

The Kentucky Elder Oral Health Survey 2005 Executive Summary

I. Background

a. Mandate

The Kentucky Elder Oral Health Survey (KEOHS) represents the third and final oral health survey commissioned by the Office of Oral Health of the Kentucky Department for Public Health in the last five years. The first oral health survey commissioned in 1999 was done to assess the oral health status of children (under age 18) in Kentucky and published in 2001. The second oral health survey examined the oral health status of adults (age 18 and older) in Kentucky and was published in 2003. This survey focuses on Kentuckians aged 65 and older and is unique in that it examines elders based on their functional ability by living situation (i.e. independent elders living in their own homes represent well-elders, those who are functionally dependent represent nursing home elders, and those who are frail represent homebound elders). There currently exists no definitive data describing the oral health status of Kentucky's elder population which is the fastest growing segment of all Kentucky's age groups.

b. History

In 1987 the last comprehensive oral health survey was commissioned by the state. The Kentucky Oral Health Survey (KOHS) did not specifically include elders and excluded all institutionalized populations (e.g., nursing home elders). The 1987 survey consisted of a telephone interview and a clinical screening exam for participants who agreed. While these findings provided extensive information about the oral health status of children and adults, Kentucky elders were generally excluded, specifically elders whose oral health status had never been examined; (nursing home elders and elders who are homebound).

c. Development

The development of the survey coincided with the planning of the KAOHS (Kentucky Adult Oral Health Survey), and many of the planning sessions for the KAOHS were attended by the developers of the KEOHS. This resulted in incorporation of many of the same questions that were used in the Adult Survey. However, the KEOHS expanded the interview and clinical exam portion to include elder-specific sections (i.e.: denture evaluation, extraoral pathology, chronic medical problems, and functional limitations). These sections were developed by reviewing published statewide and national surveys of elder oral health assessments. Two parts of the survey instrument were developed: a questionnaire (interview for those who were unable to complete on their own) and a clinical exam component. The clinical exam was done on all the participants who completed the questionnaire except for the homebound sample where only 10% of the population was examined due to the financial and logistic constraint (e.g., the survey team was unable to travel to all 470 of the homebound participants' homes).

d. Timeframe

Funding for the KEOHS began July 1, 2001. Two part-time positions were funded through the Office of Oral Health to conduct the survey; a director, and an administrative assistant. Collaboration with the University of Kentucky College Of Dentistry, Office of Aging Services, Dept. of Veterans Affairs, and the Sanders-Brown Research Center on Aging, led to the contributions of graduate students and statistical support. Funding from the Sanders-

Brown Center on Aging grant (Thomas P. Rogers Endowment) permitted the use of hiring part-time statistical support as well as publishing this data. Pilot testing and finalizing the survey instrument took place in the fall of 2001. Recruitment of statewide facilities to participate, and training and calibrating dentists to assist in conducting the clinical exam part of the survey was done from January through April 2002. The first data collection and exams took place in May 2002 and the final surveys were completed in March 2005. The results were analyzed and submitted to the Office of Oral Health in November 2005.

II. Purpose

The purpose of the Kentucky Elder Oral Health Survey (KEOHS) is to provide a benchmark status report of the oral health of Kentucky's elders (age 65+). This oral health survey represents the third component (of three) oral health surveys to assess the oral health status of the citizens in the Commonwealth of Kentucky. Surveys of children (2001) and adults (2003) were also sponsored by the Office of Oral Health in collaboration with the University of Kentucky College of Dentistry (children) and the University of Louisville School of Dentistry (adults).

a. Intent (for use of this survey)

These findings will allow oral health professionals, state agencies, and other interested parties to examine the oral health status of elders and compare the results both statewide and regionally. In addition, selected questions can be compared with results obtained from the Kentucky Adult Oral Health Survey (KAOHS), as well as with surveys conducted on elders in other states. The ultimate goal is to use these findings to assist in the development of a statewide strategic plan for determining how best to meet the oral health needs of Kentucky elders.

b. Specific Aims: The Kentucky Elder Oral Health Survey (KEOHS) was conducted to:

1. Assess the Oral Health status and treatment needs of elders living in different types of residential settings:

- Elders who are independent and living in their own homes (not institutionalized). In the U.S. 2000 census, 477,580 elders were classified as non-institutionalized in Kentucky. The group of elders who were surveyed in the KEOHS also utilized Senior Centers. While not all well elders utilize Senior Centers, this group represented the largest grouping of elders living independently that could be evaluated and was comparable to the last national survey done by the National Institute of Dental Research (NIDR) in 1990. These elders are designated the Well-Elders or WE in this survey.
- Elders living in their own homes who have agreed to participate as "research subjects" from the Sanders-Brown Center on Aging. These elders *do not* utilize Senior Centers and represent elders known as "successful elders" and who have attained a higher socioeconomic and educational status. These elders are designated Sanders-Brown elders or SB elders in the KEOHS and represent a sub-set of the well elders. However, due to their differences in socioeconomic and educational status, the SB group was evaluated separately from the WE.
- Elders residing in nursing homes identified by the Office of Aging Services. There are 342 nursing homes in Kentucky housing 26,198 nursing home elders. These elders are designated NH elders in the KEOHS.

- Homebound elders representing those elders confined to their homes and unable to provide their own transportation to purchase or obtain services. Homebound elders were identified in cooperation with the Kentucky Area Agencies on Aging (AAA) from client figures from the Spring of 2002. There are approximately 8,066 homebound clients at any given time in Kentucky. These elders are designated as HB elders in the KEOHS.
2. **Assess the perceived oral health status of Kentucky elders.**
 - The perceived oral health status was determined by an extensive 48-item questionnaire administered either by a trained caseworker or member of the research team.
 3. **Assess the clinical oral health status including dental problems as determined by a licensed dentist.**
 - The clinical oral health status was determined by a one-on-one clinical open-mouth exam on all but the Homebound population. Due to logistic and financial limitations, only 10% of the homebound sample had a clinical exam conducted. The clinical exam consisted of an extensive 33 item questionnaire including: extraoral and intraoral pathology, dentate status, periodontal and caries indices, prosthodontic replacement, denture status, and overall oral health status.
 4. **Compare both perceived and clinical oral health status of Kentucky's elders by geographic region and types of elders.**
 - Five geographic regions identified in the previous children and adult surveys were utilized in the KEOHS. These regions included: Western, Eastern, Bluegrass (Central), Northern, and Louisville (Louisville and surrounding counties). The KEOHS compares the findings from both perceived and clinical questionnaire across all regions and statewide averages. Findings for the four groups of elders (WE, SB, NH and HB) are compared on key oral health indicators to determine differences and similarities.
 5. **Identify factors affecting dental access for Kentucky elders.**
 - Among the different groups of elders, there may be specific factors or geographic areas affecting access to dental care. Access problems directly lead to poor oral health. Factors in the KEOHS which are included: utilization rates, socioeconomic reasons, and transportation issues. These factors are listed and compared in geographic regions as well as among the four groups of elders.
 6. **Provide information for a point-in-time comparison to the Healthy Kentuckians 2010 objectives (similar to the KAOHS).**
 - No data is currently present in which to compare the following Healthy Kentuckians 2010 objectives:
 - 9.3.1 Increase to at least 80% the number of edentulous or partially edentulous Kentuckians who have adequate replacement of natural dentition.
 - 9.4 Reduce to no more than 23% the proportion of Kentuckians who have lost all of their natural teeth (edentulous).
 - 9.9 Increase to at least 70% the proportion of adults age 18 and older using the oral health care system each year.

7. **Develop a comparison to the 2002 Kentucky Adult Oral Health Survey (KAOHS) and other elder populations.**
 - The importance of comparing the two statewide surveys is that trends can be discovered and insights into what interventions should be considered to promote oral health and prevent oral health problems. Few statewide oral health surveys have been done on the elderly population, but for those that have, the KEOHS should be able to see how this state compares with other states in areas of perceived and clinical oral health measures.
8. **Begin a starting point for an ongoing surveillance system of elder Kentuckians regarding their oral health status.**
 - Similar to the KAOHS the KEOHS will provide a baseline data base for future studies. The plan will be to use this data to assist in development of a plan for ongoing oral health surveillance in the state of Kentucky. Ideally, a statewide oral health survey focusing on elders should be repeated at a minimum of every 10 years.

III. Methodology

The KEOHS was conducted in three phases: 1) the design and development of the survey instrument, 2) the recruitment, training, and calibration of dentists statewide to perform the clinical component of the survey, and 3) the simultaneous recruitment of well elders utilizing Senior Centers, Sanders-Brown elders, Homebound elders through the Administration on Aging, and Nursing Home Elders. Each of these phases is described more fully below. Approval for this study was granted by the Medical Institutional Review Board, Office of Research Integrity, University of Kentucky (IRB@02-0182-FIV).

a. Design and Development of the Survey Instrument

Primarily the survey was designed and developed by members of the KEOHS research team with the input and help from the KAOHS research group at the University of Louisville School of Dentistry. Many of the same questions from the KAOHS were utilized in the KEOHS so that comparisons could be made. The following five basic components were included in the interview (questionnaire) survey instrument:

- 1) Demographic information including gender, age, zip code, education level, family income, and insurance information. These data are used to describe the sample and to enable cross-comparisons between the four different groups of elders surveyed.
- 2) General health questions including overall self-assessment, diabetic status, tobacco and alcohol use, *medical problems, medication use (prescription and over-the-counter), mouthwash use, and conditions limiting mobility*. The same general health questions were used for the KAOHS but the sections in italics were added for the KEOHS as these represent age-related health issues which may influence dental conditions.
- 3) Oral health status questions including overall self-assessment, presence of pain, number of teeth removed, caries experience indicators, periodontal indicators, satisfaction with eating ability, speaking ability, and appearance, *frequency of toothbrushing, flossing, and adequacy of prosthetic replacement for missing teeth*. The same general health questions for the KAOHS were used plus some additional questions noted in italics to assess oral health habits.
- 4) Use of dental health services including time since last visit and reason(s) for non-utilization. As noted in the KAOHS, utilization of dental services (or lack thereof) has a major impact on the resulting oral health of the individual. Factors affecting utilization include but are not limited to: demand for dental care, economics, and adequate availability and work force.

- 5) Health Access Beliefs and questions including major barriers in obtaining dental care or services, which services are difficult to obtain (if any) and what recommendations participants have for improving their oral health status. These questions were included to get feedback on what barriers the participants felt exist and on what recommendations they had for improving their oral health.

In addition to the interview/questionnaire, the KEOHS also developed a clinical screening exam similar to the KAOHS. In the KEOHS, the clinical exam was conducted on all the sample participants in the SB, WE, and NH groups. In the HB sample only 10% of the sample participants had the clinical exam administered due to financial and logistic constraints. Like the KAOHS the clinical exam included full mouth assessments such as: number of missing teeth, presence and adequacy of replacements for missing teeth, and overall oral health assessments including overall treatment urgency. In addition, presence of restorations and caries were recorded. Six anterior mandibular teeth were used as indicator teeth for the periodontal markers (teeth 22 through 27) including: gingival signs, recession, calculus, tooth mobility, and gingival bleeding. To determine the presence or absence of gingival bleeding, the dentist asked the participant to floss between two teeth. Assessments of overall periodontal health and urgency of periodontal problems were included for all dentate subjects. In addition, overall oral health assessments not included in the KAOHS were added to the KEOHS including extraoral pathology (face and neck, TM joint, and lips, corners of mouth), intraoral pathology (inside cheeks and lips, roof of mouth, tongue, floor of mouth, and saliva), and denture evaluation for people who are edentulous (including: hygiene, occlusion, integrity, stability, and retention) as well as the health of the alveolar ridges, adequacy of replacements for missing teeth, and overall oral health (for the edentulous sample).

The clinical assessment of the dental caries and periodontal indicators were all dichotomous (yes/no) responses and the criteria for the denture assessment was dichotomous (adequate/inadequate). A total of 33 clinical questions were recorded. The dental materials used in the clinical screening exam consisted of a light source (flashlight or head lamp), a plastic disposable mirror, tongue depressor, gauze and floss. Appropriate infection control procedures were followed as outlined by the Centers for Disease Control and Prevention for oral health screenings and surveys.

b. Pilot testing

The questionnaire was pilot-tested at the Lexington-Fayette County Senior Center, the Lexington Center for Health and Rehabilitation and through the Kentucky Area Agency on Aging Offices. A total of 35 individuals were chosen at random to pilot-test the questionnaire/interview and the clinical exam: 15 elders from the Senior Center (representing the well-elders, WE), 10 nursing home residents (NH), and 10 homebound elders (representing the HB group). Following the interview and exam, subjects were questioned regarding the understandability of the interview questions and if any problems were encountered in the oral exam. The pilot testing resulted in the retention of the self-reported questionnaire/interview and the clinical items on the assessment form found in the appendix.

c. Sample size

According to the 2000 Census Bureau, 504,793 elders (65+) reside in Kentucky. Elders represent approximately 13% of Kentucky's total population and 16.6% of Kentucky's adult population over age 18. Of those, 29,266 are institutionalized. The remaining 475,527 represent the non-institutionalized. An additional 8,066 of these are designated homebound by the state Administration on Aging in 2002, leaving 467,461 as the "well-elder" population. The sample sizes for the three groups (not including the Sanders-Brown Elders who are a subset of well-elders) were done using a web-based sample size calculator (<http://www.raosoft.com/samplesize.html>, 2005). The following criteria were used: a 5% margin of error, a 95% confidence level, and a 33% effect size.

Sample Size Calculations
2000 Census Bureau Data

Elders (65+) residing in Kentucky.....	504,793	
Institutionalized (Nursing Home elders).....	<u>29,266</u>	(NH population)
Non-institutionalized elders residing in Kentucky	475,527	
Homebound elders designated by AOA.....	<u>8,066</u>	(HB population)
“Well-elder” population (designated by KEOHS)	467,461	(WE population)
Sanders-Brown elders (were a sub-set of the well-elders)		

The sample size calculator gave recommended sample sizes of the following:

- For NH elders = 336
- For HB elders = 327
- For WE elders = 340

The actual sample obtained for each group was:

- NH elders = 413
- HB elders = 473
- WE elders = 430
- (SB elders) = 70 (subset of well elders)

Similarly, for each group, Regional samples were considered based on the populations of the three groups

NH elders	N (%) Population	Sample Needed/ Sample	HB elder	N (%) Population	Sample Needed/ Sample	WE elder	N (%) Population	Sample Needed/ Sample
Statewide	29,266	336 413	State	8,066	327 473	State	475,527*	340 430
Western	8,932 (30.5)	103 120	West	2,086 (25.9)	85 167	West	121,164 (25.5)	87 95
Louisville	5,936 (20.3)	69 74	Louis ville	673 (8.3)	28 53	Louis ville	100,748 (21.2)	73 86
Bluegrass	4,538 (15.5)	53 68	Blue- grass	1808 (22.4)	74 75	Blue- grass	81,982 (17.2)	59 122
Northern	2,719 (9.3)	32 59	North	928 (11.5)	38 44	North	46,235 (9.7)	33 34
Eastern	7,141 (24.4)	82 92	East- ern	2571 (31.9)	105 134	East- ern	125,398 (26.4)	90 93

*The Well Elder population was calculated with 475,527 (rather than 467,461) because the homebound elders are included with the well-elders (the additional 8,066). The Census Bureau did not break down the Regions of the State without including the Homebound in the non-institutionalized population.

d. Recruitment of dentists and elders

Initially, it was thought that dentists from all over the state needed to be recruited to help conduct the KEOHS. A 3-hour CE course was developed to include: defining the need for the Elder Oral Health Survey, a review of the data collection instruments and the clinical exam form, and an oral pathology and calibration session where participants were given two simulated patients and evaluated these patients compared to the standard examiner (dentist who developed the simulation). The CE course was then offered as a free, three-hour Continuing Education course and publicized through the Commonwealth Dental CE brochure, distributed at local dental society meetings, through the KDA newsletter, and by word of mouth. There were

over 6 training sessions held over a 3-month period and over 30 dentists were trained. However, due to scheduling and coordination problems, only 12 dentists participated and actually helped to administer the questionnaire and assist in doing the screening exams. All dentists who participated were members of the Kentucky Dental Association and attended a 3-hour training/calibration session. The following dentists participated and deserve a great amount of credit for volunteering their time to administer the KEOHS:

John Burt	Fred Howard
Barry Ceridan	Frank Metzmeir
Jennifer Chadwell	B.J. Moorhead
Michael Gross	Billy Millay
Robert G. Henry	John Parsons
J.D. Hill	Deana Tatterson

The members of the research team: Nancy Sallee, and Lisa Durham, were responsible for administering the questionnaire/interview of 48 questions for all the Nursing Home (NH) or Well Elders (WE) and Sanders-Brown (SB) elders. The Homebound Elders (HB) were interviewed by the case-managers in each of the 15 AAA districts and many of the questions in the KEOHS were asked routinely in the monthly assessment. For this reason, the questionnaire for the HB group was revised to eliminate redundant questions and the remaining questions added to a separate form which was left for the caseworkers to complete. As previously mentioned, the clinical exam was completed for all elders in the NH, WE, and SB participants by one of the dentists. Only 10% of the HB elders had a clinical exam due to logistic and financial constraints.

Recruitment of elders was difficult. In the case of Nursing Home (NH) elders, the 54 certified assisted living facilities and 342 licensed nursing homes in Kentucky were stratified according to the five regions and randomized to approximate the numbers of required elders calculated by the sample size. The nursing homes were then contacted initially by phone and those agreeing to participate were sent a follow-up letter along with an explanation of the study and consent to participate. Next, a date and time were scheduled and the nursing home administrator, or his/her designee, was sent individual consent forms to be signed by the elders living in the nursing facility or the elder's designated care-giver so the elders could participate in the study. The benefit provided to the NH elder (like all elders who participated) was that a free oral exam was provided, along with the notion of contributing valuable information to the state. Every elder who participated was given the questionnaire (or interviewed by the research team) and the clinical exam performed by a trained and calibrated dentist. The participant and nursing home administrator received a "dental report card" with a summary of clinical findings of the participating resident along with the recommendation of when a dental visit was suggested (ranging from a routine 6 month visit, to as soon as possible).

Unfortunately, many of the nursing homes when contacted did not return phone calls, were concerned that we were planning to report unfavorable information, or simply were not interested. For this reason, ultimately, most all nursing homes were contacted until there were enough nursing home elders in each region to meet or exceed the sample size required. Because of the difficulty with recruitment of nursing homes, instead of having a true stratified, random sample of approximately 10% of nursing homes in Kentucky, it was a convenience sample of nursing homes/assisted living facilities who would agree to participate. Nursing homes and assisted living facilities that participated in the KEOHS are listed in Appendix 4.

Similar problems existed with recruitment for Well Elders (WE) who utilized senior centers. Senior Centers were first contacted by Mr. Jerry Whitley, Executive Director of the Office of Aging Services at the Cabinet for health services. Mr. Whitley encouraged all the Directors of Senior Centers throughout the state to participate in the KEOHS, and in fact, the Office of Aging Services became a co-sponsor of the KEOHS. In general, each county in Kentucky has at least one Senior Center. Following the initial contact by Mr. Whitley, all Senior Centers were contacted and requested participation in the KEOHS. Like the NH elders, the WE sample became a convenience sample of those Senior Center Directors who either wanted their elders surveyed, or who did not want to participate in the survey. Even in those Senior Centers

that participated, only a small percentage of those elders who attended would actually agree to answering the questionnaire and permitting an oral exam. The reasons varied, but in many cases, even when it was announced weeks in advance, the research team was looked upon as an infringement on the elders' time, and we interfered with card-playing, bingo games, and special events. The timing of performing the oral health questionnaires and clinical exams was also critical. If our arrival was not in the morning between the hours of 9:00 and 11:00am, we were unlikely to be able to recruit or see any volunteers. After 11:00am, lunch started, and following lunch most all the seniors who attended these facilities left for home.

All the same procedures and forms were used with the WE (senior citizens centers) sample. Those who could complete the questionnaire on their own did so. For those who needed assistance, one of the research team gave the questionnaire in interview format. The dentist conducted the oral exam following completion of the questionnaire and signing of the consent form. Well elders were provided a dental report card with a summary of the clinical findings along with the recommendations (if any) for seeking care. The Senior Centers participating can be found in Appendix 5.

The Sanders-Brown (SB) group was a sub-sample of the Well Elders (WE) and represented those elders who did not attend Senior Centers. The Sanders-Brown Center of Aging is a large research building at the University of Kentucky and is the location for two programs which are Centers of Excellence at the University: Alzheimer's Disease and Stroke research. The subjects from the Sanders-Brown group who participated in the KEOHS represented the control subjects for patients with Alzheimer's' disease. In other words, they were elder (65+) healthy individuals, who are highly motivated, successful financially, and well educated. They represent a unique sample in that they have agreed to participate as controls, having their mental and physical status followed for their remaining lives, and to donate their brains for autopsy at death. The SB group (controls) was approved to participate in the KEOHS by Mr. Dave Wekstein, Director of the SB Center on Aging, and a letter was sent from him to all the SB research control participants. For those who responded, appointments were made to administer the questionnaire and perform the clinical exam. The location of the exams varied between the University Of Kentucky College Of Dentistry, General Practice Residency Program, the Lexington Senior Citizens Center, and the University Of Kentucky College Of Dentistry Public Health Offices located at 333 Waller Avenue in Lexington. The same procedures and forms were followed for the SB group as for the WE, including the questionnaire, clinical exam and giving out the dental report card indicating a summary of the clinical exam findings along with recommendations (if any) for dental care.

Homebound elders (HB) were identified by the directors of the 15 Area on Aging Agencies regionalized throughout the state. The AAA directors also fall under the auspices of the Office of Aging Services, and Mr. Jerry Whitley, the Executive Director, had the research group present an overview of the KEOHS at the Fall 2002 annual meeting. The directors were asked to give the research team feedback and the questionnaire was modified to be incorporated into the monthly assessment form the case workers utilize to check up on their clients. The ten percent of HB elders to have a clinical exam was identified by the case workers in the 15 regions. There was good cooperation in the majority of regions to obtain an adequate sample size. However, several regions reported their clients did not wish to have clinical exams, and in the Eastern Region, we were 6 clients short of having an adequate number for the projected sample size. The AAA directors and the regions they represent are listed in Appendix 6.

The same data was obtained from the HB elders as the NH, WE, and SB elders. The differences in the HB elder group was the additional form used to supplement the questions obtained by the caseworkers in the AAA 15 regions, and only obtaining a 10% clinical exam sample.

IV. Data analysis

Data were entered in a Microsoft Excel spreadsheet, then transferred to SPSS Version 10 for data analysis. Quantitative analysis was done on all four groups to provide descriptive and comparative analysis for regional differences as well as for Urban-Rural differences.

- **Urban/Rural comparisons**

The Urban/Rural calculations were identical to the Kentucky Adult Oral Health Survey. The population was divided into location of residence. The ZIP code of the participant was identified with a county. The county was then classified into one of three locations, based on the size of the largest city in the county. If the county was included in a Metropolitan Statistical Area (MSA) for the 2000 Census, then the county was included in the **MSA** location, regardless of the size of the largest city in the county. (Census 2000 defines Metropolitan Area as “either a place with a minimum population of 50,000 or a U.S. Census Bureau defined urbanized area...An MSA also may include one or more outlying counties that have close economic and social relationships with the central county”. A **small city** location was defined as counties in which the largest city is at least 5,000, but not included in an MSA. **Rural** areas were those counties in which the largest city was less than 5,000 population. Assignments were based on the adult population of the county, not on the total population

The following table describes the counties that were assigned to the various residence locations. A map showing the urban, small city and rural counties can be seen in [Appendix 7](#).

