay. These averages are twice the numbers reported nationally. According to the NHANES 1999-2002 Survey, twenty-three percent of those age 20 and up had decay.

Approximately one-quarter (26%) of FQHC clients had severe periodontitis, while seven percent of residents in shelters exhibited severe periodontal disease. These results were probably impacted by the fact that the population in the shelters was much younger on the whole than

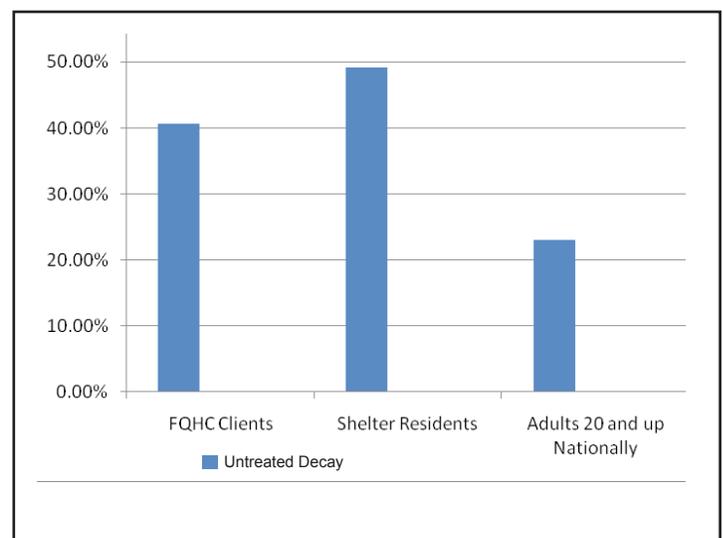
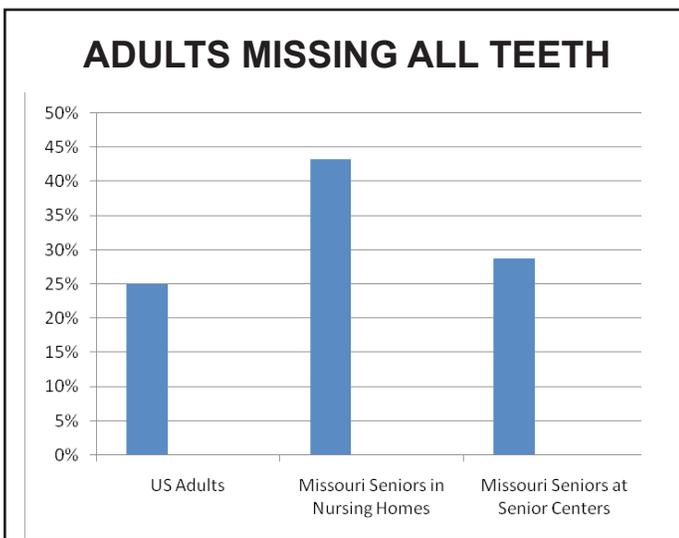
those assessed in the FQHCs.

Of the FQHC clients assessed, eighteen percent were edentulous in both arches. NHANES data (1988-1994) reported ten percent of adults age 18 and above nationally reported complete tooth loss.

NEXT STEPS

The objectives of the oral health assessment were:

- To provide a benchmark of the oral health of adult Missourians living independently and seeking services at a meal site/community center.
- To provide a benchmark of the oral health of adult Missourians requiring living assistance and thus residing in skilled nursing facilities.



- To provide a benchmark of the oral health of adult Missourians who are considered uninsured or underinsured.
- To identify access to dental care issues related to adult Missourians.

Establishing this baseline data was the first step. The next step is for appropriate groups, such as public health specialists, oral health professionals, legislators and policy-makers to review the data and design the strategies to address the oral health of Missouri adults, especially the vulnerable populations.

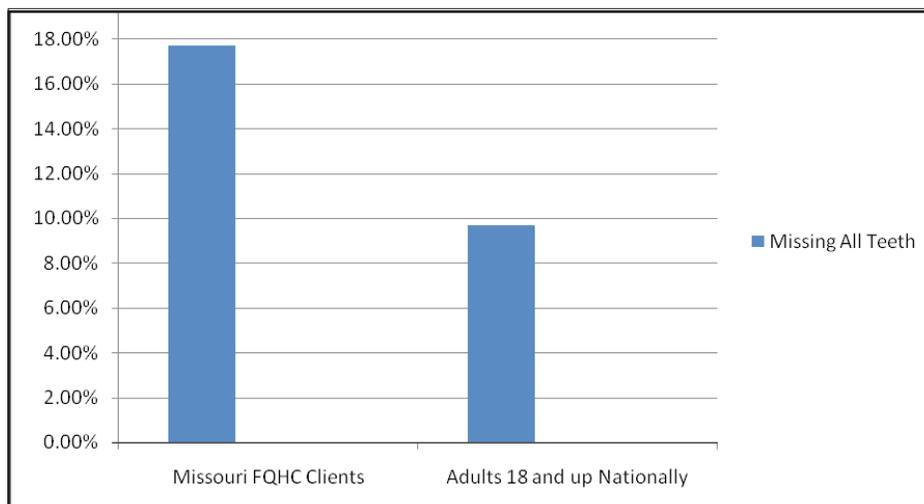
Through the collaboration of the Oral Health Task Force in 2009, a Statewide Oral Health Plan was developed. The implementation of the Plan will be further discussed by a steering committee which grew out of the Task Force. This assessment data should serve as a valuable resource for the Steering Committee as they design oral health programs and services.