Location Assignment	Kentucky Counties
MSAs (US Census 2000)	
Cincinnati, OH	Boone, Campbell, Gallatin, Grant, Kenton, Pendleton
Clarksville, TN	Christian
Evansville, IN	Henderson
Huntington, WV	Boyd, Carter, Greenup
Lexington, KY	Bourbon, Clark, Fayette, Jessamine, Madison, Scott, Woodford
Louisville, KY	Bullitt, Jefferson, Oldham
Owensboro, KY	Daviess
Small City Counties	Allen, Anderson, Barren, Bell, Boyle, Caldwell, Calloway, Franklin, Grayson, Graves, Hardin, Harlan, Harrison, Hopkins, Johnson, Knox, Larue, Laurel, Letcher, Logan, Marion, Mason, McCracken, Mercer, Nelson, Pike, Perry, Pulaski, Rowan, Shelby, Taylor, Warren, Wayne, Whitley
Rural Counties	Adair, Ballard, Bath, Bracken, Breathitt, Breckinridge, Butler, Carlisle, Carroll, Casey, Clay, Clinton, Crittenden, Cumberland, Edmonson, Elliott, Estill, Fleming, Floyd, Fulton, Garrard, Green, Hancock, Hart, Henry, Hickman, Jackson, Knott, Lawrence, Lee, Leslie, Lewis, Lincoln, Livingston, Lyon, Magoffin, Marshall, Martin, McCreary, McLean, Meade, Menifee, Metcalfe, Monroe, Montgomery, Morgan, Muhlenberg, Nicholas, Ohio, Owen, Owsley, Powell, Robertson, Rockcastle, Russell, , Simpson, Spencer, Todd, Trimble, Trigg, Union, Washington, Webster, Wolfe

	Census 2000 Population	Total Population Percentage	Well Elder Population	Percent of Well Elder Population	Total Well Elder Sample N (%)
Urban Areas	1, 479,677	48.5%	219,581	46.2%	176 (40.9)
Small Cities	825,332	27.1%	134,928	28.4%	158 (36.8)
Rural Areas	741,942	24.4%	121,018	25.4%	74 (17.2)
Missing					22 (5.1)
Total	3,046,951	100.0%	425,527	100.0%	430 (100.0)

- **Regional comparisons**

The regional comparisons were conducted utilizing the same 5 geographic regions as in the Kentucky Children's and Adults' surveys. The five regions and counties included in each region can be seen in [Appendix 8](#).

Region	Counties included in Regions
Western	Allen, Ballard, Barren, Breckinridge, Butler, Caldwell, Calloway, Carlisle, Christian, Crittenden, Daviess, Edmonson, Fulton, Graves, Grayson, Hancock, Hart, Henderson, Hickman, Hopkins, Livingston, Logan, Lyon, Marshall, McCracken, McLean, Meade, Metcalfe, Muhlenberg, Ohio, Simpson, Todd, Trigg, Union, Warren, Webster
Louisville	Bullitt, Jefferson, Oldham, Shelby, Spencer
Bluegrass	Anderson, Bourbon, Boyle, Fayette, Franklin, Hardin, Harrison, Jessamine, Larue, Marion, Mercer, Nelson, Nicholas, Scott, Taylor, Washington, Woodford
Northern	Boone, Bracken, Campbell, Carroll, Gallatin, Grant, Henry, Kenton, Mason, Owen, Pendleton, Robertson, Trimble
Eastern	Adair, Bath, Bell, Boyd, Breathitt, Carter, Casey, Clark, Clay, Clinton, Cumberland, Elliott, Estill, Fleming, Floyd, Garrard, Green, Greenup, Harlan, Jackson, Johnson, Knott, Knox, Laurel, Lawrence, Lee, Leslie, Letcher, Lewis, Lincoln, Madison, Magoffin, Martin, McCreary, Menifee, Monroe, Montgomery, Morgan, Owsley, Perry, Pike, Powell, Pulaski, Rockcastle, Rowan, Russell, Wayne, Whitley, Wolfe

Regional comparisons were done in order to provide insights regarding oral health status and to determine particular areas of oral health need.

V. Results

The follow sections contain the results of the three elder groups surveyed on the Interview/Questionnaire (Form A) and the Clinical Findings (as examined by a dentist). It includes all of the variables collected in quantitative analyses.

Each data sheet contains the following information:

1. Heading Information

This lists the variable under consideration, and gives a brief description of the variable.

2. Graphical Representation of Data

This section presents a graphical representation of the information and includes the geographic and urban/rural place of residence on selected variables.

3. Tabular Representation of Data

This section presents data in a tabular form. Geographic and urban/rural place of residence is included for selected variables.

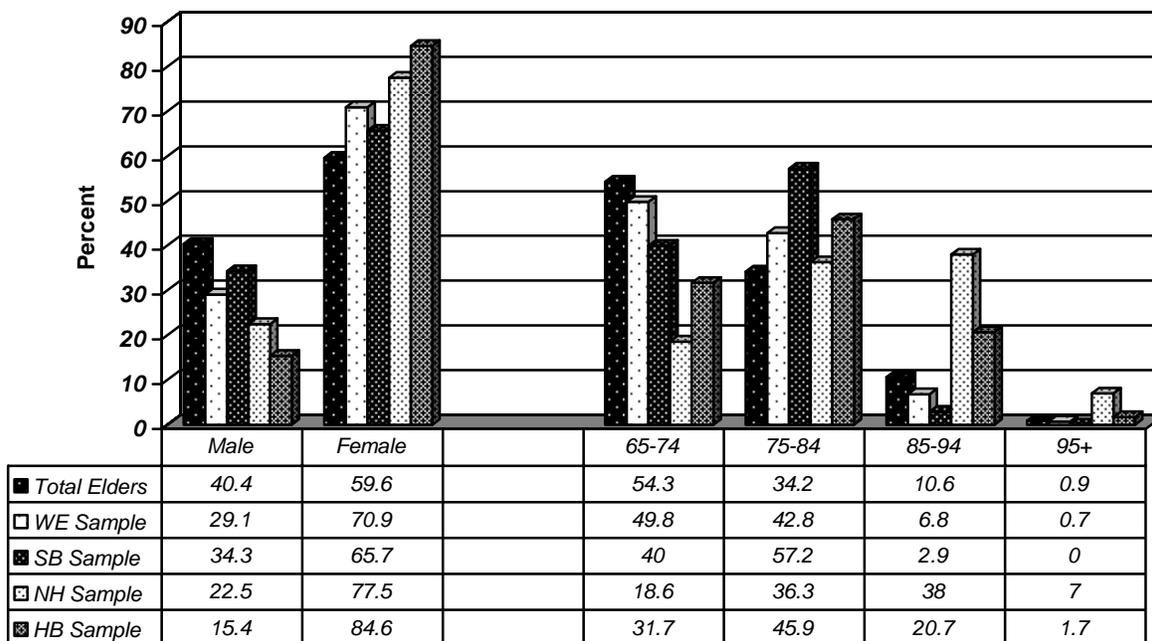
4. Discussion

This section gives insight into what the significance of the information in the graphs and tables mean. This may be done with comparison to the Kentucky Adult Oral Health Survey, the Healthy Kentuckians 2010 goals, or additional elder surveys.

Kentucky Elder Population and KEOHS Elders by Gender and Age (AQ1 and AQ2)

This page describes the population and the actual sample by gender and age. The population data came from the Census 2000 data.

Kentucky Elder Population and KEOHS Sample by Gender and Age



Kentucky Elder Population		Well Elder (WE) Sample		Sanders-Brown (SB) Sample		Nursing Home (NH) Sample (29,266)		Homebound (HB) Sample (8,066)	
Elder Population	% Elder Pop.	WE Sample	% of WE Sample	SB Sample	% of SB Sample	NH Sample	% of NH Sample	HB Sample	% of HB Sample

Statewide	504,793*	100	430	100	70	100	413	100	473	100
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Age 1	65 – 74	273,943	54.3	214	49.8	28	40.0	77	18.6	150	31.7
Age 2	75 – 84	172,589	34.2	184	42.8	40	57.2	150	36.3	217	45.9
Age 3	85 – 94	53,706	10.6	29	6.8	2	2.9	157	38.0	98	20.7
Age 4	95 +	4,555	0.9	3	0.7	0	0.0	29	7.0	8	1.7

Gender 1	Male	203,981	40.4	125	29.1	24	34.3	93	22.5	73	15.4
Gender 2	Female	300,812	59.6	305	70.9	46	65.7	320	77.5	400	84.6

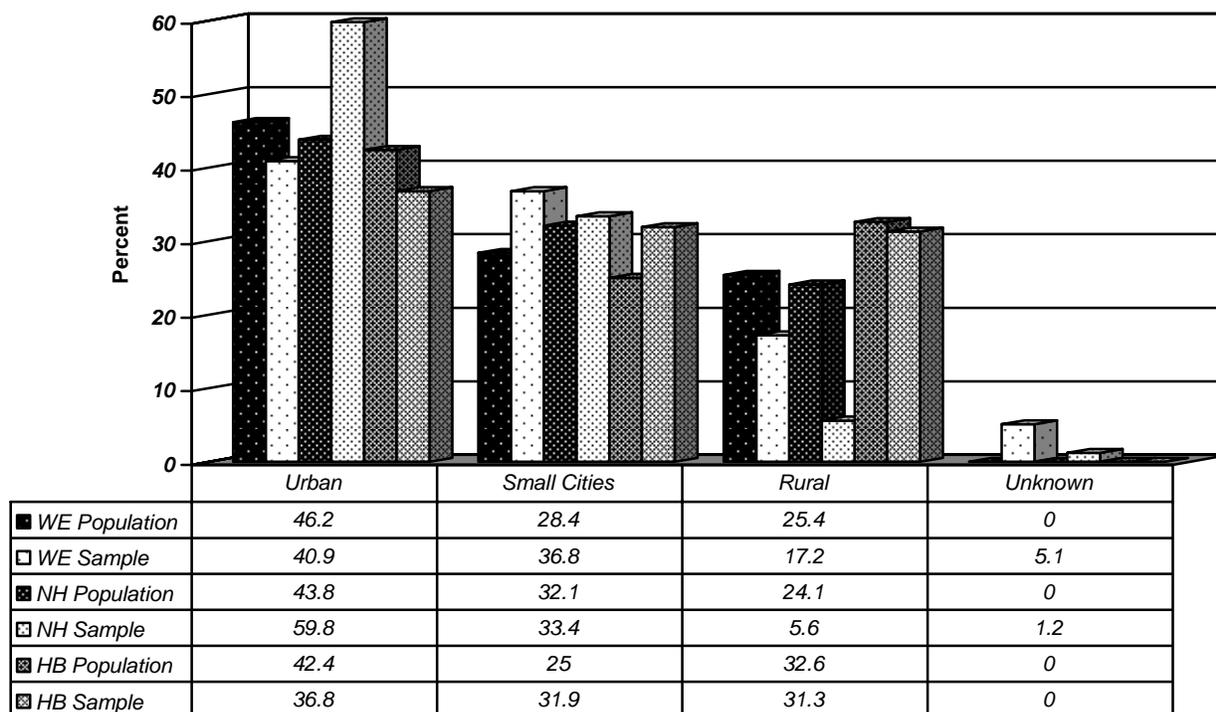
*The total elder population statewide is 504,793 per the 2000 Census Data. The age breakdown given is the only reported age category information regarding elders. This includes the 29,266 institutionalized elders that make up the NH component of the KEOHS. The actual population of Well Elders (including the Sanders-Brown group) is 504,793 – 29,266 = 475,527 Well Elders. The Homebound are included in the Well Elders. The total Kentucky Elder Sample = 1,386 (70 SB, 430 WE, 413 NH and 473 HB).

A total of 92.6% of the Well Elders surveyed for this study were between the ages of 65 to 84 years of age. This compares to 88.5% of the Kentucky Elder population who are between 65 and 84. Note the NH and HB elders are proportionately older (38% and 20.7% respectively, age 85-94). While the ratio of male to female is approximately 2/3 (40.4/59.6%) in the Kentucky Elder population, the ratio for the Well Elder sample is about 1 male to every 2 females (29.1/70.9 %). The breakdown among the Sanders-Brown group is similar, with the ratio of 1 to 2 males to females (34.3/65.7%). The ratio of male to female for the NH sample is about 1 male to 3 females (22.5/77.5%) and the ratio of males to females in the Homebound sample is over 1 male to every 4 females (15.4/84.6%). These ratios reflect the proportionate number of males/females living in the various settings: at home, nursing homes, and those homebound.

Kentucky Elder Population and KEOHS Elders by Urban/Small City/Rural Location (AQ6)

This page describes the population and the actual sample by urban, small city and rural places of residence

**Kentucky Elder Population (Total and Sample)
by Urban/Small Cities/Rural Location**



WE Population N (%) OF WE Population	WE Sample N (%) of WE Sample	NH Population N (%) of NH Population	NH Sample N (%) of Sample	HB Population N (%) of Population	HB Sample N (%) of Sample
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Statewide	475,527* (100)	430 (100)	29,266 (100)	413 (100)	8066 (100)	473 (100)
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Location 1	Urban Areas	219,581 (46.2)	176 (40.9)	12,804 (43.8)	247 (59.8)	3423 (42.4)	174 (36.8)
Location 2	Small Cities	134,928 (28.4)	158 (36.8)	9,403 (32.1)	138 (33.4)	2014 (25.0)	151 (31.9)
Location 3	Rural Areas	121,018 (25.4)	74 (17.2)	7,059 (24.1)	23 (5.6)	2629 (32.6)	148 (31.3)
Unknown	N/A	N/A	22 (5.1)	N/A	5 (1.2)	N/A	N/A

*The total Well Elder population does not include the 29,266 institutionalized elders.

	Sample	Percent of Total Sample
Sanders-Brown Group*	70	100

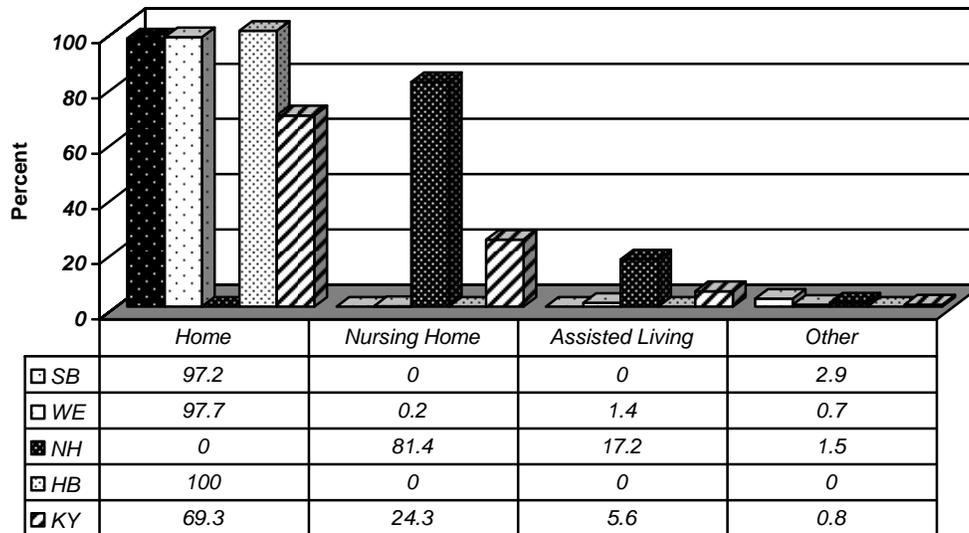
*Sanders-Brown elders all reside in the Lexington-Fayette county Urban area in Central Kentucky. SB elders were not included in urban/rural calculations (1,386-70 = 1,316).

The majority of the Kentucky statewide oral health elder sample resides in an urban or small city locality (1044/1316 = 79.3%). The well elder sample is similar, with 77.7% residing in an urban or small city location. The NH sample finds the majority of nursing home elders located in urban or small city areas (93.2%). The HB sample finds an even distribution of about one-third of HB elders residing in urban, small city, and rural areas. Only 18.6% (245/1316) live in rural areas.

KEOHS Elders' Current Living Arrangement (AQ7)

This page describes the living arrangements of the Kentucky elders sampled in the KEOHS.

Elders' Current Living Arrangements



Self-reported Current Living Arrangements	Total Sample	Percent of Total Sample
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Sanders-Brown Group N = 70	70	100
Home (house, apt., mobile home, etc.)	68	97.2
Nursing Home	0	0.0
Assisted Living Facility	0	0.0
Other	2	2.9

Well Elders N = 430	430	100
Home (house, apt., mobile home, etc.)	420	97.7
Nursing Home	1	0.2
Assisted Living Facility	6	1.4
Other	3	0.7

Nursing Home Elders N = 413	413	100
Home (house, apt., mobile home, etc.)	0	0.0
Nursing Home	336	81.4
Assisted Living Facility	71	17.2
Other	6	1.5

Homebound Elders N = 473	473	100
Home (house, apt., mobile home, etc.)	473	100.0
Nursing Home	0	0.0
Assisted Living Facility	0	0.0
Other	0	0.0

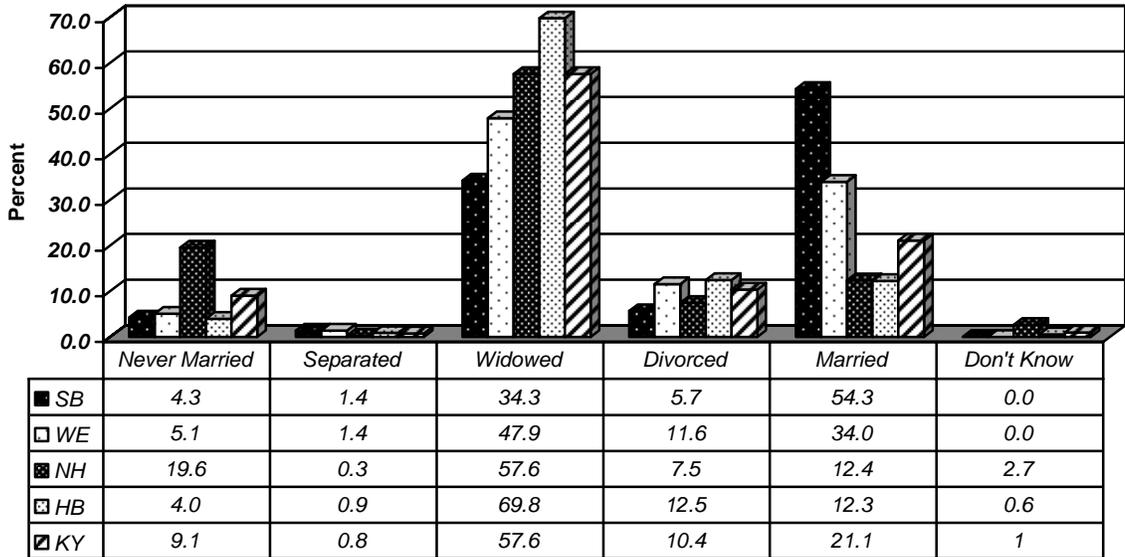
KY Statewide Elders N = 1386	1386	100
Home (house, apt., mobile home, etc.)	961	69.3
Nursing Home	337	24.3
Assisted Living Facility	77	5.6
Other	11	0.8

Statewide, 69.3% of sampled elders live at home and 24.3% live in nursing homes. The remaining 6.4% live elsewhere (assisted living facilities, etc.).

KEOHS Elders' Marital Status (AQ8)

This page describes the elders' self-reported marital status.

Elders' Self-Reported Marital Status



Marital Status	Total Sample	Percent of Total Sample
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Sanders-Brown Group N = 70	70	100
Never Married	3	4.3
Separated	1	1.4
Widowed	24	34.3
Divorced	4	5.7
Married	38	54.3
Don't know/not sure	0	0.0

Well Elders N = 430	430	100
Never Married	22	5.1
Separated	6	1.4
Widowed	206	47.9
Divorced	50	11.6
Married	146	34.0
Don't know/not sure	0	0.0

Nursing Home Elders N = 413	413	100
Never Married	81	19.6
Separated	1	0.3
Widowed	238	57.6
Divorced	31	7.5
Married	51	12.4
Don't know/not sure	11	2.7

Marital Status	Total Sample	Percent of Total Sample
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Homebound Elders N = 473	473	100
Never Married	19	4.0
Separated	4	0.9
Widowed	330	69.8
Divorced	59	12.5
Married	58	12.3
Don't know/not sure	3	0.6

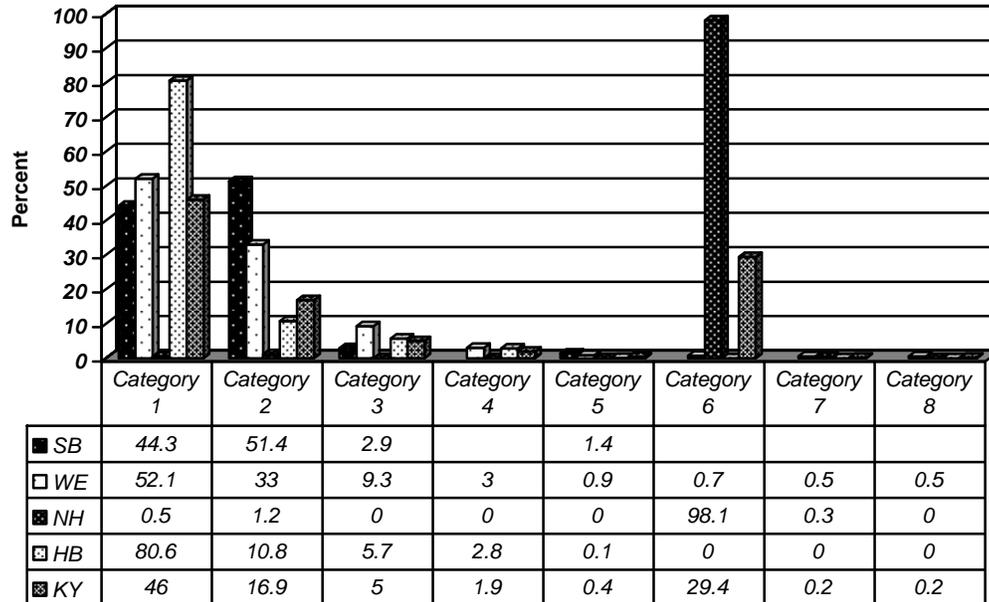
KY Statewide Elders N = 1386	1386	100
Never Married	125	9.1
Separated	12	0.8
Widowed	798	57.6
Divorced	144	10.4
Married	293	21.1
Don't know/not sure	14	1.0

The majority of elders in this sample were widowed (57.6%). The next highest percentage of elders in the sample were married (21.1%). As might be expected the greatest percent of married elders were in the Sanders-Brown group (54.3%), followed by the well elders (34.0%), with the fewest married elders among the nursing home elders (12.4%) and homebound elders (12.3%). Conversely, the greatest percent of widowed elders were in reverse order: HB elders 69.8%, NH elders 57.6%, well elders 47.9%, and SB elders 34.3.

KEOHS Elders' Household Composition (AQ9)

This page describes the elders' household living arrangements and composition.

Elders' Household Composition



Self-Reported Household Composition	Total Sample	Percent of Total Sample
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Sanders-Brown Group N = 70		70	100
Category 1	Live Alone	31	44.3
Category 2	With Spouse	36	51.4
Category 3	With Children	2	2.9
Category 4	With Relatives	0	0.0
Category 5	With Non-Relatives	1	1.4
Category 6	Nursing Home/Asst. Living Facility	0	0.0
Category 7	Don't Know/Not Sure	0	0.0
Category 8	Refused	0	0.0

Well Elders N = 430		430	100
Category 1	Live Alone	224	52.1
Category 2	With Spouse	142	33.0
Category 3	With Children	40	9.3
Category 4	With Relatives	13	3.0
Category 5	With Non-Relatives	4	0.9
Category 6	Nursing Home/Asst. Living Facility	3	0.7
Category 7	Don't Know/Not Sure	2	0.5
Category 8	Refused	2	0.5

Self-reported Household Composition	Total Sample	Percent of Total Sample
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Nursing Home Elders N = 413		413	100
Category 1	Live Alone	2	0.5
Category 2	With Spouse	5	1.2
Category 3	With Children	0	0.0
Category 4	With Relatives	0	0.0
Category 5	With Non-Relatives	0	0.0
Category 6	Nursing Home/Asst. Living Facility	405	98.1
Category 7	Don't Know/Not Sure	1	0.3
Category 8	Refused	0	0.0

Homebound Elders N = 473		473	100
Category 1	Live Alone	381	80.6
Category 2	With Spouse	51	10.8
Category 3	With Children	27	5.7
Category 4	With Relatives	13	2.8
Category 5	With Non-Relatives	1	0.1
Category 6	Nursing Home/Asst. Living Facility	0	0.0
Category 7	Don't Know/Not Sure	0	0.0
Category 8	Refused	0	0.0

KY Statewide Elders N = 1386		1386	100
Category 1	Live Alone	638	46.0
Category 2	With Spouse	234	16.9
Category 3	With Children	69	5.0
Category 4	With Relatives	26	1.9
Category 5	With Non-Relatives	6	0.4
Category 6	Nursing Home/Asst. Living Facility	408	29.4
Category 7	Don't Know/Not Sure	3	0.2
Category 8	Refused	2	0.2

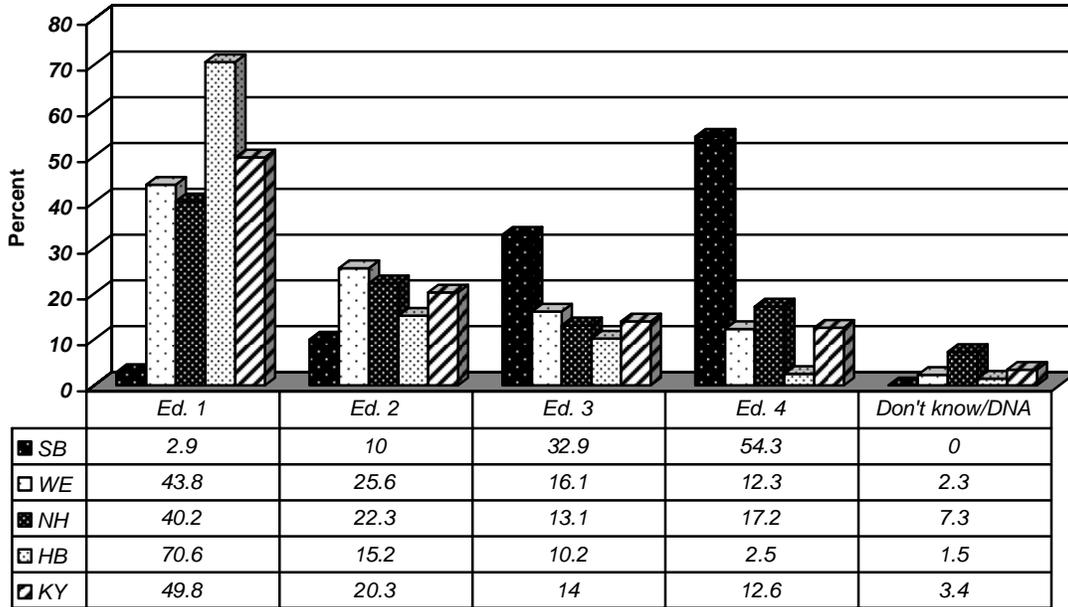
Statewide, 46% of elders live alone. Another 16.9% live with their spouse and 5% live with their children. Not surprisingly, 29.4% of elders surveyed live in nursing homes since we targeted the NH elders. Only 1.9% of elders live with relatives other than children or spouses.

Regarding elder groups, 52.1% of the well elders live alone and 33% live with their spouse, whereas 44.3% of the Sanders-Brown group live alone and 51.4% live with their spouse. The majority of HB elders live alone, another 10.8% live with their spouse and 5.7% live with children.

KEOHS Elders by Education (AQ11)

This page describes the elder sample by educational level attained.

Elders' Education Level



Sample	
Total Sample	Percent of Total Sample

Sanders-Brown Group N = 70		70	100
Education 1	Less than High School	2	2.9
Education 2	High School/GED	7	10.0
Education 3	Some College/Associate Degree	23	32.9
Education 4	College or Greater	38	54.3
	Don't know/Did not answer	0	0.0

Well Elders N = 430		430	100
Education 1	Less than High School	188	43.8
Education 2	High School/GED	110	25.6
Education 3	Some College/Associate Degree	69	16.1
Education 4	College or Greater	53	12.3
	Don't know/Did not answer	10	2.3

Nursing Home Elders N = 413		413	100
Education 1	Less than High School	166	40.2
Education 2	High School/GED	92	22.3
Education 3	Some College/Associate Degree	54	13.1
Education 4	College or Greater	71	17.2
	Don't know/Did not answer	30	7.3

Sample	
Total Sample	Percent of Total Sample

Homebound Elders N = 473		473	100
Education 1	Less than High School	334	70.6
Education 2	High School/GED	72	15.2
Education 3	Some College/Associate Degree	48	10.2
Education 4	College or Greater	12	2.5
	Don't know/Did not answer	7	1.5

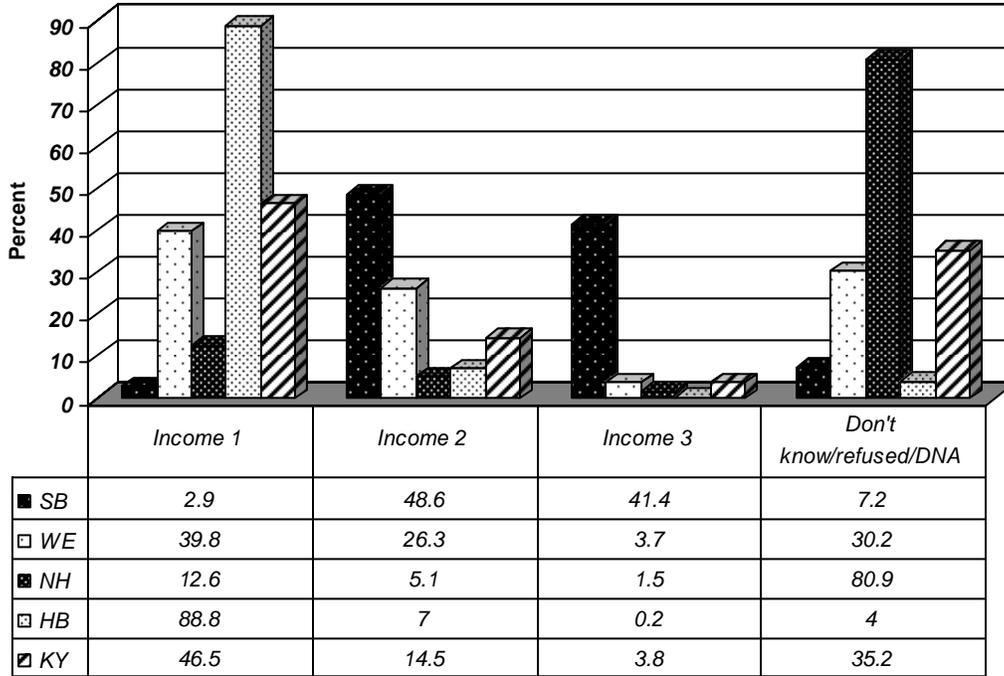
KY Statewide Elders N = 1386		1386	100
Education 1	Less than High School	690	49.8
Education 2	High School/GED	281	20.3
Education 3	Some College/Associate Degree	194	14.0
Education 4	College or Greater	174	12.6
	Don't know/Did not answer	47	3.4

Statewide, of those elders sampled, almost half (49.8%) had less than a high school education (attended up to 12th grade), but did not graduate from high school). Another 20.3% had a high school education, 14% had some college or an associate degree, and 12.6% obtained a college degree or advanced (graduate degree) education. Kentucky elders with less than a 12th grade education ranged from a high of 70.6% (homebound), 43.8% (well elders), 40.2% (nursing home), to a low of 2.9% in the SB elders. Conversely, the SB elders attained the highest educational status with 87.2% with at least some college, assoc. degree or higher, well elders with 28.4% with some college or greater, NH elders with 30.3% with some college or greater, and the HB elders with only 12.7% attaining some college education or higher

KEOHS Elders by Family Income (AQ13)

This page describes the elder sample by family income.

Elders by Family Income Category



		Sample	
		Total Sample	Percent of Total Sample
Sanders-Brown Group N = 70		70	100
Income 1	< 15,000	2	2.9
Income 2	15,000 – 49,999	34	48.6
Income 3	50,000+	29	41.4
	Don't know/refused/did not answer	5	7.2
Well Elders N = 430		430	100
Income 1	<15,000	171	39.8
Income 2	15,000 – 49,999	113	26.3
Income 3	50,000+	16	3.7
	Don't know/refused/did not answer	130	30.2
Nursing Home Elders N = 413		413	100
Income 1	<15,000	52	12.6
Income 2	15,000 – 49,999	21	5.1
Income 3	50,000+	6	1.5
	Don't know/refused/did not answer	334	80.9
Homebound Elders N = 473		473	100
Income 1	< 15,000	420	88.8
Income 2	15,000 – 49,999	33	7.0
Income 3	50,000+	1	0.2
	Don't know/refused/did not answer	19	4.0

		Sample	
		Total Sample	Percent of Total Sample
KY Statewide Elders N = 1386		1386	100
Income 1	<15,000	645	46.5
Income 2	15,000 – 49,999	201	14.5
Income 3	50,000+	52	3.8
	Don't know/not sure/did not answer	488	35.2

Statewide, almost half (46.5%) of sampled elders' family income was \$15,000 or less. Another 14.5% of elders earned from \$15,000 up to \$50,000 and 3.8% of elders earned \$50,000 or greater.

Regarding elder groups, 39.8% of the well elders reported an income of less than \$15,000 as compared to only 2.9% of the Sanders-Brown group. Conversely, 41.4% of the Sanders-Brown group reported incomes of \$50,000 or higher and only 3.7% of the well elders reported an income of \$50,000 or higher. Only 12.6% of the nursing home elders reported having incomes of less than \$15,000. The majority of nursing home elders did not know, were unsure, or refused to report their family income (80.9%). Almost 90% (88.8%) of the HB elders reported having incomes of less than \$15,000.

KEOHS Elders' General Health Problems Experienced During the Past 12 Months (AQ15)

This page describes the elders' most common general health problems as indicated for the past 12 months.

	The Most Common General Health Problems the Past 12 Months	Total Sample	% of Total Sample
Sanders-Brown Group N=70		***	***
	High Blood Pressure	31	44.3
	Arthritis/Rheumatism	29	41.4
	Back Problems	20	28.6
	Diabetes	9	12.9
	Heart Problems	9	12.9
Well Elders N=430		***	***
	High Blood Pressure	221	51.4
	Arthritis/Rheumatism	183	42.6
	Heart Problems	106	24.6
	Diabetes	91	21.2
	Back Problems	90	20.9
Nursing Home Elders N=413		***	***
	High Blood Pressure	163	39.5
	Arthritis/Rheumatism	154	37.3
	Heart Problems	130	31.5
	Diabetes	80	19.4
	Back Problems	63	15.3
Homebound Elders N=473		***	***
	Arthritis/Rheumatism	371	78.4
	High Blood Pressure	308	65.1
	Back Problems	247	52.2
	Heart Problems	225	47.6
	Diabetes	133	28.1
KY Statewide Elders N = 1386		***	***
	Arthritis/Rheumatism	737	53.2
	High Blood Pressure	723	52.2
	Heart Problems	470	33.9
	Back Problems	420	30.3
	Diabetes	324	23.4

***Number and percent of total sample does not equal 100% because participants were asked to list all general health problems that applied.

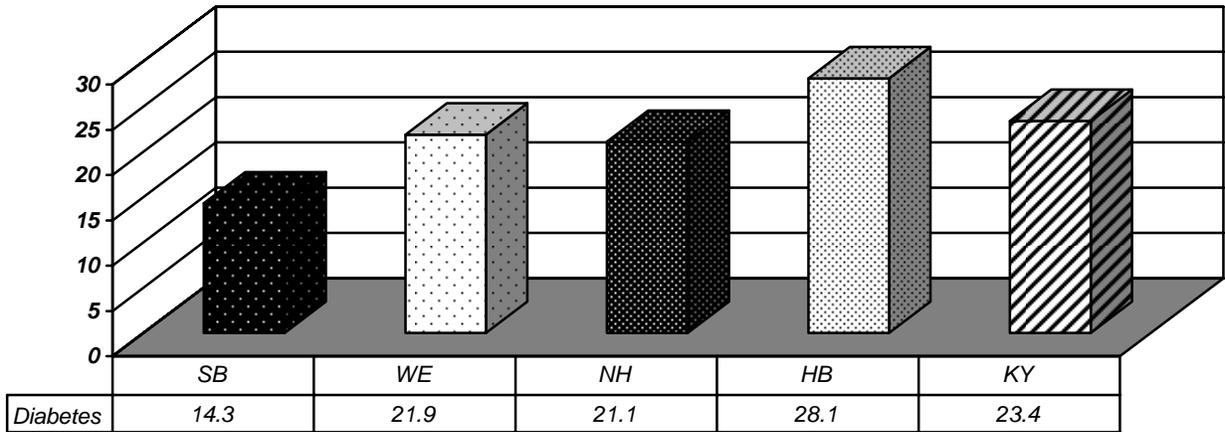
Over half of the elders sampled reported arthritis/rheumatism (53.2%) and high blood pressure (52.2%). Besides arthritis and high blood pressure, the other top three health problems reported were: heart problems (33.9%), back problems (30.3%) and diabetes (23.4%).

The most reported general health problems experienced within the past 12 months by the Sanders-Brown elders was high blood pressure (44.3%), followed by arthritis/rheumatism (41.4%). Similarly, the well elders and the nursing home elders' top two general health problems were also high blood pressure (51.4% and 39.5% respectively), followed by arthritis/rheumatism (42.6% and 37.3% respectively). Homebound elders also reported the top two general health problems as arthritis/rheumatism (78.4%), and high blood pressure (65.1%), but this order was reversed compared to the other three groups.

KEOHS Elders with Diabetes (Self-Report) (AQ16)

This page describes the self-reported diabetic status of the sample population of elders.

Elders Who Reported Diabetes



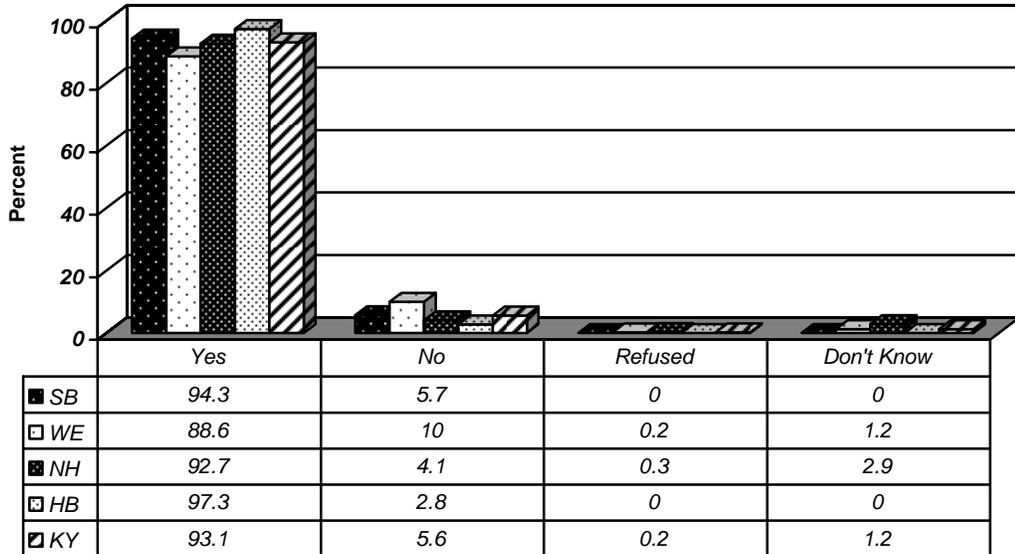
Self-Reported Diabetes	# of Sample Reporting Diabetes	Percent of Total Sample with Diabetes
Sanders-Brown Group N = 70	10	14.3
Well Elders N = 430	94	21.9
Nursing Home Elders N = 413	87	21.1
Homebound Elders N = 473	133	28.1
KY Statewide Elders N = 1386	324	23.4

Statewide, 23.4% of Kentucky elders reported having diabetes. Regarding elder groups, the highest group reporting diabetes is the homebound with 28.1%, followed by the well elders and NH elders with 21.9% and 21.1% respectively, and the SB group with the lowest percentage of diabetes 14.3%. The KEOHS statewide sample (23.4%) is slightly higher than the 17.6% reported in the 2003 BRFSS report for Kentucky, age 65 years and older. Except for the SB group, the percentage of elders with diabetes reported is more than double the rate reported for the 2002 KAOHS (10%).

KEOHS Elders Who Take Medications (AQ17)

This page describes the elders who take medications.

Elders Who Reported Taking Medications



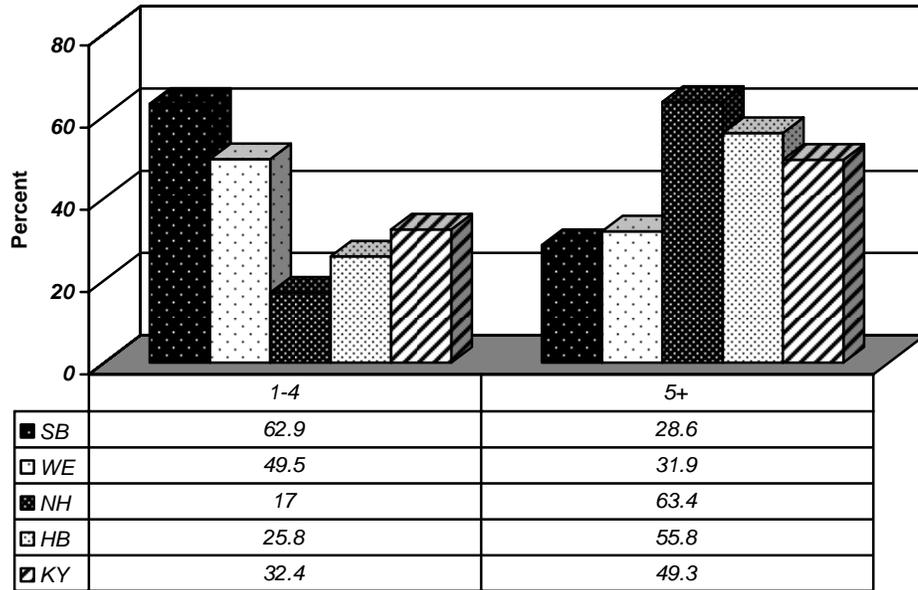
	Self-Reported Taking Medications	Total Sample	Percent of Total Sample
Sanders-Brown Group N = 70		70	100
	Yes	66	94.3
	No	4	5.7
	Refused	0	0.0
	Did not answer	0	0.0
Well Elders N = 430		430	100
	Yes	381	88.6
	No	43	10.0
	Refused	1	0.2
	Did not answer	5	1.2
Nursing Home Elders N = 413		413	100
	Yes	383	92.7
	No	17	4.1
	Refused	1	0.3
	Did not answer	12	2.9
Homebound Elders N = 473		473	100
	Yes	460	97.3
	No	13	2.8
	Refused	0	0.0
	Did not answer	0	0.0
KY Statewide Elders N = 1386		1386	100
	Yes	1290	93.1
	No	77	5.6
	Refused	2	0.2
	Did not answer	17	1.2

Statewide, almost all elders sampled take medications (93.1%).

KEOHS Elders' Reported Number of Prescription Medications Currently Being Taken (AQ17s1)

This page describes the current number of prescription medications taken by the elders.

Elder's Self-Reported Number of Prescription Medications Taken



Self-Reported Number of Prescription Medications Taken	Sample reporting taking prescription meds	Percent of Total Sample
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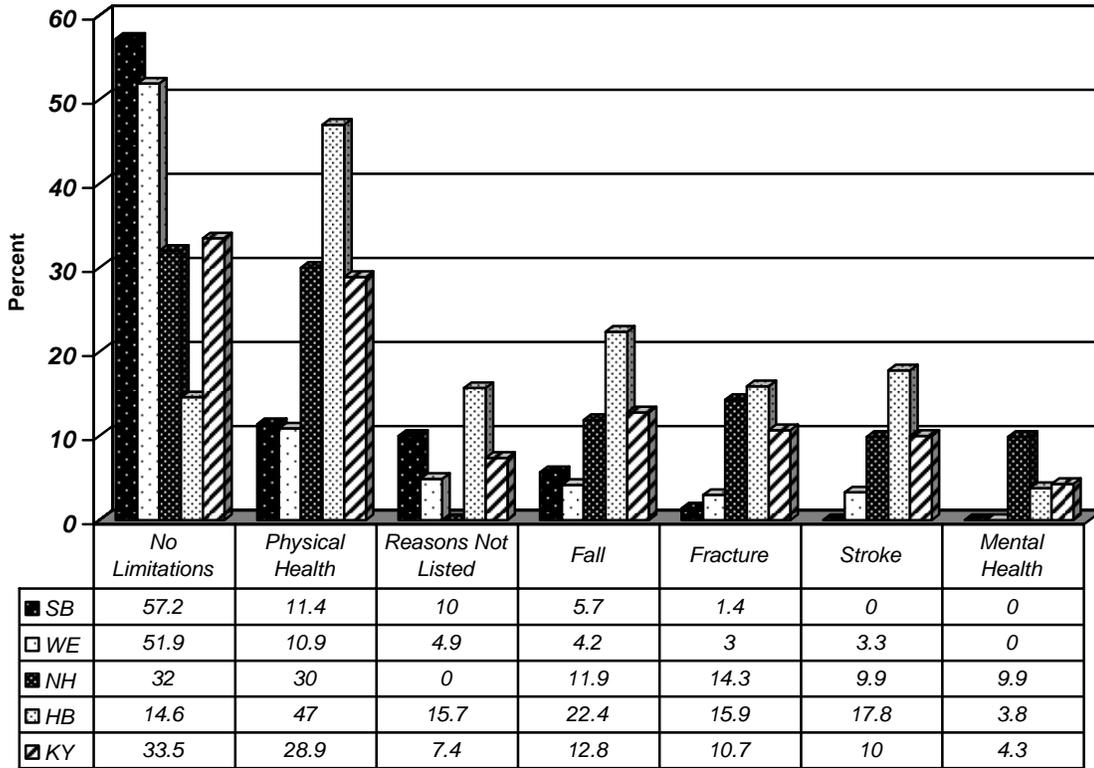
Sanders-Brown Group N = 70	64	91.4
1 - 4	44	62.9
5 +	20	28.6
Well Elders N = 430	350	81.4
1 - 4	213	49.5
5 +	137	31.9
Nursing Home Elders N = 413	332	80.4
1 - 4	70	17.0
5 +	262	63.4
Homebound Elders N = 473	386	81.6
1 - 4	122	25.8
5 +	264	55.8
KY Statewide Elders N = 1386	1132	81.7
1 - 4	449	32.4
5 +	683	49.3

Statewide, the majority of elders take prescription meds (1132/1382, 81.7%). The Sanders-Brown elders take the most prescription meds (64/70, 91.4%), followed by the homebound elders (386/473, 81.6%). The majority of well elders also take prescription meds (350/430, 81.4%), as well as the nursing home elders (332/413, 80.4%). However, the majority of nursing home elders take 5 or more prescription meds (262/413, 63.4%), followed by the homebound elders (264/473, 55.8%). This high number of medications being taken is characteristic of elder populations managing chronic diseases and conditions, and is consistent with the literature.

KEOHS Elders' Top Conditions/Diseases that Limit Mobility (AQ19)

This page describes the top conditions and/or diseases reported that limit mobility among elders.