ACKNOWLEDGEMENTS

This assessment was developed and implemented by a group of dedicated health professionals.

The Department of Health and Senior Services (DHSS) would like to thank the Oral Health Assessment Team, the University of Missouri - Kansas City School of Dentistry, and the AST-DD consultant.

Also, DHSS would like to acknowledge with gratitude the participation of twenty-six skilled nursing facilities, twenty-five senior sites, nine Federally Qualified Health Centers, and eight homeless shelters that helped to make this assessment possible.



APPENDIX A: SKILLED NURSING FACILITY AND MEAL SITE ORAL HEALTH ASSESSMENT

NAME OF FACILITY/AGENCY: _____ Zip code _____		CLIENT #: _____	
SURVEY DATE: ____/____/____	GENDER: 1 ____ Male 2 ____ Female	ETHNICITY: 1 ____ African-American 2 ____ Caucasian 3 ____ Hispanic 4 ____ Asian 5 ____ Other	
AGE: 1 ____ 51-60 2 ____ 61-70 3 ____ 71-80 4 ____ 81-90 5 ____ 91-100+	RESPONSE STATUS: 1 ____ Alert/Conversant 2 ____ Unable to give reliable answers 3 ____ Unaware of the screening		
SEEN A DENTIST IN PAST YEAR: 1 ____ yes 2 ____ no	IF YES, WHY: 1 ____ Routine cleaning/exam 2 ____ Toothache/pain 3 ____ Tooth extraction 4 ____ Other (please explain)		
DENTAL INSURANCE/COVERAGE: 1 ____ Medicaid 2 ____ Private insurance 3 ____ Armed Forces 4 ____ None			

APPENDIX B: FQHC AND SHELTER ORAL HEALTH ASSESSMENT

NAME OF FACILITY/AGENCY: _____ Zip Code _____	CLIENT #: _____	SURVEY DATE: ____/____/____	AGE: _____	GENDER: 1 _____ Male 2 _____ Female	ETHNICITY: 1 _____ African-American 2 _____ Caucasian 3 _____ Hispanic 4 _____ Asian 5 _____ Other
Do you have medical insurance? Yes _____ No _____ Medicaid/Medicare _____	During the past 6 months, did you have a toothache more than once, when biting or chewing? a. No _____ b. Yes _____ c. Don't know/don't remember _____				About how long has it been since you last visited a dentist? Include all types of dentists, such as, orthodontists, oral surgeons, and all other dental specialists, as well as dental hygienists. a. 6 months or less _____ b. More than 6 months, but not more than 1 year ago _____ c. More than 1 year ago, but not more than 3 years ago _____ d. More than 3 years ago _____ e. Never have been _____ f. Don't know/don't remember _____
Do you have dental insurance? Yes _____ No _____ Medicaid/Medicare _____	What was the main reason that you last visited a dentist? (Please check one) a. Went in on own for check-up, examination or cleaning. _____ b. Was called in by the dentist for check-up, examination or cleaning. _____ c. Something was wrong, bothering or hurting. _____ d. Went for treatment of a condition that dentist discovered at earlier check-up _____ e. Other _____ f. Don't know/don't remember _____		During the past 12 months, was there a time when you needed dental care but could not get it at that time? a. No _____ b. Yes _____ c. Don't know/don't remember _____		The last time you could not get the dental care you needed, what was the main reason you couldn't get care? (Please circle one) a. Could not afford it _____ b. No insurance _____ c. Did not accept Medicaid _____ d. Not serious enough _____ e. Wait too long in clinic/office _____ f. Difficulty getting appointment _____ g. Don't like/trust dentists _____ h. No dentist available _____ i. Didn't know where to go _____ j. No way to get there _____ k. Hours not convenient _____ l. Speak a different language _____ m. Other family needs _____ n. Other reason _____ o. Don't know/don't remember _____