Elders' Top Conditions/Diseases that Limit Mobility



Self-Reported Conditions/Diseases that Limit Mobility	Total Sample	Percent of Total Sample
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Sanders-Brown N=70	***	***
No Limitations	40	57.2
Physical Health	8	11.4
Reasons Not Listed	7	10.0
Fall	4	5.7
Fracture (hip, knee, ankle)	1	1.4
Stroke	0	0.0
Mental Health	0	0.0

Well Elders N=430	***	***
No Limitations	223	51.9
Physical Health	47	10.9
Reasons Not Listed	21	4.9
Fall	18	4.2
Fracture (hip, knee, ankle)	13	3.0
Stroke	14	3.3
Mental Health	0	0.0

Self-Reported Conditions/Diseases that Limit Mobility	Total Sample	Percent of Total Sample
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Nursing Home Elders N=413	***	***
No Limitations	132	32.0
Physical Health	124	30.0
Reasons Not Listed	0	0.0
Fall	49	11.9
Fracture (hip, knee, ankle)	59	14.3
Stroke	41	9.9
Mental health	41	9.9

Homebound Elders N=473	***	***
No Limitations	69	14.6
Physical Health	222	47.0
Reasons Not Listed	74	15.7
Fall	106	22.4
Fracture (hip, knee, ankle)	75	15.9
Stroke	84	17.8
Mental Health	18	3.8

KY Statewide Elders N = 1386	***	***
No Limitations	464	33.5
Physical Health	401	28.9
Reasons Not Listed	102	7.4
Fall	177	12.8
Fracture (hip, knee, ankle)	148	10.7
Stroke	139	10.0
Mental Health	59	4.3

***Total sample numbers and percentages do not equal 100% because more than one category may have been chosen.

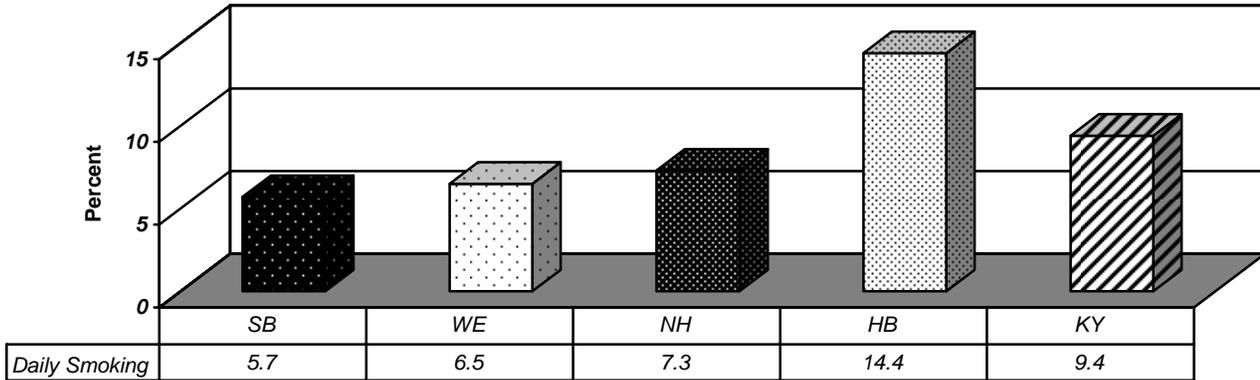
Statewide, elders' top conditions/diseases that limit mobility, in descending order, were: physical health limitations (28.9%, falls (12.8%), fractures (hip, knee, ankle) (10.7%), and stroke (10%).

Regarding elder groups, 51.9% of the well elders reported that they have no limitations of their mobility due to any conditions and/or diseases. Among the Sanders-Brown group, 57.2% reported no limitations. The greatest percentage of limitations were in the homebound elders (47% with physical health limitations, 22.4% limited due to a fall, and 17.8% limited due to stroke), followed by the nursing home elders (30% with physical health limitations, 14.3% due to a fracture of the hip, knee or ankle, 11.9% limited due to a fall and 9.9% with a stroke).

KEOHS Elders Who Smoke Cigarettes Every Day (AQ22a)

This page describes the elders who reported smoking cigarettes every day. This does not include people who use other forms of tobacco only (i.e. spit tobacco, pipes or cigars)

Elders Who Smoke Cigarettes Every Day



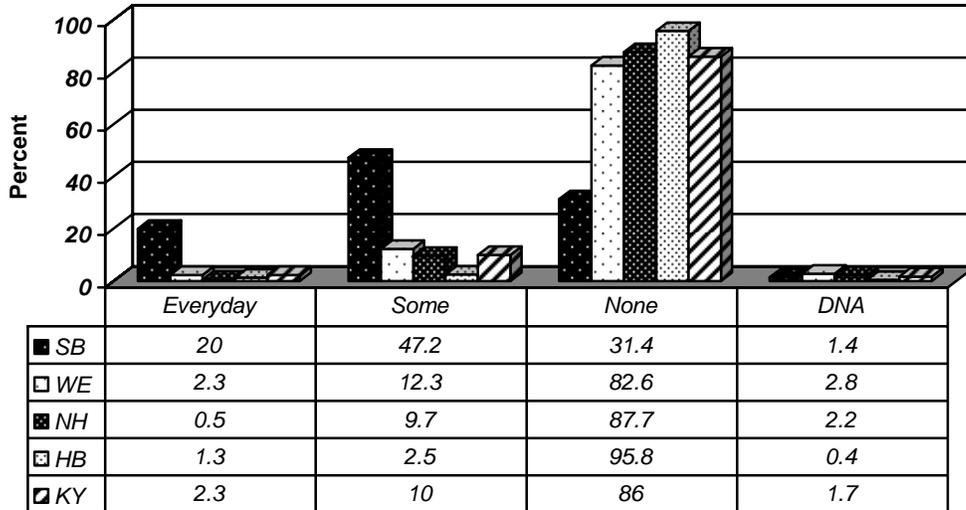
Self-Reported Smoking Cigarettes Daily	Number of Everyday Smokers	Percent of Everyday Smokers
Sanders-Brown Group N = 70	4	5.7
Well Elders N = 430	28	6.5
Nursing Home Elders N = 413	30	7.3
Homebound Elders N = 473	68	14.4
KY Statewide Elders N = 1386	130	9.4

Statewide, only 9.4% of all sampled elders reported smoking every day. Only 5.7% of the Sanders-Brown group, 6.5% of the well elders, and 7.3% of the nursing home elders reported smoking cigarettes everyday compared to the total adult population of 26.8% as reported in the 2002 KAOHS results. In the 2003 BRFSS for people aged 65 years and older, 12.5% reported smoking cigarettes daily. The only group surveyed which was similar to the BRFSS findings was the homebound group in which 14.4% reported smoking every day

KEOHS Elders' Self-Reported Frequency of Alcohol Consumption (AQ23a)

This page describes the self-reported frequency of alcohol consumption by elders

Elders' Self-Reported Frequency of Alcohol Consumption



Self-Reported Frequency of Alcohol Consumption	Total Sample	Percent of Total Sample
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Sanders-Brown Group N = 70	70	100
Everyday	14	20.0
Some	33	47.2
None	22	31.4
Did Not Answer	1	1.4

Well Elders N = 430	430	100
Everyday	10	2.3
Some	53	12.3
None	355	82.6
Did Not Answer	12	2.8

Nursing Home Elders N = 413	413	100
Everyday	2	0.5
Some	40	9.7
None	362	87.7
Did Not Answer	9	2.2

Homebound Elders N = 473	473	100
Everyday	6	1.3
Some	12	2.5
None	453	95.8
Did Not Answer	2	0.4

KY Statewide Elders N = 1386	1386	100
Everyday	32	2.3
Some	138	10.0
None	1192	86.0
Did Not Answer	24	1.7

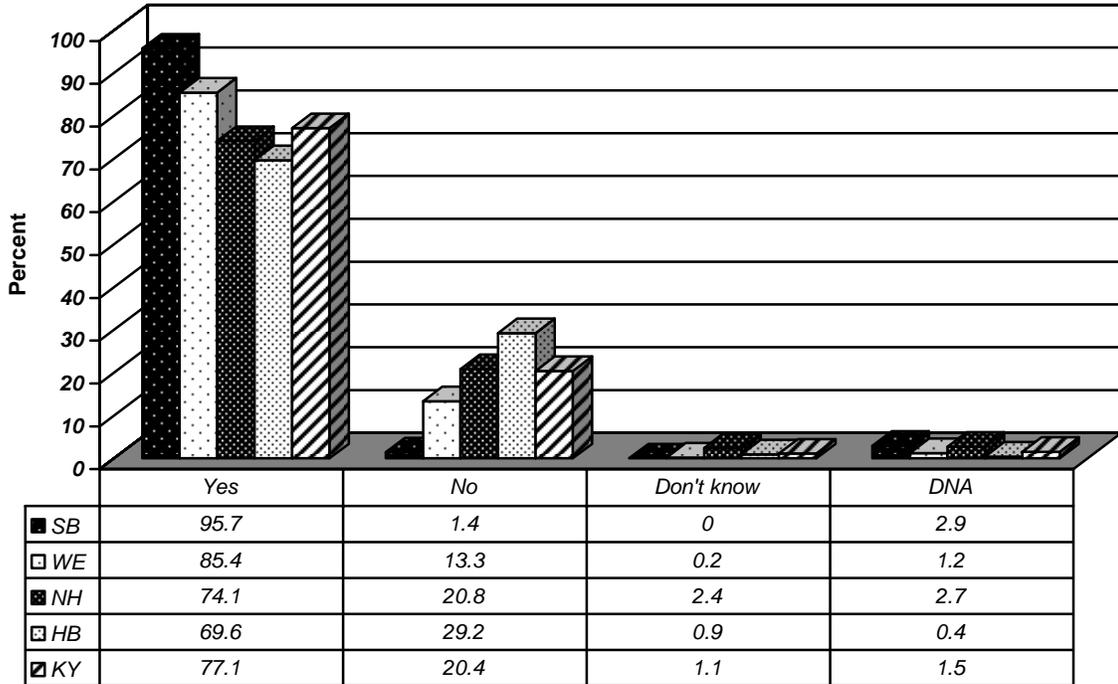
Statewide, most elders (86.0%) reported having consumed no alcoholic beverages within the past 30 days. Ten percent (10.0%) reported drinking some alcohol occasionally, but not every day, and 2.3% of elders reported drinking alcohol daily.

Regarding elder groups, almost 83% of well elders reported having consumed no alcoholic beverages within the past 30 days. Similar percentages reveal the great majority of NH and HB elders also do not drink (87.8% and 95.8%, respectively). Twenty percent of the Sanders-Brown group reported daily alcohol consumption compared to the well elders' report of 2.3% and even less for the NH and HB elders. The 2003 BRFSS data reported that 16.9% of people aged 65 years and older had a drink within the past 30 days.

KEOHS Elders' Self-Report on Toothbrushing Habits (AQ25)

This page describes the elders who reported toothbrushing habits.

Elders' Self-Reported Toothbrushing Habits



Self-Reported Brushing Habits	Total Sample	Percent of Total Sample
-------------------------------	--------------	-------------------------

Sanders-Brown Group N = 70	70	100
Yes	67	95.7
No	1	1.4
Don't know	0	0.0
Did not answer	2	2.9

Well Elders N = 430	430	100
Yes	367	85.4
No	57	13.3
Don't Know	1	0.2
Did not answer	5	1.2

Nursing Home Elders N = 413	413	100
Yes	306	74.1
No	86	20.8
Don't know	10	2.4
Did not answer	11	2.7

Homebound Elders N = 473	473	100
Yes	329	69.6
No	138	29.2
Don't know	4	0.9
Did not answer	2	0.4

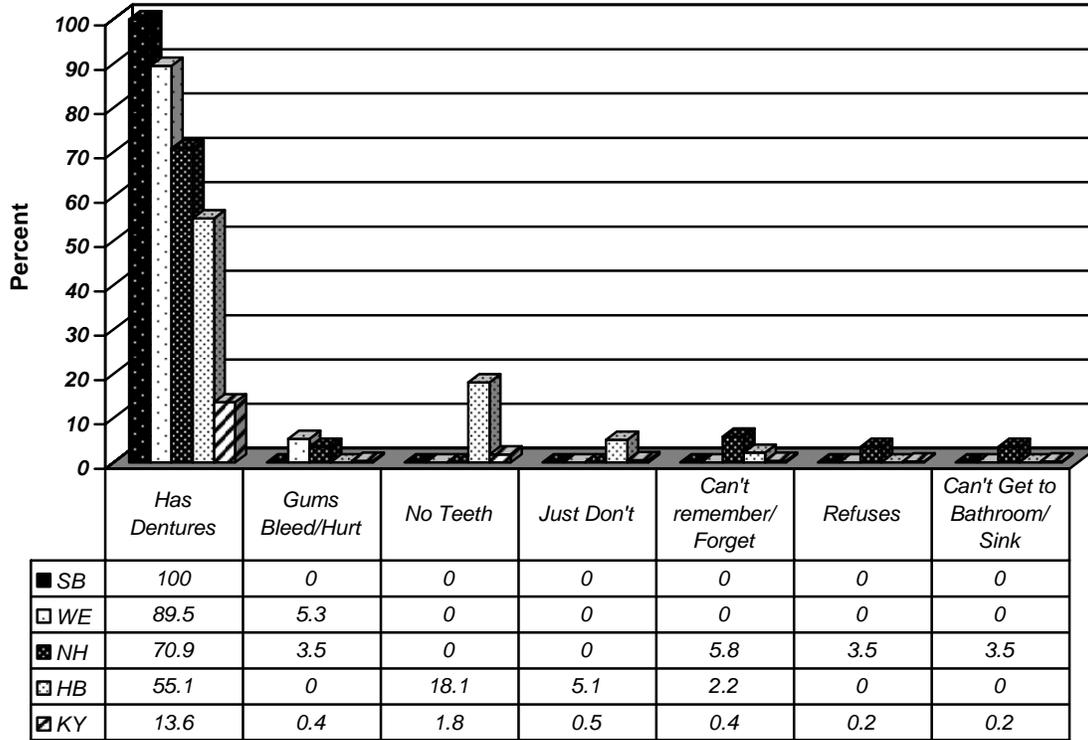
Self-Reported Brushing Habits	Total Sample	Percent of Total Sample
KY Statewide Elders N = 1386	1386	100
Yes	1069	77.1
No	282	20.4
Don't know	15	1.1
Did not answer	20	1.5

Statewide, the majority of elders reported brushing their teeth at least once a day (77.1%). Regarding elder groups, 85.4% of the well elders reported that they brushed their teeth and 95.7% of the Sanders-Brown reported brushing habits. Only 74.1% of the nursing home elders reported brushing their teeth, followed by the homebound elders who reported the lowest percent of those brushing (69.6%).

Top Reasons KEOHS Elders Reported for Not Brushing their Teeth Regularly (AQ25s1)

This page describes the main reasons the elders gave for not brushing.

Elders' Self-Reported Reasons for Not Brushing Teeth Regularly



Self-Reported Top Reasons for Not Brushing Regularly	Total Sample who answered No to question on brushing	% of Total Sample who answered No to question
--	--	---

Sanders-Brown Group N=1*	***	***
Has Dentures/ Uses Polident	1	100.0

Well Elders N=57*	***	***
Has Dentures/Have no teeth	51	89.5
Gums Bleed/Hurt	3	5.3

Nursing Home Elders N=86*	***	***
Has Dentures/Have no teeth	61	70.9
Can't remember	5	5.8
Refuses	3	3.5
Can't get to bathroom/sink	3	3.5
They bleed or hurt when brushing	3	3.5

Homebound Elders N=138*	***	***
Has Dentures	76	55.1
No teeth	25	18.1
Just Don't	7	5.1
Can't remember (forget)	3	2.2

Self-Reported Top Reasons for Not Brushing Regularly	Total Sample who answered No to question on brushing	% of Total Sample who answered No to question
--	--	---

KY Statewide Elders N = 282*	***	***
Has Dentures	189	13.6
Gums bleed/hurt	6	0.4
No teeth	25	1.8
Just don't	7	0.5
Can't remember (forget)	7	2.5
Refuses	3	0.2
Can't get to bathroom/sink	3	0.2

*Totals of elders in each group who reported not brushing their teeth.

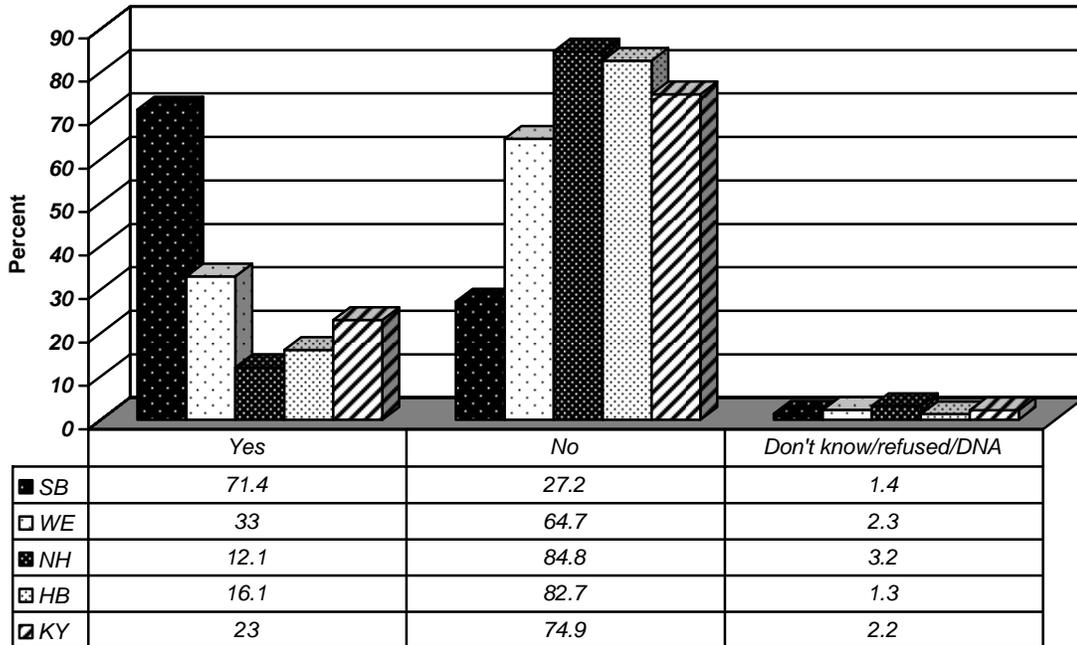
***Does not equal 100% because there were more reasons given for not brushing than those listed. Single responses by the NH group include: put it off, too busy, don't have enough time, never taught how to, no brush, no use of hands, not able, only brush when children come, requires verbal cues and assistance, staff does not brush, too hard. The most frequent response given by NH elders for not brushing teeth was wearing dentures/having no teeth.

Among the homebound elders, single responses included: afraid of teeth falling out, causes pain, don't even know where toothbrush is, don't feel like it, don't need to – chews tobacco instead, don't want to, inconvenient, lazy, limited mobility in hands due to arthritis.

KEOHS Elders' Self-Report on Use of Dental Floss (AQ26)

This page describes the self-reported use of dental floss by elders.

Elders' Self-Reported Use of Dental Floss



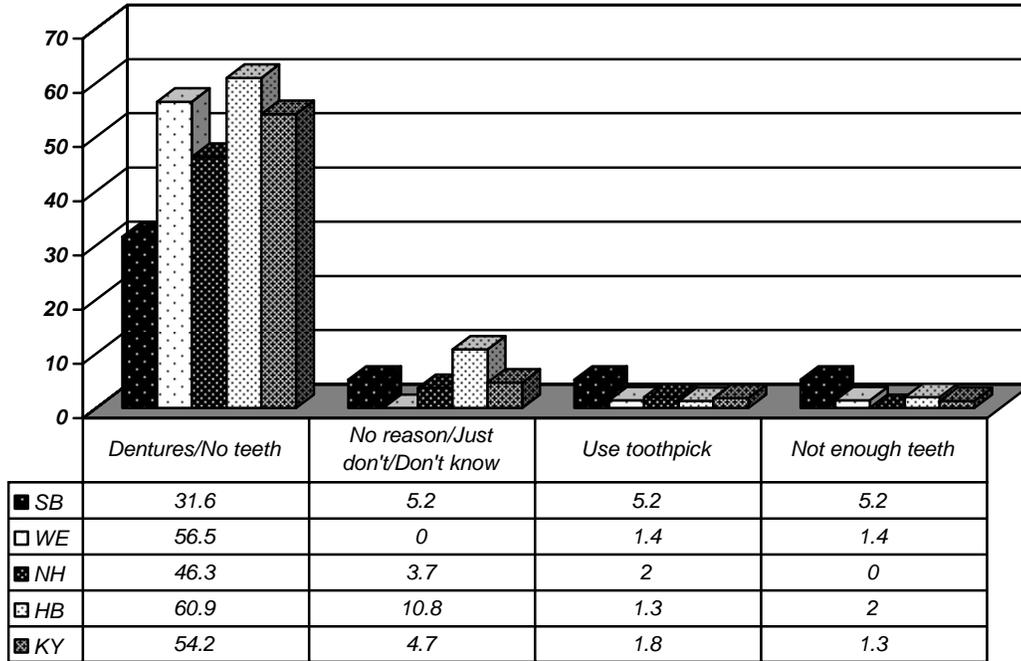
Self-Reported Use of Dental Floss	Total Sample	Percent of Total Sample
Sanders-Brown Group N = 70	70	100
Yes	50	71.4
No	19	27.2
Don't know/refused/did not answer	1	1.4
Well Elders N = 430	430	100
Yes	142	33.0
No	278	64.7
Don't know/refused/did not answer	10	2.3
Nursing Home Elders N = 413	413	100
Yes	50	12.1
No	350	84.8
Don't know/refused/did not answer	13	3.2
Homebound Elders N = 473	473	100
Yes	76	16.1
No	391	82.7
Don't know/refused/did not answer	6	1.3
KY Statewide Elders N = 1386	1386	100
Yes	318	23.0
No	1038	74.9
Don't know/refused/did not answer	30	2.2

Statewide, a much lower percent (23.0%) of all sampled elders reported t flossing regularly. However, there was a wide range of flossing reported between elder groups, with only 33.0% of the well elders reporting using dental floss while 71.4% of the Sanders-Brown group reported using dental floss. Only a very small percentage of the homebound sample reported using dental floss (16.1%) followed by the nursing home elders at 12.1%. If you include only the number of dentate elders (those who have teeth), the number of elders who floss increases to 42.5%. Of the elders who reported using dental floss, almost all reported using it 1 or 2 times a day.

KEOHS Elders' Self-Report on Not Using Dental Floss (AQ26s1)

This page describes the elders' self-reported top reasons for not using dental floss regularly.

Elders' Reasons Given for Not Flossing Teeth



Self-Reported Top Reasons for Not using Dental Floss	Total Sample who answered No to question on flossing	% of Total Sample who answered No to question
--	--	---

Sanders-Brown Group N=19*	***	***
Dentures/no teeth	6	31.6
No reason, just don't	1	5.2
Use toothpick	1	5.2
Not enough teeth	1	5.2

Well Elders N=278*	***	***
Dentures/no teeth	157	56.5
No reason, just don't	0	0.0
Use toothpick	6	2.2
Not enough teeth	4	1.4

Statewide NH Elders N=350*	***	***
Dentures/no teeth	162	46.3
No reason, just don't	6	3.7
Use toothpick	7	2.0
Not enough teeth	0	0.0

Statewide Homebound Elders N = 391*	***	***
Dentures/no teeth	238	60.9
No reason, just don't	42	10.8
Use toothpick	5	1.3
Not enough teeth	8	2.0

Self-Reported Reasons for Not using Dental Floss	Total Sample who answered No to question on flossing	% of Total Sample who answered No to question
--	--	---

KY Statewide Elders N = 1038*	***	***
Dentures/no teeth	563	54.2
No reason, just don't	49	4.7
Use toothpick	19	1.8
Not enough teeth	13	1.3

*Number who reported not using dental floss.

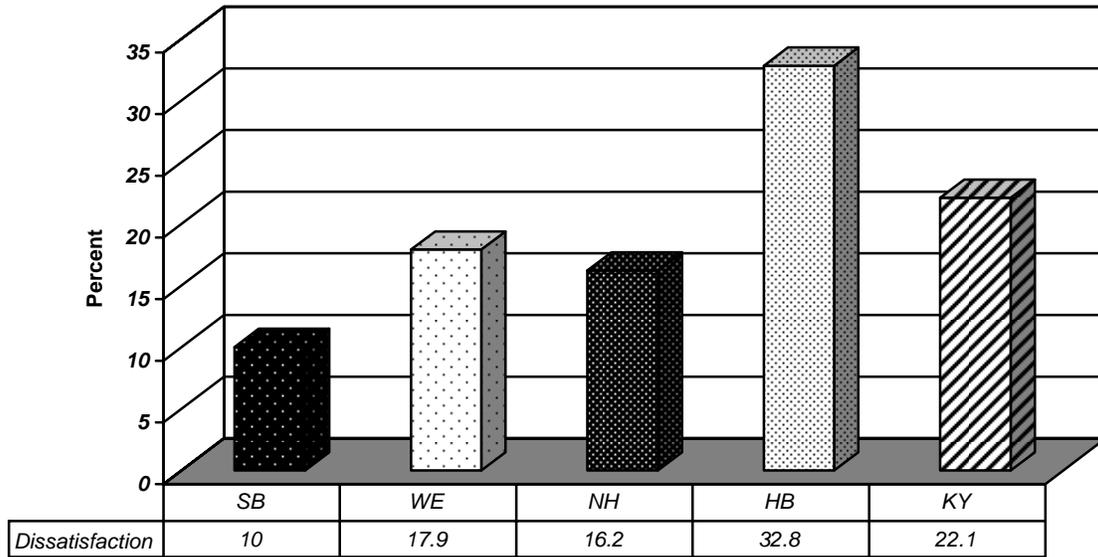
***Does not equal 100% because there were more reasons given for not flossing than those listed.

Other responses given by well elders included: don't think of/ forget, don't do, and dislike flossing. Other responses by nursing home elders were: gets stuck in teeth, no reason, dislike doing it, don't take the time, don't think of it, forget, too hard, mouth too small, afraid floss will break, confusion, unable due to arthritis, don't bother (teeth too bad), can't do it, hurts, don't want to, don't have two hands, no need, unable due to stroke, too much trouble. Additional reasons given by homebound elders included: I can't do it myself, broke tooth while flossing 1 year ago, can't hold floss, causes bleeding, doesn't like to, too much trouble, doesn't think it is necessary, doesn't have any floss, flossing doesn't help, got on nerves so quit, painful, inconvenient, limited mobility in hands, never have flossed, teeth are too close together, teeth are too bad, too lazy.

KEOHS Elders Who Reported Dissatisfaction with their Ability to Chew (AQ27a)

This page describes the elders who reported dissatisfaction with their ability to chew food as a result of the condition of their teeth, gums or dentures.

Elders' Dissatisfaction with the Ability to Chew



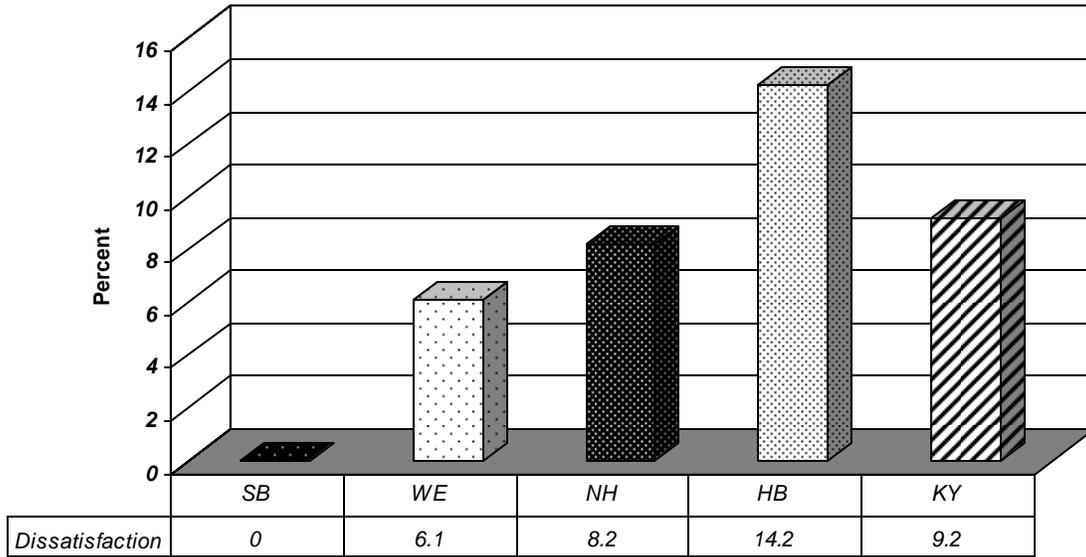
Dissatisfaction with the Ability to Chew		# (%) of Total Sample
Sanders-Brown Group	N = 70	7 (10.0)
Well Elders	N = 430	77 (17.9)
Nursing Home Elders	N = 413	67 (16.2)
Homebound Elders	N = 473	155 (32.8)
KY Statewide Elders	N = 1386	306 (22.1)

Statewide, 22.1% of elders reported dissatisfaction with their ability to chew food as a result of the condition of their teeth, gums, or dentures. This ranged from a low of 10.0% in the SB group to a high of 32.8% in the HB elders.

KEOHS Elders Who Reported Dissatisfaction with the Ability to Speak Clearly (AQ27b)

This page describes the elders who reported dissatisfaction with their ability to speak clearly as a result of the condition of their teeth, gums or dentures.

Elders' Dissatisfaction with the Ability to Speak Clearly

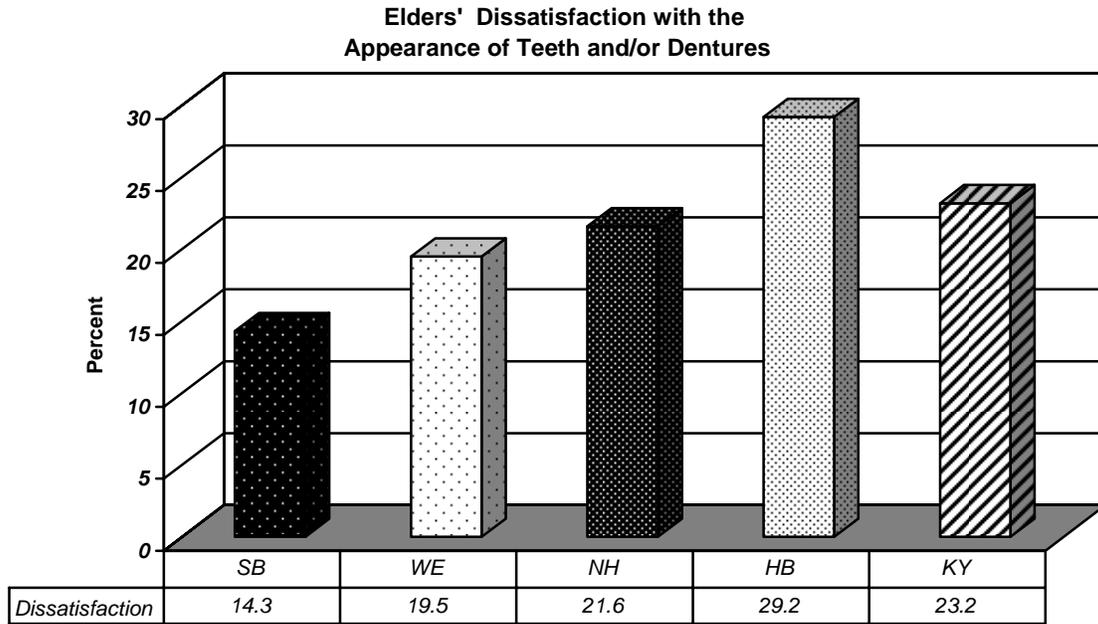


Dissatisfaction with the Ability to Speak Clearly		# (%) of Total Sample
Sanders-Brown Group	N = 70	0 (0.0)
Well Elders	N = 430	26 (6.1)
Nursing Home Elders	N = 413	34 (8.2)
Homebound Elders	N = 473	67 (14.2)
KY Statewide Elders	N = 1386	127 (9.2)

Statewide, 9.2% of elders reported dissatisfaction with their ability to speak clearly as a result of their teeth, gums or dentures. This ranged from a low of no reports (0%) from the SB group to a high of 14.2% for the homebound elders.

KEOHS Elders' Dissatisfaction with the Appearance of Teeth and/or Dentures (AQ27c)

This page describes the elders who reported dissatisfaction with the appearance of their teeth and/or dentures.



Dissatisfaction with the Appearance of Teeth and/or Dentures	# (%) of Total Sample
Sanders-Brown Group N = 70	10 (14.3)
Well Elders N = 430	84 (19.5)
Nursing Home Elders N = 413	89 (21.6)
Homebound Elders N = 473	138 (29.2)
KY Statewide Elders N = 1386	321 (23.2)

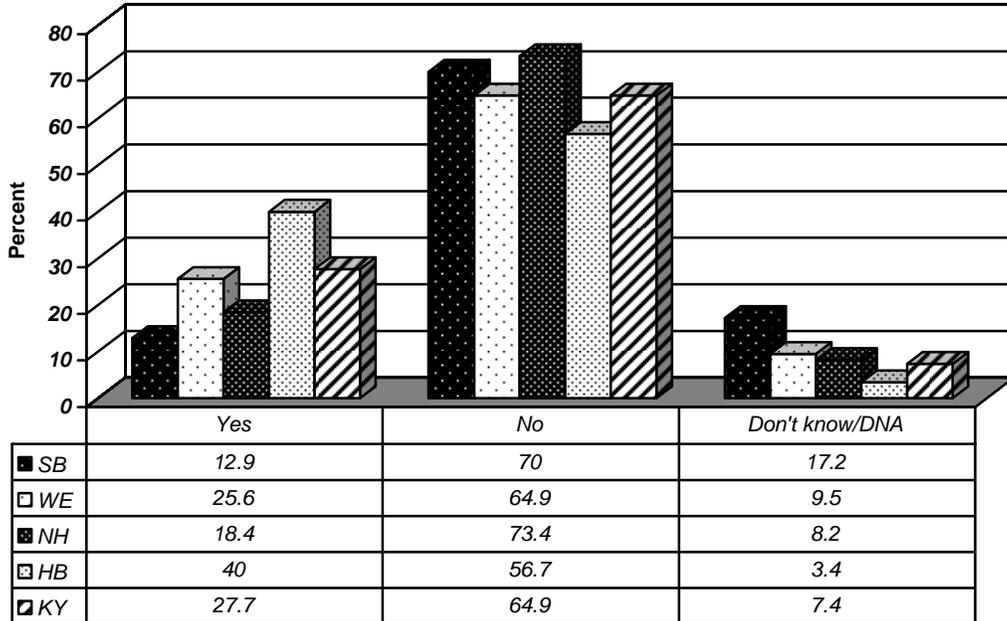
Statewide, 23.2% of elders reported dissatisfaction with the appearance of their teeth and/or dentures.

The Sanders-Brown group reported the lowest dissatisfaction with the appearance of their teeth and/or dentures (14.3%). Among the well elders, 19.5% reported dissatisfaction with their teeth and/or dentures. This percentage is the same as the 2002 KAOHS statewide data. Almost 22% (21.6%) of NH elders were dissatisfied with the appearance of teeth and/or dentures and the homebound had the greatest percentage (29.2%) of those who were dissatisfied with the appearance of their teeth and/or dentures.

KEOHS Elders' Self-Report on Current Dental Problems (AQ28)

This page describes the elders' self-report on current dental problems.

Elders' Self-Report on Current Dental Problems



Self-Reported Current Dental Problems	Total Sample	Percent of Total Sample
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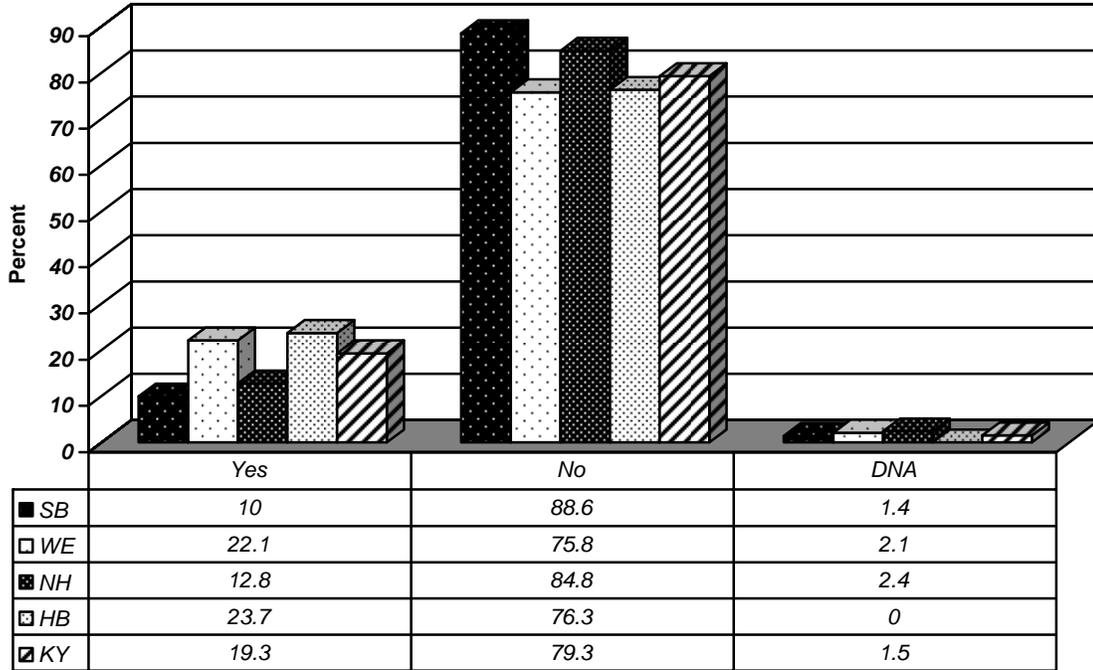
Sanders-Brown Group N = 70	70	100
Yes	9	12.9
No	49	70.0
Don't know/did not answer	12	17.2
Well Elders N = 430	430	100
Yes	110	25.6
No	279	64.9
Don't know/did not answer	41	9.5
Nursing Home Elders N = 413	413	100
Yes	76	18.4
No	303	73.4
Don't know/did not answer	34	8.2
Homebound Elders N = 473	473	100
Yes	189	40.0
No	268	56.7
Don't know/did not answer	16	3.4
KY Statewide Elders N = 1386	1386	100
Yes	384	27.7
No	899	64.9
Don't know/did not answer	103	7.4

Statewide, almost 28% (27.7%) of elders surveyed reported having current dental problems. This ranged from a low of 12.9% in the SB group to a high of 40% in the HB elders.

Kentucky Elders' Self-Report of Pain in Teeth, Gums or Jaws (AQ29)

This page describes the elders' self-report of any dental pain in their teeth, gums or jaws

Elders' Self-Report of Pain in Teeth, Gums or Jaws



Self-Reported Pain in Teeth, Gums or Jaws	Total Yes # (%)	Total No # (%)	Did not answer # (%)
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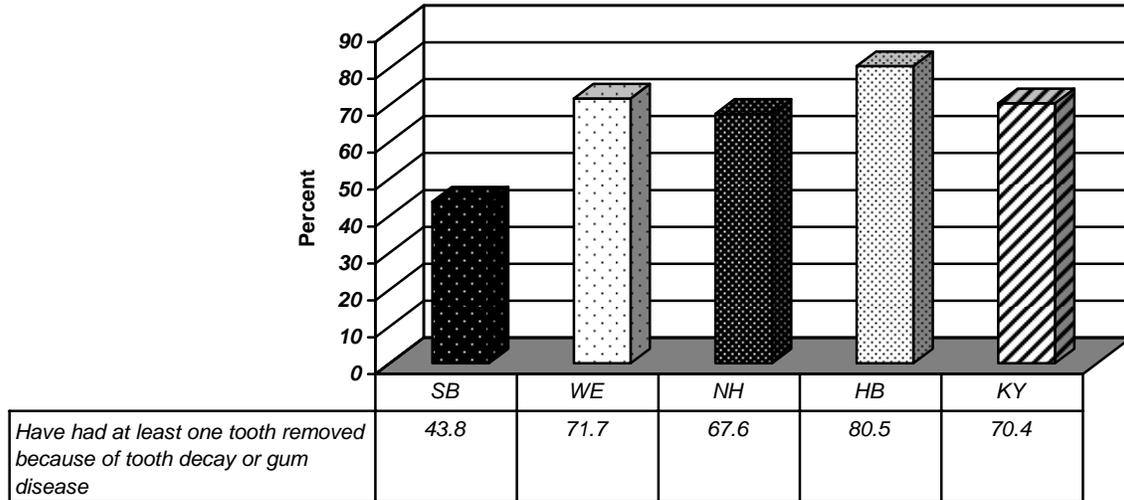
Sanders-Brown Group	N = 70	7 (10.0)	62 (88.6)	1 (1.4)
Well Elders	N = 430	95 (22.1)	326 (75.8)	9 (2.1)
Nursing Home Elders	N = 413	53 (12.8)	350 (84.8)	10 (2.4)
Homebound Elders	N = 473	112 (23.7)	361 (76.3)	0 (0.0)
KY Statewide Elders	N = 1386	267 (19.3)	1099 (79.3)	20 (1.5)

Statewide, nineteen percent (19.3%) of elders reported having dental pain in their teeth, gums or jaws. The range was a low of 10.0% in the SB group to a high of 23.7% in the HB group.

KEOHS Dentate Elders Who Have Had Teeth Removed Because of Tooth Decay or Gum Disease (AQ33)

This page describes the dentate elders who have had one or more teeth removed because of tooth decay or gum disease.

Elders Who Have Had Teeth Removed Because of Tooth Decay or Gum Disease



Teeth Removed Because of Decay or Gum Disease	Total Dentate Sample	# (%) of Dentate Sample
Sanders-Brown Group N=70	64*	28 (43.8)
Well Elders N=430	247*	177 (71.7)
Nursing Home Elders N=413	225**	152 (67.6)
Homebound Elders N=473	205	165 (80.5)
KY Statewide Elders N = 1386	741	522 (70.4)

*Number of dentate sample confirmed by clinical question. A total of 64 (out of 70 SB elders) were confirmed dentate by the clinical exam. Similarly, a total of 247 WE were found to be dentate by the clinical exam.

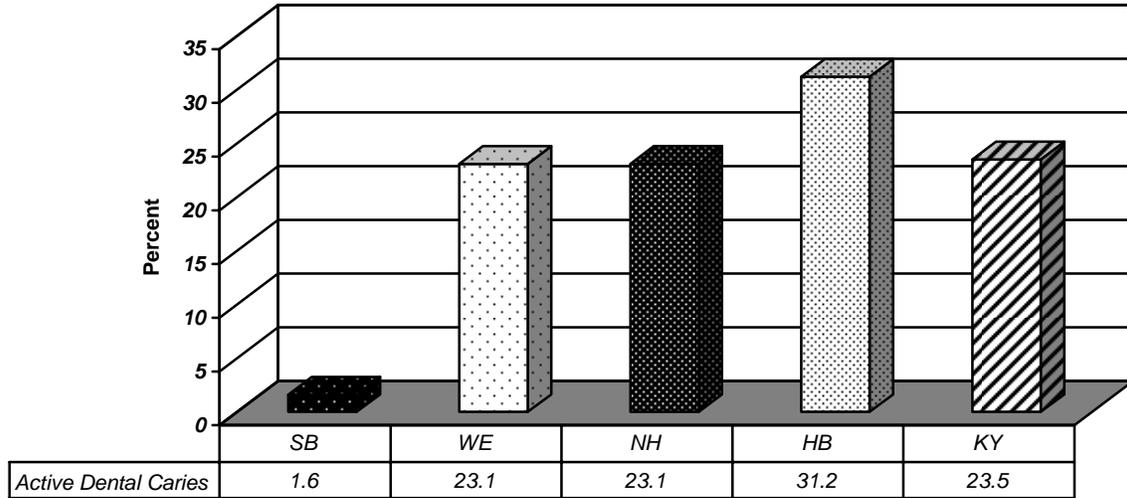
**Only 225 (out of 232 who were found to be dentate in the clinical exam) reported being dentate on this questionnaire.

Statewide, 70.4% of sampled elders had at least one tooth removed due to gum disease or dental caries. Regarding elder groups, 71.7% of dentate well elders and 67.6% of the nursing home elders have had at least one tooth removed due to gum disease or dental caries. Homebound elders reported the highest percentage (80.5%) of those who had one or more teeth removed because of tooth decay or gum disease. In contrast, the SB group reported only 43.8% who had one or more teeth removed due to tooth decay or gum disease. The 2003 BRFSS data showed that statewide, 64.1% of the respondents reported that they have had six or more teeth removed due to decay or gum disease.

KEOHS Dentate Elders Who Reported Dental Caries (AQ33a2)

This page describes the dentate elders who reported having active dental decay in any of their teeth.

Dentate Elders Who Reported Dental Caries



Active Dental Caries	Total Dentate Sample	# (%) Dentate Sample who Answered Question
Sanders-Brown Group N = 70	64	1 (1.6)
Well Elders N = 430	247	57 (23.1)
Nursing Home Elders N = 413	225*	52 (23.1)
Homebound Elders N = 473	205	64 (31.2)
KY Statewide Elders N = 1386	741	174 (23.5)

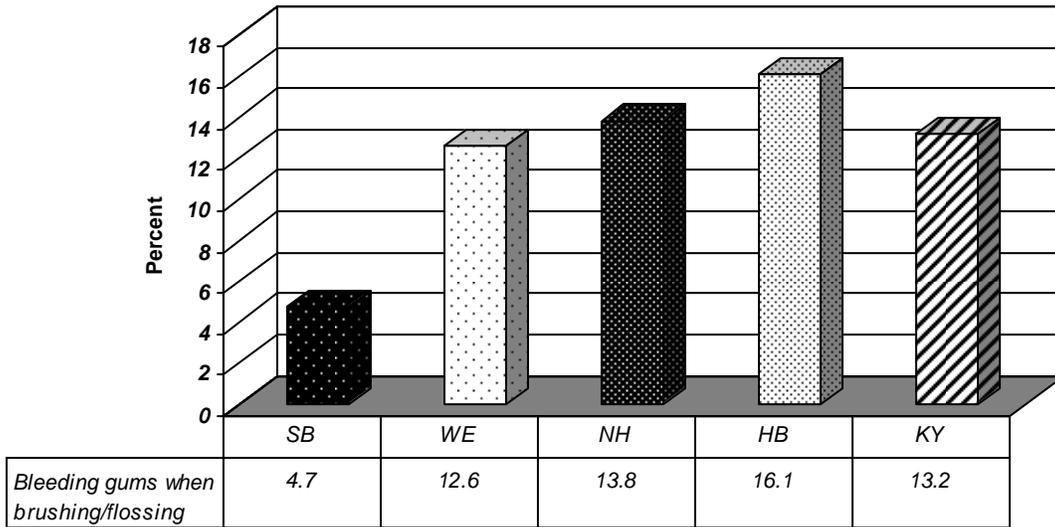
* Only 225 (out of 232 who were found to be dentate in the clinical exam) reported being dentate on this questionnaire.

Statewide, of those elders who have teeth (are dentate), about one fourth (23.5%) reported having active dental decay. This ranged from a low of 1.6% reported by the SB group to a high of 31.2% in the HB group.

KEOHS Dentate Elders Who Reported Gums Bleeding when Brushing and/or Flossing (AQ33a3)

This page describes the elders who reported their gums bleed when they brush and/or floss their teeth. This excludes edentulous elders, and includes only elders who have one or more natural teeth.