APPENDIX C1: SKILLED NURSING FACILITY AND SENIOR CENTER ORAL HEALTH ASSESSMENT

<p>LIPS:</p> <p>1 ___ Smooth, pink, moist</p> <p>2 ___ Dry, chapped, or red at corners</p> <p>3 ___ Swelling/lump, white/red, ulcerated, bleeding/ulcerated at corners</p>	<p>TONGUE:</p> <p>1 ___ Normal, moist, pink</p> <p>2 ___ Fissured, coated</p> <p>3 ___ Patchy, red or ulcerated, swollen</p>	
<p>MAXILLA:</p> <p>1 ___ No natural teeth</p> <p>2 ___ Some natural teeth</p>	<p>MAXILLARY FULL DENTURE:</p> <p>1 ___ Has full denture</p> <p>2 ___ Does not have full denture</p> <p>3 ___ NA – has natural teeth</p>	<p>MAXILLARY DENTURE STATUS:</p> <p>1 ___ OK - can use as is</p> <p>2 ___ Needs repair/reline to be functional</p> <p>3 ___ NA – has natural teeth</p>
<p>MANDIBLE:</p> <p>1 ___ No natural teeth</p> <p>2 ___ Some natural teeth</p>	<p>MANDIBULAR FULL DENTURE:</p> <p>1 ___ Has full denture</p> <p>2 ___ Does not have full denture</p> <p>3 ___ NA – has natural teeth</p>	<p>MANDIBULAR DENTURE STATUS:</p> <p>1 ___ OK - can use as is</p> <p>2 ___ Needs repair/reline to be functional</p> <p>3 ___ NA – has natural teeth</p>
<p>UNTREATED DECAY:</p> <p>1 ___ No untreated decay</p> <p>2 ___ Yes- has untreated decay</p> <p>3 ___ NA – edentulous</p>		
<p>CANDIDIASIS:</p> <p>1 ___ No</p> <p>2 ___ Yes</p>		
<p>SALIVA:</p> <p>1 ___ Moist tissues, watery & free-flowing saliva</p> <p>2 ___ Dry, sticky tissues, little saliva or saliva very thick-ropy</p> <p>3 ___ Tissues parched and red, very little/no saliva present</p>		
<p>TREATMENT URGENCY:</p> <p>1 ___ No obvious problems – should receive regular dental care</p> <p>2 ___ Early dental care needed – before next scheduled visit</p> <p>3 ___ Urgent dental care needed – has pain or infection – care within next 48 hours</p>		

APPENDIX C2: FQHC AND SHELTER ORAL HEALTH ASSESSMENT

<p>LIPS:</p> <p>1 ___ Smooth, pink, moist</p> <p>2 ___ Dry, chapped, or red at corners</p> <p>3 ___ Swelling/lump, white/red, ulcerated, bleeding/ulcerated at corners</p>	<p>TONGUE:</p> <p>1 ___ Normal, moist, pink</p> <p>2 ___ Fissured, coated</p> <p>3 ___ Patchy, red or ulcerated, swollen</p>	
<p>MAXILLA:</p> <p>1 ___ No natural teeth</p> <p>2 ___ Some natural teeth</p>	<p>MAXILLARY FULL DENTURE:</p> <p>1 ___ Has full denture</p> <p>2 ___ Does not have full denture</p> <p>3 ___ NA – has natural teeth</p>	<p>MAXILLARY DENTURE STATUS:</p> <p>1 ___ OK - can use as is</p> <p>2 ___ Needs repair/reline to be functional</p> <p>3 ___ NA – has natural teeth</p>
<p>MANDIBLE:</p> <p>1 ___ No natural teeth</p> <p>2 ___ Some natural teeth</p>	<p>MANDIBULAR FULL DENTURE:</p> <p>1 ___ Has full denture</p> <p>2 ___ Does not have full denture</p> <p>3 ___ NA – has natural teeth</p>	<p>MANDIBULAR DENTURE STATUS:</p> <p>1 ___ OK - can use as is</p> <p>2 ___ Needs repair/reline to be functional</p> <p>3 ___ NA – has natural teeth</p>
<p>UNTREATED DECAY:</p> <p>1 ___ No untreated decay</p> <p>2 ___ Yes, Untreated decay</p> <p>3 ___ NA – edentulous</p>	<p>TREATED DECAY:</p> <p>1 ___ No treated decay</p> <p>2 ___ Yes, treated decay</p> <p>3 ___ NA – edentulous</p>	
<p>SEVERE PERIODONTITIS:</p> <p>1 ___ No mobility or furcation involvement</p> <p>2 ___ Yes – has mobility or furcation involvement</p> <p>3 ___ NA – edentulous</p>	<p>ORAL CLEANLINESS:</p> <p>1 ___ Clean mouth/dentures</p> <p>2 ___ Food, calculus, materia alba in some areas of mouth/dentures</p> <p>3 ___ Food, calculus, materia alba in most areas of the mouth or on dentures; bridges of calculus severe bad breath.</p>	
<p>ORAL LESIONS:</p> <p>1 ___ No</p> <p>2 ___ Yes</p>		
<p>TREATMENT URGENCY:</p> <p>1 ___ No obvious problems – should receive regular dental care</p> <p>2 ___ Early dental care needed – before next scheduled visit</p> <p>3 ___ Urgent dental care needed – has pain or infection – care within next 48 hours</p>		