Dentate Elders Who Reported Bleeding Gums when Brushing/Flossing



	Bleeding Gums when Brushing and/or Flossing	Total Dentate Sample	# (%) Dentate Sample who answered question
Sanders-Brown Group	N = 70	64	3 (4.7)
Well Elders	N = 430	247	31 (12.6)
Nursing Home Elders	N = 413	225*	31 (13.8)
Homebound Elders	N = 473	205	33 (16.1)
KY Statewide Elders	N = 1386	741	98 (13.2%)

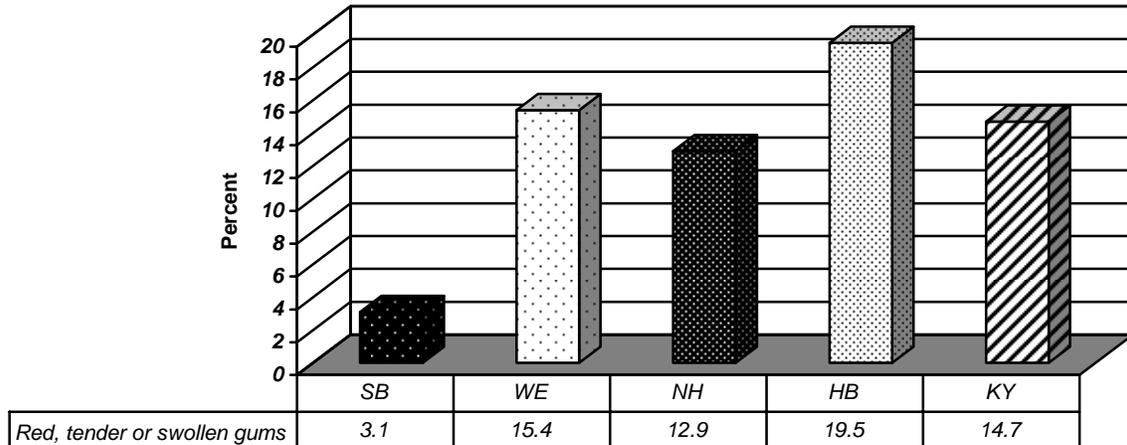
* Only 225 (out of 232 who were found to be dentate in the clinical exam) reported being dentate on this questionnaire.

Statewide, 13.2% of dentate elders reported their gums bleed when they brush and/or floss their teeth. Bleeding gums indicate inflammation and gum disease. Regarding elder groups, 12.6% of the well elders and 13.8% of the nursing home elders reported bleeding when brushing and/or flossing their teeth. This is about three times as many as the Sanders-Brown group where only 4.7% reported bleeding gums. The highest percentage of elders with bleeding gums reported were the homebound elders with 16.1%.

KEOHS Dentate Elders Who Reported Red, Tender or Swollen Gums (AQ33a4)

This page describes the elders reporting red, tender or swollen gums. This excludes edentulous elders, and includes only elders who have one or more natural teeth.

Dentate Elders Who Reported Red, Tender or Swollen Gums



	Red, Tender or Swollen Gums	Total Dentate Sample	Total Dentate Sample who answered question
Sanders-Brown Group N = 70		64	2 (3.1)
Well Elders N = 430		247	38 (15.4)
Nursing Home Elders N = 413		225*	29 (12.9)
Homebound Elders N = 473		205	40 (19.5)
KY Statewide Elders N = 1386		741	109 (14.7)

* Only 225 (out of 232 who were found to be dentate in the clinical exam) reported being dentate on this questionnaire.

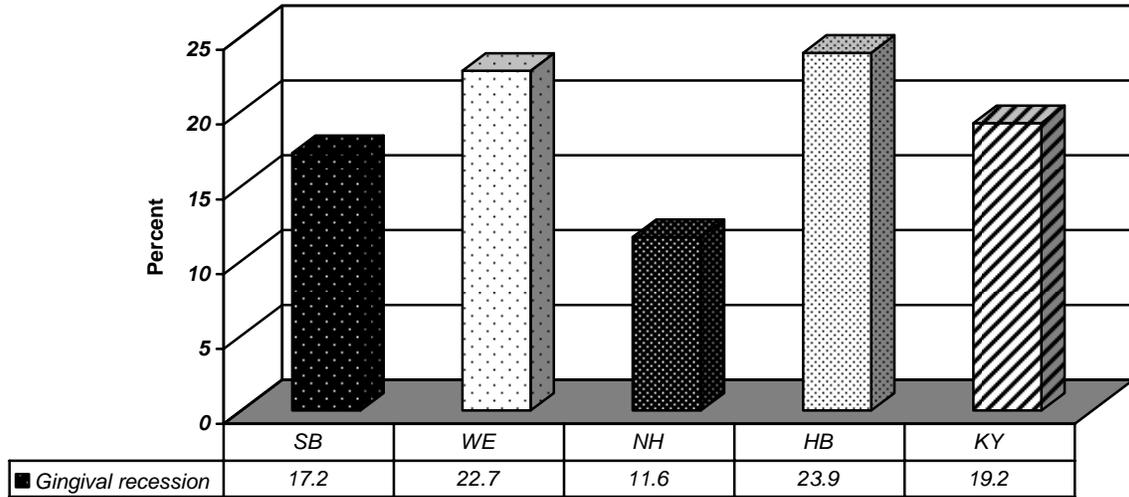
Statewide, almost fifteen percent (14.7%) of dentate elders reported their gums red, tender, or swollen.

Regarding elder groups, 15.4% of the dentate well elders, 12.9% of the nursing home elders, and 19.5% of the homebound elders reported having red, tender and/or swollen gums as compared to the Sanders-Brown group where only 2 people (3.1%) reported having red, tender and/or swollen gums. Red, tender and swollen gums are indicators of gingival and periodontal diseases.

KEOHS Dentate Elders Who Reported Gingival Recession (AQ33a5)

This page describes the elders who reported that their “gums pull away from their teeth in places”. This excludes edentulous elders and includes only elders who have one or more natural teeth.

Dentate Elders Who Reported Gingival Recession



Gingival Recession	Total Dentate Sample	# (%) Dentate Sample who answered question
Sanders-Brown Group N = 70	64	11 (17.2)
Well Elders N = 430	247	56 (22.7)
Nursing Home Elders N = 413	225*	26 (11.6)
Homebound Elders N = 473	205	49 (23.9)
KY Statewide Elders N = 1386	741	142 (19.2)

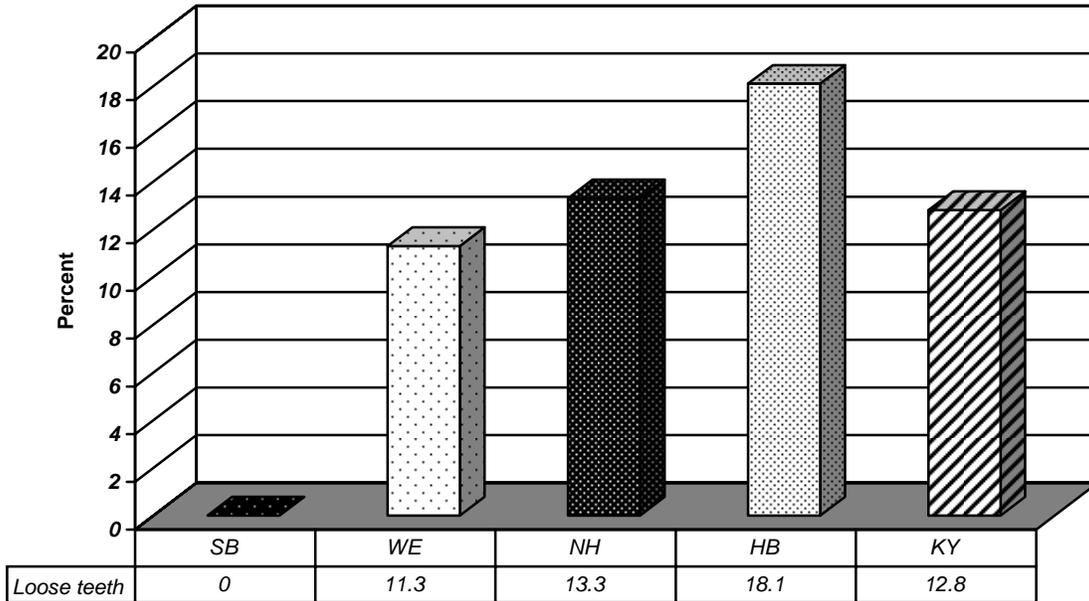
* Only 225 (out of 232 who were found to be dentate in the clinical exam) reported being dentate on this questionnaire.

About twenty percent (19.2%) of dentate elders reported gingival recession. The greatest percentage of recession reported was in the WE (22.7%) and the HB (23.9%) elders.

KEOHS Dentate Elders Who Reported Loose Teeth (AQ33a6)

This page describes the elders' self-report of loose teeth. This excludes edentulous elders and includes only those who have one or more natural teeth.

Dentate Elders Who Reported Loose Teeth



Loose Teeth	Total Dentate Sample	# (%)Dentate Sample who answered question
Sanders-Brown Group N = 70	64	0 (0.0)
Well Elders N = 430	247	28 (11.3)
Nursing Home Elders N = 413	225*	30 (13.3)
Homebound Elders N = 473	205	37 (18.1)
KY Statewide Elders N = 1386	741	95 (12.8)

* Only 225 (out of 232 who were found to be dentate in the clinical exam) reported being dentate on this questionnaire.

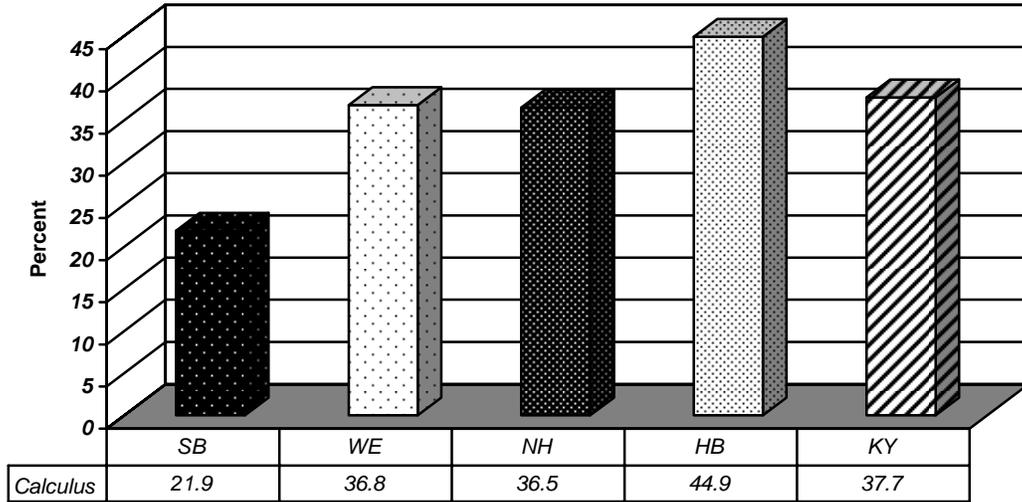
Statewide, almost 13% (12.8%) of dentate elders reported loose teeth.

Regarding elder groups, 11.3% of well elders, 13.3% of the nursing home elders, and 18.1% of the homebound elders reported having loose teeth, which is a sign of severe periodontal disease. No one in the Sanders-Brown group reported having any loose teeth.

KEOHS Dentate Elders Who Reported Having Calculus, Tartar or Build-up (referred to collectively as calculus) on their Teeth (AQ33a7)

This page describes the elders who reported having calculus on their teeth. This excludes edentulous elders, and includes only those elders who have one or more natural teeth.

Dentate Elders Who Reported Having Calculus



Calculus, Tartar, or Build-up on Teeth	Total Dentate Sample	# (%) Dentate Sample who answered question
Sanders-Brown Group N = 70	64	14 (21.9)
Well Elders N = 430	247	91 (36.8)
Nursing Home Elders N = 413	225*	82 (36.5)
Homebound Elders N = 473	205	92 (44.9)
KY Statewide Elders N = 1386	741	279 (37.7)

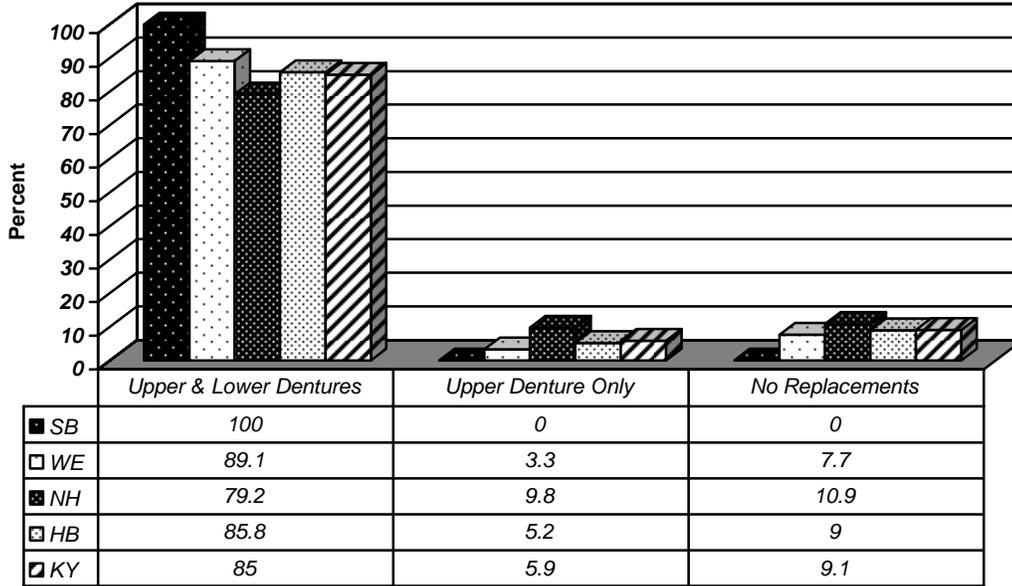
* Only 225 (out of 232 who were found to be dentate in the clinical exam) reported being dentate on this questionnaire.

Statewide, almost 38% of dentate elders reported having tartar (calculus) on their teeth. Regarding elder groups, 36.8% of the well elders, 36.5% of the nursing home elders, and 44.9% of the homebound elders reported having calculus build-up on their teeth. The Sanders-Brown group reported a lower percentage of having calculus on their teeth, 21.9%. The percentage is higher than the 2002 Kentucky Adult Oral Health Survey (KAOHS) data that reported 20% of adults having calculus build-up on their teeth.

KEOHS Edentulous Elders Who Reported Having Dentures (AQ36)

This page describes the edentulous elders who reported having upper and lower dentures, upper denture only, or no replacements.

Edentulous Elders Who Reported Having Dentures



Have Dentures	Total Edentulous Sample who Answered Question	Percent Edentulous Sample with or w/out Denture(s)
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Sanders-Brown Group N = 70	6	100
Upper & Lower Dentures	6	100.0
Upper Denture Only	0	0.0
No replacements	0	0.0
Well Elders N = 430	183	100
Upper & Lower Dentures	163	89.1
Upper Denture Only	6	3.3
No replacements	14	7.7
Nursing Home Elders N = 413	183*	100
Upper & Lower Dentures	145	79.2
Upper Denture Only	18	9.8
No replacements	20	10.9
Homebound Elders N = 473	268	100
Upper & Lower Dentures	230	85.8
Upper Denture Only	14	5.2
No replacements	24	9.0
KY Statewide Elders N = 1386	640	100
Upper & Lower Dentures	544	85.0
Upper Denture Only	38	5.9
No replacements	58	9.1

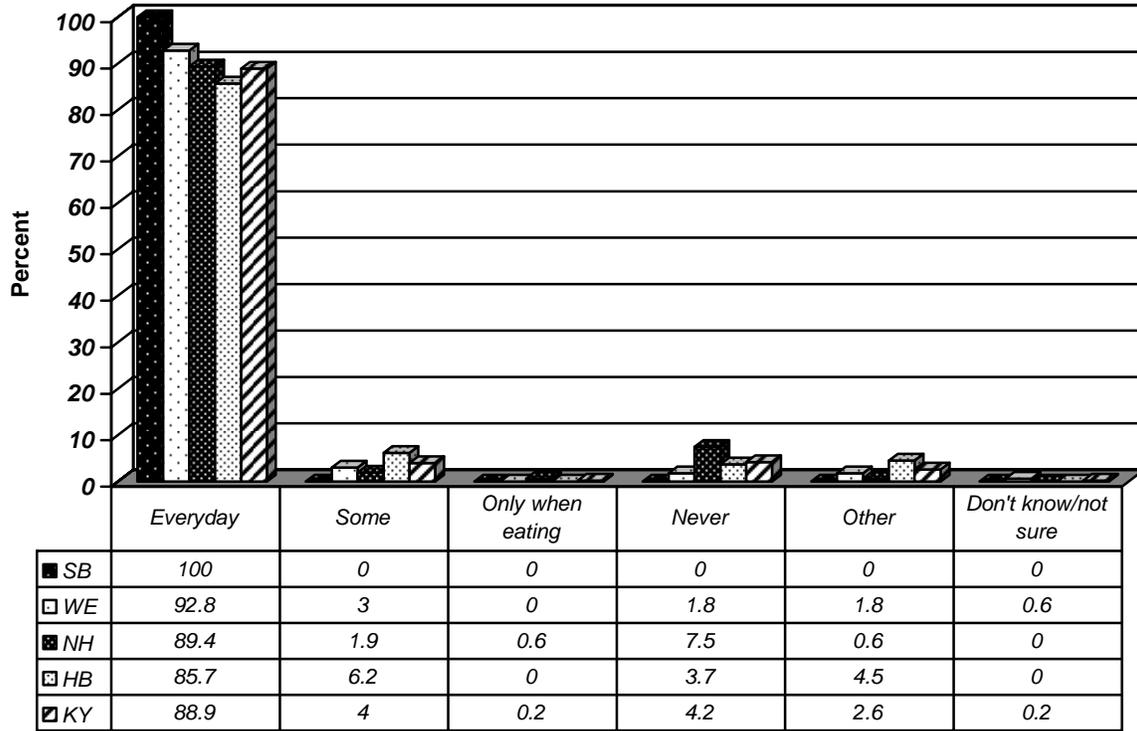
*Clinical exam found only 181 Nursing Home elders edentulous.

Statewide, 85% of those elders who are edentulous (have no teeth), reported having upper and lower dentures. This ranged from a low of 79.2% of NH patients who have both upper and lower dentures to a high of 100% of SB elders who have upper and lower dentures (all SB elders who are missing their teeth have dentures). The highest percentage of elders reporting having only an upper denture was 9.8% in the NH elder group and elders reporting having no replacements at all for missing teeth ranged from a low of 0% in the SB group to a high of 10.9% in the NH group.

KEOHS Edentulous Elders' Self- Report on the Frequency of Wearing their Denture(s) (AQ38)

This page describes the frequency of wearing dentures reported by denture wearers.

Edentulous Elders' Self-Report on the Frequency of Wearing their Dentures



Frequency of Wearing Denture(s)	Total Sample with Dentures who answered question	Percent Sample with Dentures Who Wear Their Dentures
---------------------------------	--	--

Sanders-Brown Group N = 70	6*	100
Everyday	6	100

Well Elders N = 430	166*	100
Everyday	154	92.8
Some	5	3.0
Never	3	1.8
Other	3	1.8
Don't know/Not sure	1	0.6

Nursing Home Elders N = 413	161*	100
Everyday	144	89.4
Some	3	1.9
Only when eating	1	0.6
Never	12	7.5
Other	1	0.6
Don't know/Not sure	0	0.0

Frequency of Wearing Denture(s)	Total Sample with Dentures who answered question	Percent Sample with Dentures Who Wear Their Dentures
---------------------------------	--	--

Homebound Elders N = 473	244*	100
Everyday	209	85.7
Some	15	6.2
Never	9	3.7
Other	11	4.5
Don't know/Not sure	0	0.0

KY Statewide Elders N = 1386	577*	100
Everyday	513	88.9
Some	23	4.0
Only when eating	1	0.2
Never	24	4.2
Other	15	2.6
Don't know/Not sure	1	0.2

*Number of the edentulous who wear dentures who answered this question

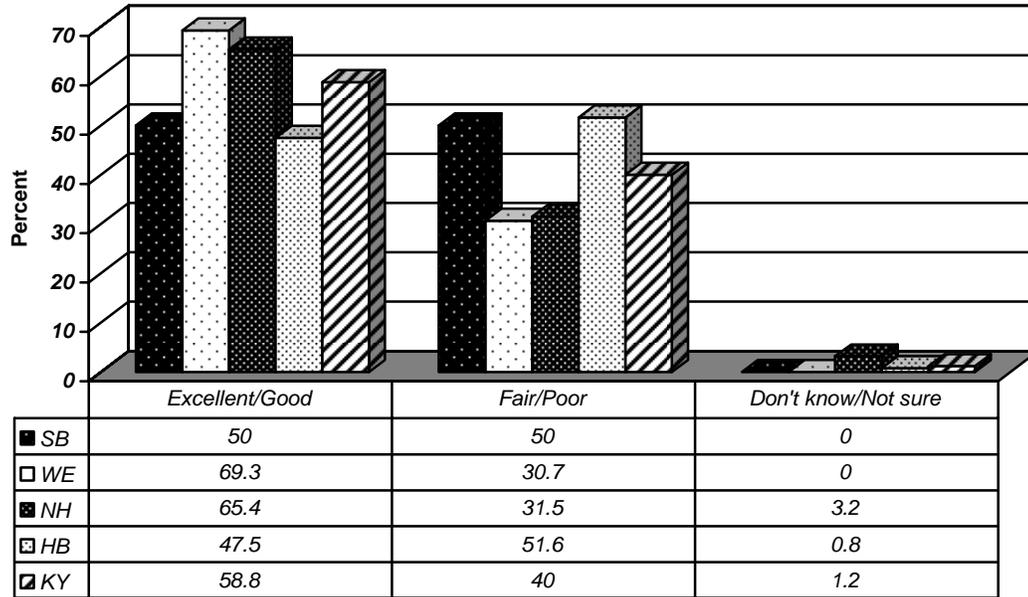
Statewide, the majority of elders who have dentures wear them daily (88.9%).

Regarding elder groups, almost 93% of the well elders who wear dentures reported that they wear them everyday, as do 100% of the Sanders-Brown group, Among the nursing home elders who wear dentures, 89.4% wear them everyday, followed by 85.7% of the homebound elders.

KEOHS Edentulous Elders' Self-Report on Fit of Dentures (AQ39)

This page describes the fit of dentures reported by the elders who wear dentures.

Edentulous Elders' Self-Report on Fit of Dentures



Self-Reported Fit of Denture(s)	
Total Edentulous Sample with Dentures who answered question	Percent of Total Edentulous Sample with Dentures who answered question

Sanders-Brown Group N = 70	6	100
Excellent/Good	3	50.0
Fair/Poor	3	50.0
Don't know/Not sure	0	0.0
Well Elders N = 430	163	100
Excellent/Good	113	69.3
Fair/Poor	50	30.7
Don't know/Not sure	0	0.0
Nursing Home Elders N = 413	159	100
Excellent/Good	104	65.4
Fair/Poor	50	31.5
Don't know/Not sure	5	3.2
Homebound Elders N = 473	244	100
Excellent/Good	116	47.5
Fair/Poor	126	51.6
Don't know/Not sure	2	0.8
KY Statewide Elders N = 1386	572	100
Excellent/Good	336	58.8
Fair/Poor	229	40.0
Don't know/Not sure	7	1.2

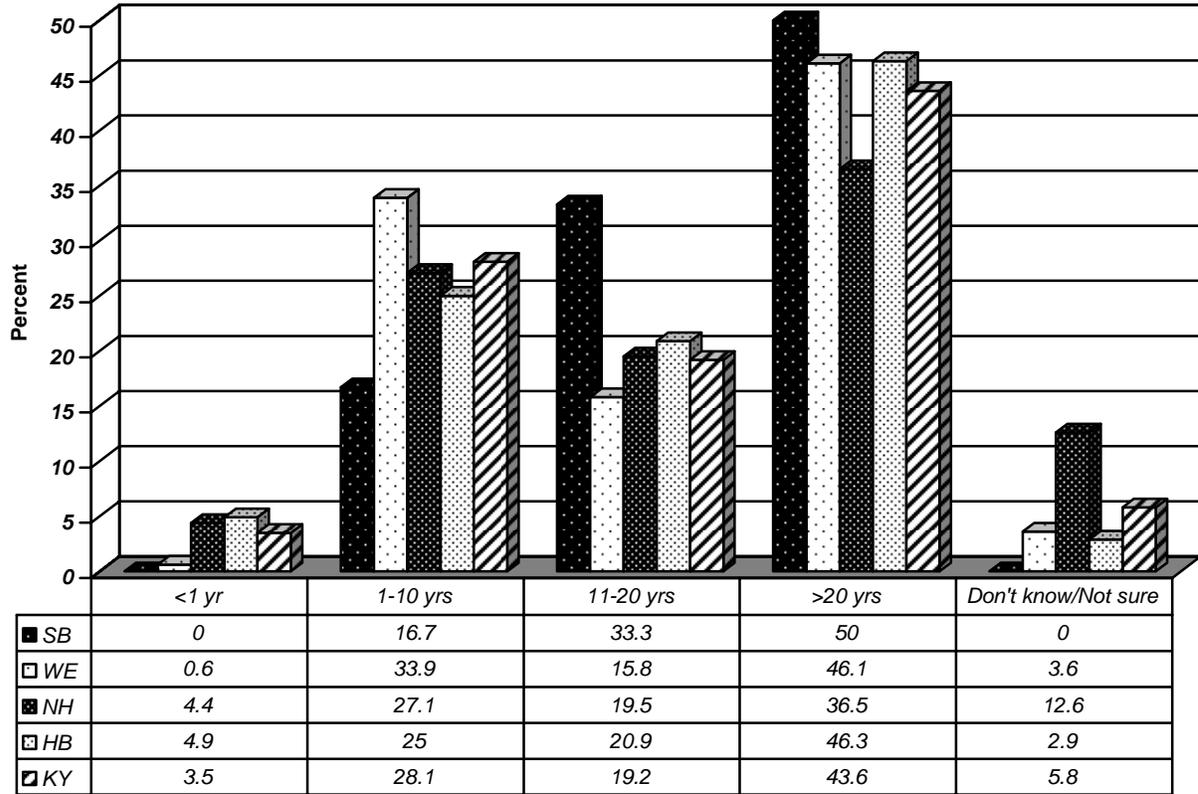
Statewide, the majority of elders who had dentures reported that their denture fit was either excellent or good (58.8%). However, a large minority felt their denture fit was either fair or poor (40.0%).

Regarding the elder groups, 50% of the Sanders-Brown group reported the fit of their dentures as excellent or good and 50% as fair to poor. Of the well elders 69.3% reported the fit of their dentures as excellent or good, and 30.7% reported their denture fit as fair to poor. Similarly, 65.4% of the NH elders reported the fit of their dentures as excellent or good, and 31.5% reported the fit of their dentures as fair to poor. Of the HB elders, 47.5% reported excellent to good denture fit compared to 51.6% who reported fair to poor.

KEOHS Elders' (with Dentures) Self-Report on Length of Time with Present Denture (AQ41)

This page describes the self-report by the elders who wear dentures on how long they have had their current dentures.

Elders' (with Dentures) Self-Report on Length of Time with Present Denture



Length of time with present denture(s)	Total Edentulous Sample with Dentures who answered question	Percent of Total Edentulous Sample with Dentures who answered question
--	---	--

Sanders-Brown Group N = 70	6	100
Less than 1 year	0	0.0
1-10 years	1	16.7
11-20 years	2	33.3
More than 20 years	3	50.0
Don't know/Not sure	0	0.0

Well Elders N = 430	165	100
Less than 1 year	1	0.6
1-10 years	56	33.9
11-20 years	26	15.8
More than 20 years	76	46.1
Don't know/Not sure	6	3.6

Length of time with present denture(s)	Total Edentulous Sample with Dentures who answered question	Percent of Total Edentulous Sample with Dentures who answered question
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Nursing Home Elders N = 413	159	100
Less than 1 year	7	4.4
1-10 years	43	27.1
11-20 years	31	19.5
More than 20 years	58	36.5
Don't know/Not sure	20	12.6

Homebound Elders N = 473	244	100
Less than 1 year	12	4.9
1-10 years	61	25.0
11-20 years	51	20.9
More than 20 years	113	46.3
Don't know/Not sure	7	2.9

KY Statewide Elders N = 1386	574	100
Less than 1 year	20	3.5
1-10 years	161	28.1
11-20 years	308	19.2
More than 20 years	250	43.6
Don't know/Not sure	33	5.8

The length of time statewide elders reported having their dentures was as follows:

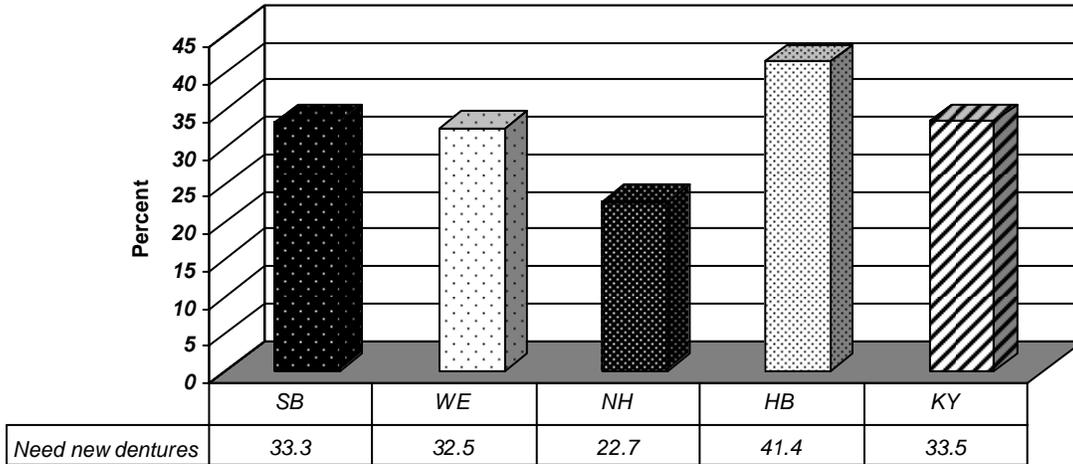
- Less than 1 year (3.5%)
- From 1 year to 10 years (28.1%)
- From 11 to 20 years (19.2%)
- More than 20 years (43.6%).

The groups who had their dentures the longest included the NH group (36.5% with dentures 21 or more years old), the WE group (46.1% with dentures 21 or more years old), and HB elders (46.3 with dentures 21 or more years old).

KEOHS Elders' (with Dentures) Self-Report of Need for New Dentures (AQ42)

This page describes the elders who had dentures who said they needed new dentures.

Elders' (with Dentures) Self-Report of Need for New Dentures



Self-Report of Need for New Dentures	Total Edentulous Sample with Dentures (from AQ36)	# (%) of Total Edentulous Sample with Dentures Reporting Need for New Dentures
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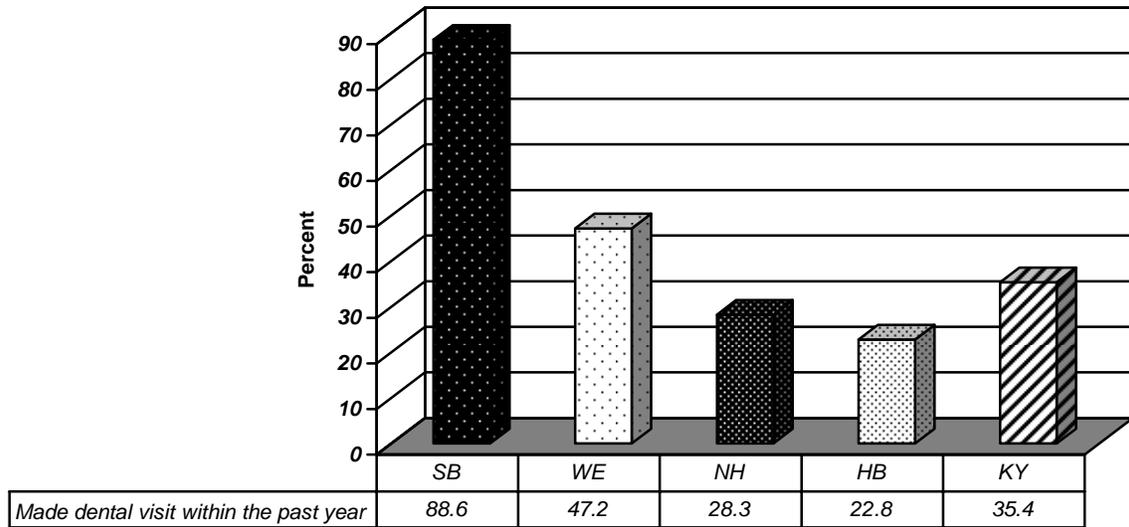
Sanders-Brown Group	N = 70	6	2 (33.3)
Well Elders	N = 430	169	55 (32.5)
Nursing Home Elders	N = 413	163	37 (22.7)
Homebound Elders	N = 473	244	101 (41.4)
KY Statewide Elders	N = 1386	582	195 (33.5)

Statewide, elders' self-reported need for new dentures was 33.5%. This ranged from a low of 22.7% for NH elders to a high of 41.4% for HB elders. Most frequent reasons included not being satisfied with the appearance or the way the dentures feel, and current dentures are worn out.

KEOHS Elders Who Made a Dental Visit within the Past Year (AQ43)

This page describes the number and percent of the elders who made a dental visit within the past year. These dental visits were for any reason (pain, preventive, reconstructive, periodontal).

Elders Who Made a Dental Visit within the Past Year



Made a Dental Visit within the Past Year	# (%) of Total Sample
Sanders-Brown Group N = 70	62 (88.6)
Well Elders N = 430	203 (47.2)
Nursing Home Elders N = 413	117 (28.3)
Homebound Elders N = 473	108 (22.8)
KY Statewide Elders N = 1386	490 (35.4)

Statewide, 35.4% of elders reported they had made a dental visit within the past year.

Regarding elder groups, only 22.8% of the homebound elders made a dental visit within the past year, followed by 28.3% of nursing home elders, 47.2% of the well elders, and the highest percent, 88.6% of the Sanders-Brown elders. The 2002 KAOHS data showed that overall, 64% of all adults made a dental visit within the past year. Except for the SB group, this is clearly a significant difference in percentage of elders who made a dental visit within the past year.

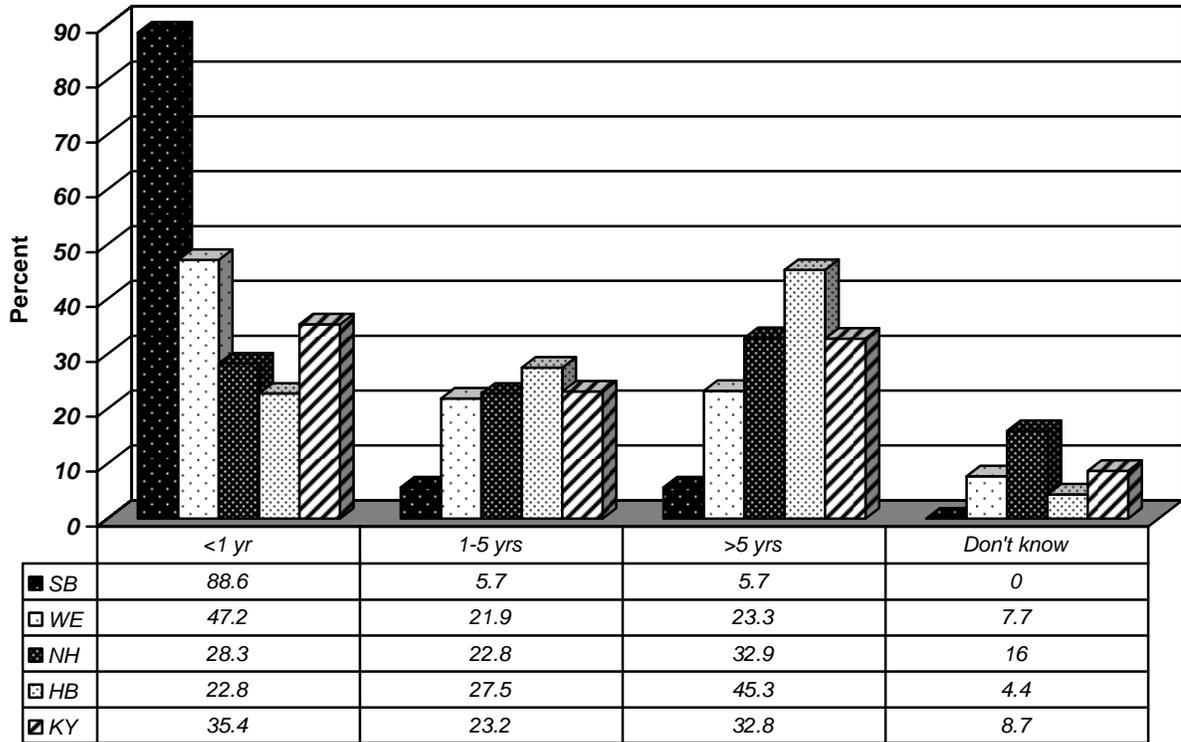
The Healthy Kentuckians 2010 goal is to increase to at least 70% to the proportion of adults who use the oral health care system each year. Baseline data are from the 1996 Kentucky BRFSS, which show 62% utilization. Other comparable surveys report baseline adult utilization, aged 65 years and older, of dental services within the past year of 58% (2003 Kentucky BRFSS) and 67.9 (National BRFSS).

Only the Sanders-Brown well elders exceeded the Healthy Kentuckians 2010 goal.

KEOHS Elders' Time Since Last Dental Visit (AQ43s1)

This page describes the time since last making a dental visit, for any reason.

Elders' Time Since Last Dental Visit



Time Since Last Dental Visit	Total Sample	Percent of Total Sample
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Sanders-Brown Group N = 70	70	100
Less than 1 year	62	88.6
1 to 5 years	4	5.7
More than 5 years	4	5.7
Don't know/refused/did not answer	0	0

Well Elders N = 430	430	100
Less than 1 year	203	47.2
1 to 5 years	94	21.9
More than 5 years	100	23.3
Don't know/refused/did not answer	33	7.7

Nursing Home Elders N = 413	413	100
Less than 1 year	117	28.3
1 to 5 years	94	22.8
More than 5 years	136	32.9
Don't know/refused/did not answer	66	16.0

Time Since Last Dental Visit	Total Sample	Percent of Total Sample
Homebound Elders N = 473	473	100
Less than 1 year	108	22.8
1 to 5 years	130	27.5
More than 5 years	214	45.3
Don't know/refused/did not answer	21	4.4
KY Statewide Elders N = 1386	1386	100
Less than 1 year	490	35.4
1 to 5 years	322	23.2
More than 5 years	454	32.8
Don't know/refused/did not answer	120	8.7

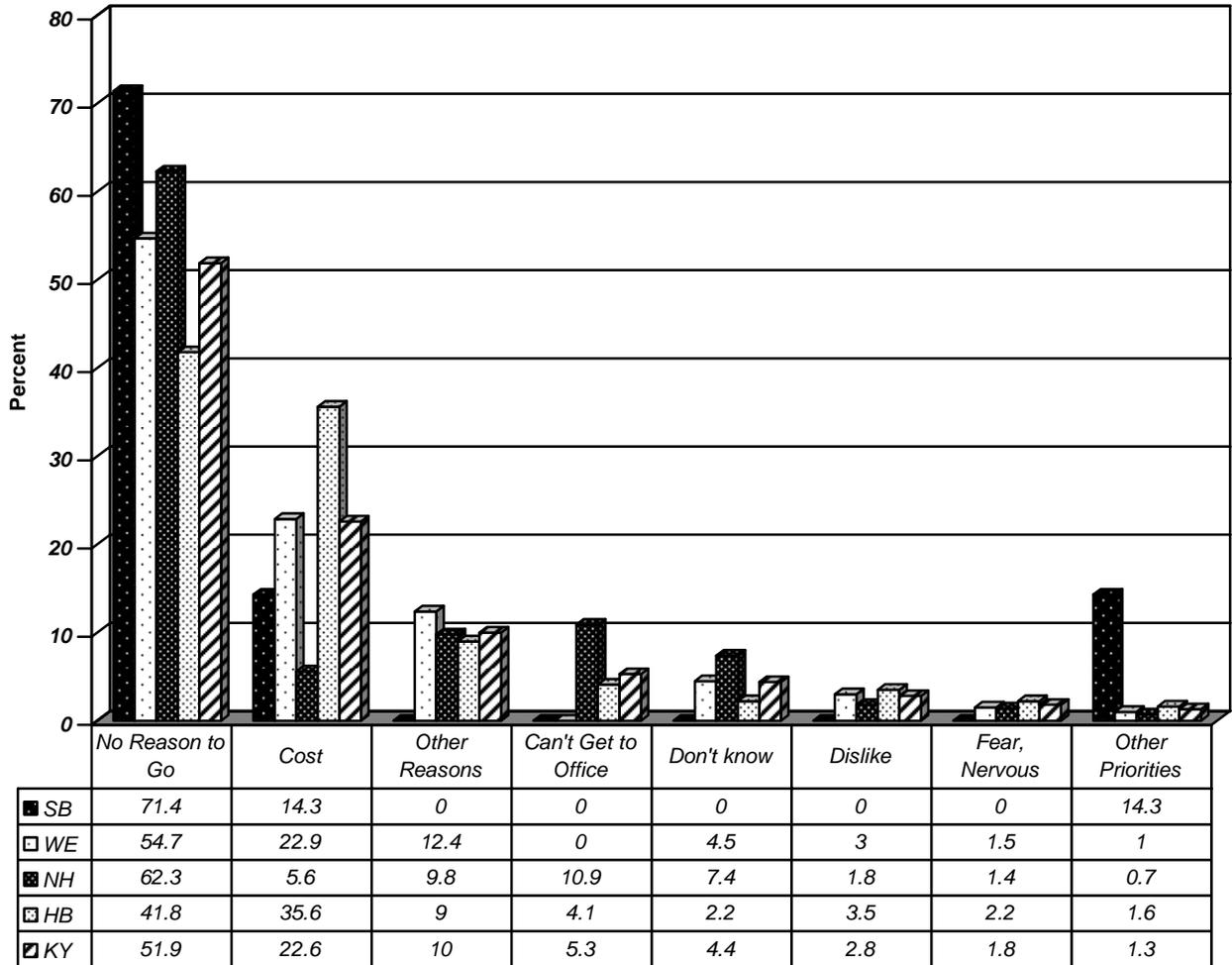
The length of time since an elder made a dental visit for any reason was found to be as follows: less than 1 year (35.4%), from 1-5 years (23.2%), and greater than 5 years (32.8%). The homebound group went the longest time without visiting the dentist of any the elder groups (45.3% had not visited in more than 5 years), followed by the NH group (32.9% had not visited the dentist in more than 5 years).

Regarding the elder groups, 88.6% of the SB group, 47.2% of well elders, 28.3% of NH elders, and 22.8% of homebound elders had a dental visit within the past year. Only 5.7% of the SB group and 23.3% of well elders indicated that it had been more than 5 since their last dental visit. The 2002 KAOHS data showed that adults age 65 years and older utilized dental services less often (51%) than adults age 25 to 44 (70%). This survey confirms that data.

KEOHS Elders' Reasons for No Dental Visit Within the Past Year (AQ44)

This page describes the reasons elders had for not making a dental visit. This excludes elders who visited a dentist within the past year.

Elders' Top Reasons for No Dental Visit Within the Past Year



Reasons for <u>Not</u> Visiting a Dentist in the past year	Total Sample	Percent of Total Sample
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Sanders-Brown Group	N=70	7*	100
	No Reason to Go	5	71.4
	Cost	1	14.3
	Other Reasons	0	0.0
	Can't Get to Office	0	0.0
	Don't know/Refused	0	0.0
	Dislike	0	0.0
	Fear, Nervousness	0	0.0
	Other Priorities	1	14.3

Reasons for <u>Not</u> Visiting a Dentist in the past year	Total Sample	Percent of Total Sample
Well Elders N = 430	201*	100
No Reason to Go	110	54.7
Cost	46	22.9
Other Reasons	25	12.4
Can't Get to Office	0	0.0
Don't know/Refused	9	4.5
Dislike	6	3.0
Fear, Nervousness	3	1.5
Other Priorities	2	1.0
Nursing Home Elders N = 413	284*	100
No Reason to Go	177	62.3
Cost	16	5.6
Other Reasons	28	9.8
Can't Get to Office	31	10.9
Don't know/Refused	21	7.4
Dislike	5	1.8
Fear, Nervousness	4	1.4
Other Priorities	2	0.7
Homebound Elders N – 473	368*	100
No Reason to Go	154	41.8
Cost	131	35.6
Other Reasons	33	9.0
Can't Get to Office	15	4.1
Don't know/Refused	8	2.2
Dislike	13	3.5
Fear, Nervousness	8	2.2
Other Priorities	6	1.6
KY Statewide Elders N = 1386	860*	100
No Reason to Go	446	51.9
Cost	194	22.6
Other Reasons	86	10.0
Can't Get to Office	46	5.3
Don't know/Refused	38	4.4
Dislike	24	2.8
Fear, Nervousness	15	1.8
Other Priorities	11	1.3

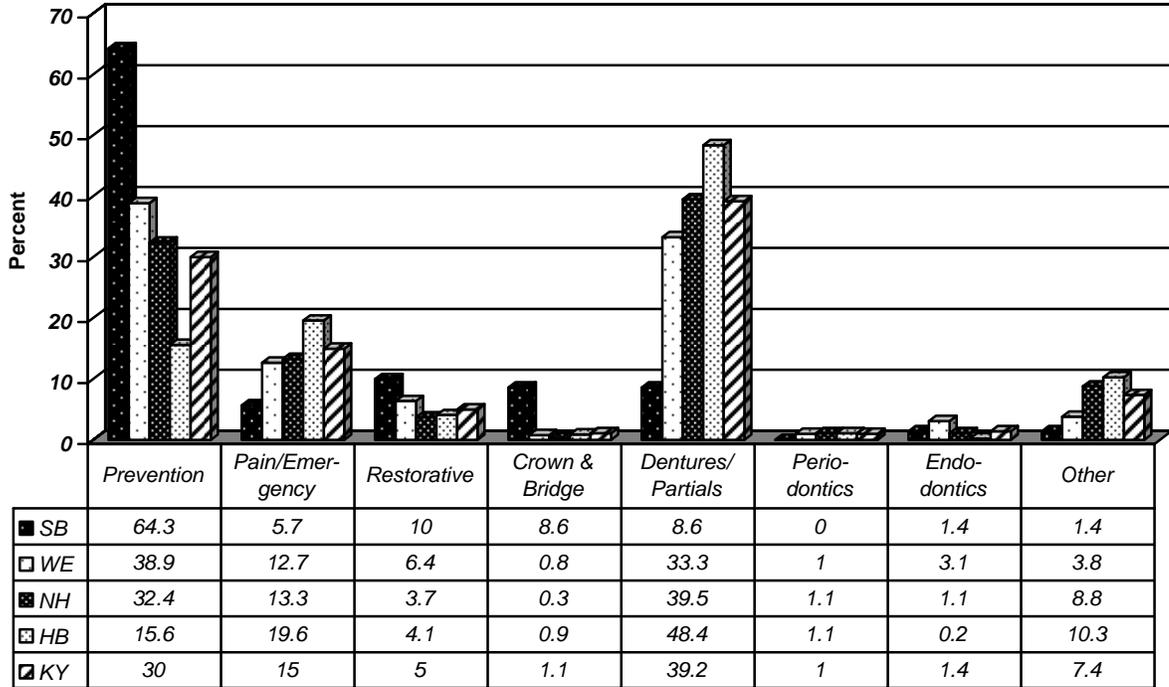
*These numbers represent those who responded to why they didn't go to the dentist in the past year.

The two most common reasons for not visiting the dentist within the past year reported by elder Kentuckians were “no reason to go” , 51.9% (ranging from 41.8% HB to 71.4% SB) and “cost”, 22. 6% (ranging from a low of 5.6% for NH elders to a high of 35.6% for homebound elders). Significantly, the NH elders and HB elders had a number of people who could not get to the dental office 10.9% of NH elders and 4.1% of HB elders. The other two groups did not mention “cannot get to office” as a reason they did not go.

KEOHS Elders' Reasons for Most Recent Visit to the Dentist (AQ45.1)

This page describes the reasons elders gave for their most recent dental visit.

Elders' Reasons for Most Recent Dental Visit



Reasons for most recent dental visit	Total Sample who answered question	Percent of Total Sample who answered question
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Sanders-Brown Group N = 70	70	100
Prevention/cleaning	45	64.3
Pain/Emergency/Extraction	4	5.7
Restorative/Fillings	7	10.0
Crowns/Bridges	6	8.6
Dentures/Partials	6	8.6
Gum Therapy/Periodontal	0	0.0
Root Canals/Endodontics	1	1.4
Other	1	1.4

Well Elders N = 430	393	100
Prevention/cleaning	153	38.9
Pain/Emergency/Extraction	50	12.7
Restorative/Fillings	25	6.4
Crowns/Bridges	3	0.8
Dentures/Partials	131	33.3
Gum Therapy/Periodontal	4	1.0
Root Canals/Endodontics	12	3.1
Other	15	3.8

Reasons for most recent dental visit	Total Sample who answered question	Percent of Total Sample who answered question
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Nursing Home Elders N = 413	377	100
Prevention/cleaning	122	32.4
Pain/Emergency/Extraction	50	13.3
Restorative/Fillings	14	3.7
Crowns/Bridges	1	0.3
Dentures/Partials	149	39.5
Gum Therapy/Periodontal	4	1.1
Root Canals/Endodontics	4	1.1
Other	33	8.8

Homebound Elders N = 473	469	100
Prevention/cleaning	73	15.6
Pain/Emergency/Extraction	92	19.6
Restorative/Fillings	19	4.1
Crowns/Bridges	4	0.9
Dentures/Partials	227	48.4
Gum Therapy/Periodontal	5	1.1
Root Canals/Endodontics	1	0.2
Other	48	10.3

KY Statewide Elders N = 1368	1309	100
Prevention/cleaning	393	30.0
Pain/Emergency/Extraction	196	15.0
Restorative/Fillings	65	5.0
Crowns/Bridges	14	1.1
Dentures/Partials	513	39.2
Gum Therapy/Periodontal	13	1.0
Root Canals/Endodontics	18	1.4
Other	97	7.4

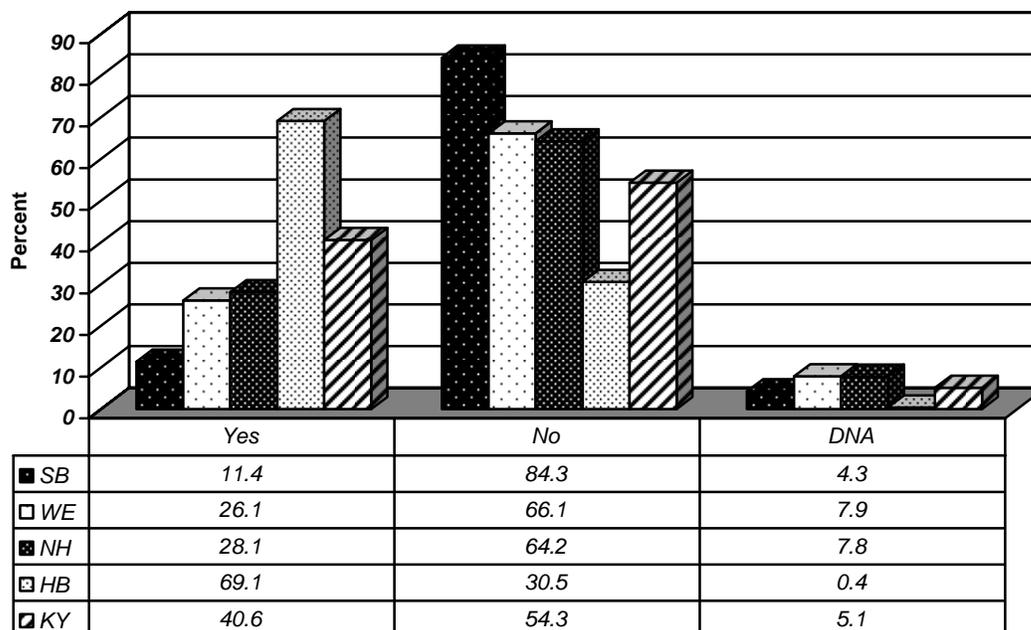
The elders' top three reasons why they did go to see the dentist are listed here:

- Prosthodontics (dentures or partials), 39.2%
- Prevention/cleaning, 30.0%
- Emergency Dentistry (pain/extraction), 15.0%

KEOHS Elders' Self-Reported Major Barriers to Getting Dental Care or Services (AQ46)

This page describes elders' self-reported barriers to getting dental care and services.

Elders Who Reported Major Barriers to Getting Dental Care or Services



Barriers to Dental Care or Services	Total Sample	Percent of Total Sample
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Sanders-Brown Group N = 70	70	100
Yes	8	11.4
No	59	84.3
Did not answer	3	4.3
Well Elders N = 430	430	100
Yes	112	26.1
No	284	66.1
Did not answer	34	7.9
Nursing Home Elders N = 413	413	100
Yes	116	28.1
No	265	64.2
Did not answer	32	7.8
Homebound Elders N = 473	473	100
Yes	327	69.1
No	144	30.5
Did not answer	2	0.4
KY Statewide Elders N = 1386	1386	100
Yes	563	40.6
No	752	54.3
Did not answer	71	5.1

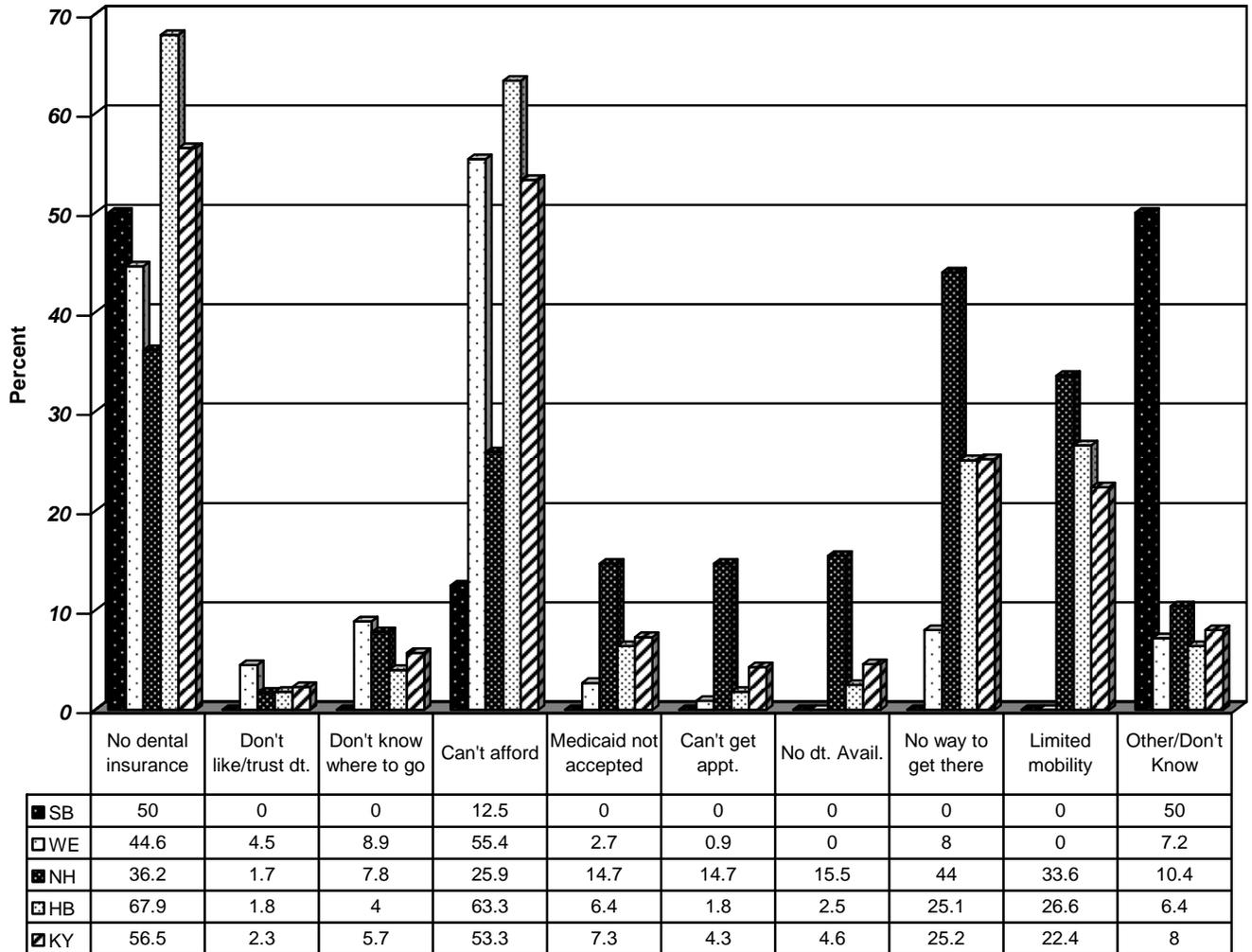
Statewide, 40.6% of elders reported major barriers to getting dental care and services.

Regarding the elder groups, 66.1% of the well elders and 84.3% of the SB group reported that they have no barriers that prohibit them from seeking access to dental care and services. Conversely, 69.1% of the homebound elders and 28.1% of the NH elders reported having major barriers in getting dental care.

KEOHS Elders' Barriers to Dental Care and Services (AQ46s1-10)

This page describes the elders' reported barriers to getting dental care or services.

Elders' Reasons Listed as Barriers to Dental Care and Services



No Dental Insurance	Don't like/trust/believe in dt.	Don't Know Where To Go	Can't Afford	Medicaid Not Accepted	Can't Get Appt.	No Dentist Avail.	No Way To Get There	Limited Mobility	Other/ Don't Know/ Not Sure
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Sanders-Brown Group N=8*

4 (50.0)	0 (0.0)	0 (0.0)	1 (12.5)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	4 (50.0)
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Well Elders N=112*

50 (44.6)	5 (4.5)	10 (8.9)	62 (55.4)	3 (2.7)	1 (0.9)	0 (0.0)	9 (8.0)	0 (0.0)	8 (7.2)
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Nursing Home Elders N=116*

42 (36.2)	2 (1.7)	9 (7.8)	30 (25.9)	17 (14.7)	17 (14.7)	18 (15.5)	51 (44.0)	39 (33.6)	12 (10.4)
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Homebound Elders N=327*

222 (67.9)	6 (1.8)	13 (4.0)	207 (63.3)	21 (6.4)	6 (1.8)	8 (2.5)	82 (25.1)	87 (26.6)	21 (6.4)
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No Dental Insurance	Don't like/trust/believe in dt.	Don't Know Where To Go	Can't Afford	Medicaid Not Accepted	Can't Get Appt.	No Dentist Avail.	No Way To Get There	Limited Mobility	Other/ Don't Know/ Not Sure
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KY Statewide Elders N = 563*

318 (56.5)	13 (2.3)	32 (5.7)	300 (53.3)	41 (7.3)	24 (4.3)	26 (4.6)	142 (25.2)	126 (22.4)	45 (8.0)
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*Numbers are based on those who responded that they had major barriers (AQ46); however, the questionnaire allowed participants to mark down any barriers that applied, so they may have answered more than once.

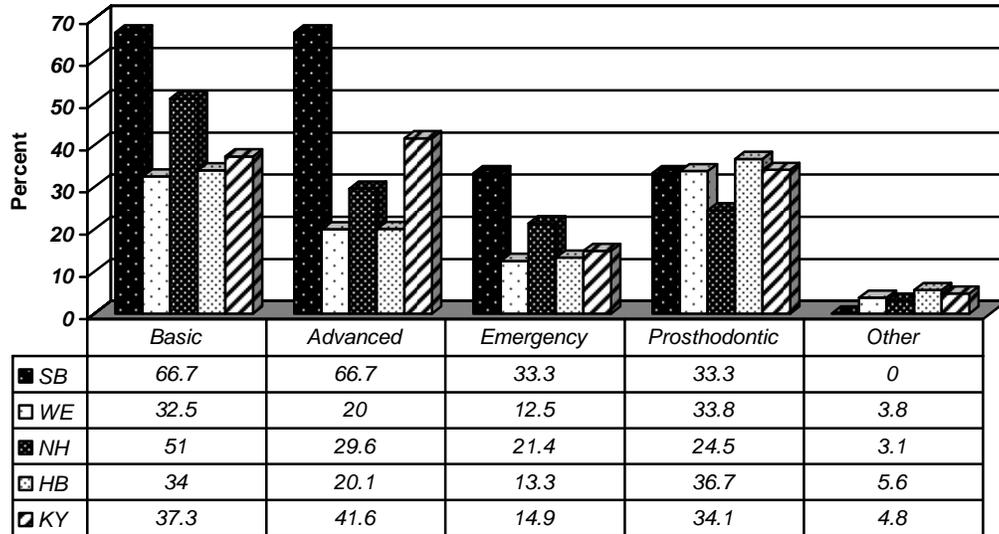
KY Statewide Elders self-reported major barriers to getting dental services included:

- Lack of dental insurance, 56.5%
- Inability to afford dental care, 53.3%
- No way to get there, 25.2%
- Limited mobility, 22.4%
- Medicaid not accepted by dentist, 7.3%
- Other reasons, 8.0%

KEOHS Elders Who Reported Difficulty in Obtaining Dental Services (AQ47s1-8)

This page describes the elders who reported having difficulty in obtaining dental services. **Basic dental services** are defined as dental check-ups, cleanings and fillings(restorations). **Advanced dental services** are crowns, bridges, implants, periodontal treatment and extractions. **Emergency dental services** are when the person is able to make an appointment and visit the dentist right away for any dental pain or acute oral problem. **Prosthodontic dental services** are having dentures or partials made by the dentist.

Elders Who Reported Difficulty in Obtaining Types of Dental Services



Basic Dental Services	Advanced Dental Services	Emergency Dental Services	Prosthodontic Dental Services	Other Services
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Sanders-Brown Group N=3*

2 (66.7)	2 (66.7)	1 (33.3)	1 (33.3)	0 (0.0)
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Well Elders N=80*

26 (32.5)	16 (20.0)	10 (12.5)	27 (33.8)	3 (3.8)
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Nursing Home Elders N=98*

50 (51.0)	29 (29.6)	21 (21.4)	24 (24.5)	3 (3.1)
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Homebound Elders N=338*

115 (34.0)	68 (20.1)	45 (13.3)	124 (36.7)	19 (5.6)
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KY Statewide Elders N = 517*

193 (37.3)	215 (41.6)	77 (14.9)	176 (34.1)	25 (4.8)
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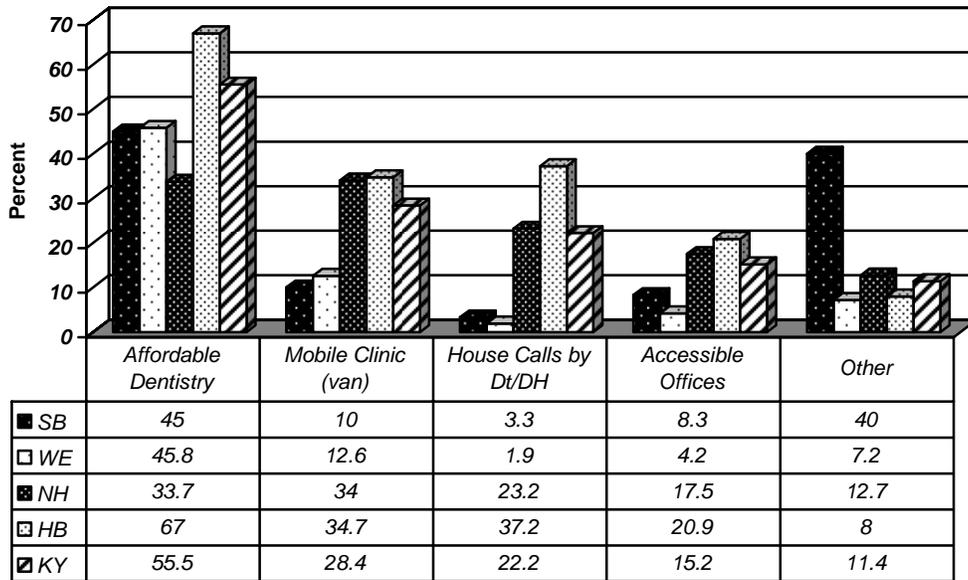
*Sample who answered question. Percentages do not equal 100% as elders were asked to select as many options as applied to them.

Over one-third (37.3%) of elders reported difficulty in obtaining basic services, 41.6% in obtaining advanced dental services, and 34.1% in obtaining prosthodontic dental services. About 15% reported difficulty in obtaining emergency dental services.

KEOHS Elders' Recommendations for Improving Access to Dental Care and Services (AQ48s1-5)

This page describes elders' recommendations for improving access to dental care and services to improve their oral health care. The people surveyed may have responded to more than one of the answers given.

Elders' Recommendations for Improving Access to Dental Care and Services



Make Dentistry Affordable	Mobile Clinic/Mobile Van	House Calls by Dentist or Dental Hygienist	Dental Offices More Handicapped Accessible	Other
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Sanders-Brown Group N=57*

27 (47.4)	6 (10.5)	2 (3.5)	5 (8.8)	24 (42.1)
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Well Elders N= 321*

197 (45.8)	54 (12.6)	8 (1.9)	18 (4.2)	31 (7.2)
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Nursing Home Elders N=315*

106 (33.7)	107 (34.0)	73 (23.2)	55 (17.5)	40 (12.7)
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Homebound Elders N=473*

317 (67.0)	164 (34.7)	176 (37.2)	99 (20.9)	38 (8.0)
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KY Statewide Elders N = 1166*

647 (55.5)	331 (28.4)	259 (22.2)	177 (15.2)	133 (11.4)
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*Number who answered this question.

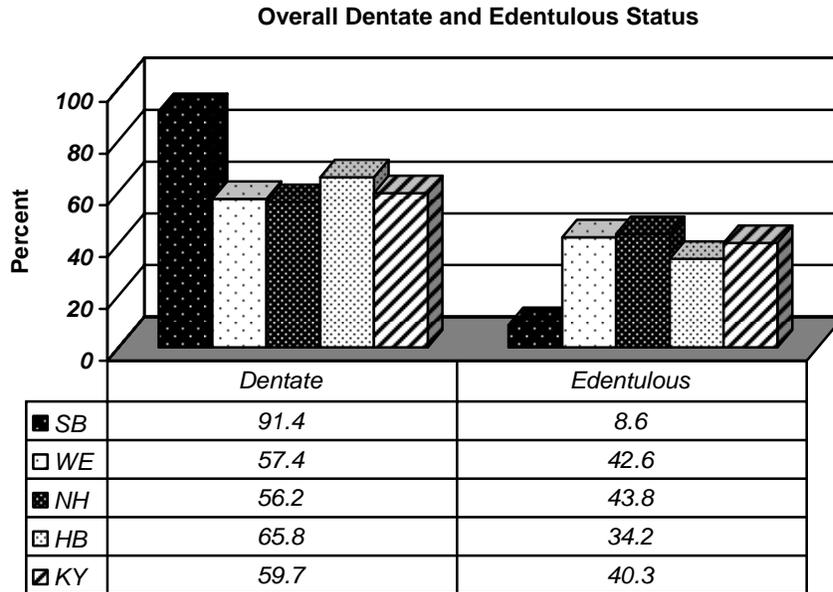
The elders gave recommendations for improving access to dental care and services. The top four recommendations were:

- Make dentistry affordable, 55.5%
- Use a mobile clinic/mobile van to access elders, 28.4%
- Have dentist/hygienists make house calls, 22.2%
- Make dental offices more handicapped accessible, 15.2%.

Kentucky Elders Clinical Questionnaire (CQ) and Screening Exam

KEOHS Elders' Overall Dentate and Edentulous Status

This section describes the breakdown of elders sampled by dentate and edentulous status (presence or absence of teeth).



Presence and Absence of teeth	Total Sample #	Total Dentate Sample (with teeth) # (%)	Total Edentulous Sample (no teeth) # (%)
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Sanders-Brown Group (SB)	70	64 (91.4)	6 (8.6)
Well Elders (WE)	430	247 (57.4)	183 (42.6)
Nursing Home Elders (NH)	413	232 (56.2)	181 (43.8)
Homebound Elders (HB)	38	25 (65.8)	13 (34.2)
KY Statewide Elders (KY)	951	568 (59.7)	383 (40.3)

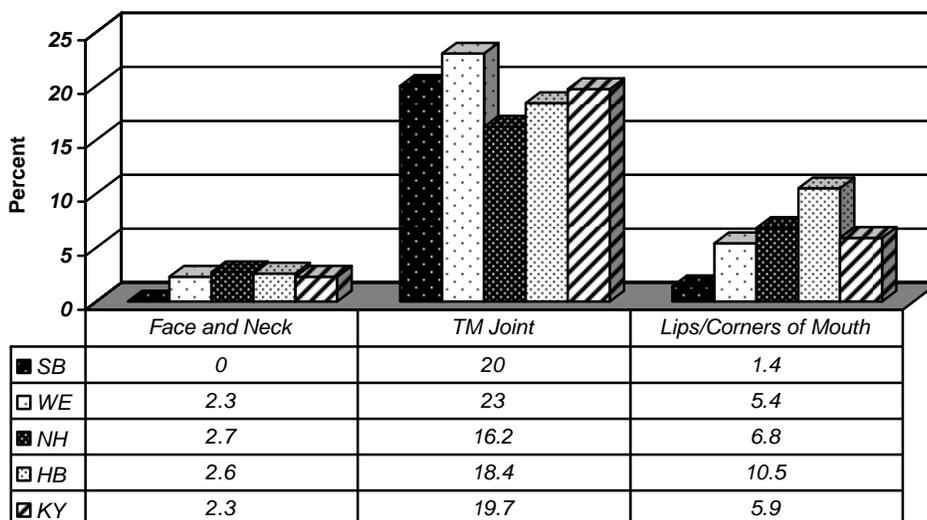
Statewide, 40.3% of all sampled elders were found to be edentulous (having no teeth), although this ranged from a low of 8.6% in the SB group to a high of 43.8% in the NH group.

Regarding elder groups, 42.6% of WE, 43.8% of the NH, and 34.2% of the HB are totally edentulous compared to only 8.6% of the SB group. This highlights the fact that the SB group represents those elders who have a higher socioeconomic (SE) status (higher education and income) and validates previous research which suggests tooth retention is strongly correlated with a higher SE status. Although the HB clinical sample only found 34.2% completely edentulous, the *self-reported survey* (Form A) found the HB elders reported the highest level of edentulism (56.7%).

KEOHS Elders' Extraoral Pathology (CQ1-CQ3)

Extraoral pathology includes the face and neck, the temporal mandibular joint (TMJ), and the lips to include the corners of the mouth. **Face and neck pathology** includes a swelling or lump, sore or mole more than 2 weeks old, or a change in size or color of a mole or sore. **TMJ Pathology** is present if one or more of the following symptoms: pain, popping or cracking, are reported or discovered during palpation. **Lips and corners of the mouth pathology** includes any color change more than 2 weeks old, swelling or lump, or an ulcer which may bleed on the lips or at the corners of the mouth.

Elders with Extraoral Pathology



Extraoral Pathology	Number and percent () of total sample for Extraoral Pathology		
	Face and Neck	TM Joint	Lips/ Corners of Mouth
Sanders-Brown Group N = 70	0 (0.0)	14 (20.0)	1 (1.4)
Well Elders N = 430	10 (2.3)	99 (23.0)	23 (5.4)
Nursing Home Elders N = 413	11 (2.7)	67 (16.2)	28 (6.8)
Homebound Elders N = 38	1 (2.6)	7 (18.4)	4 (10.5)
KY Statewide Elders N = 951	22 (2.3)	187 (19.7)	56 (5.9)

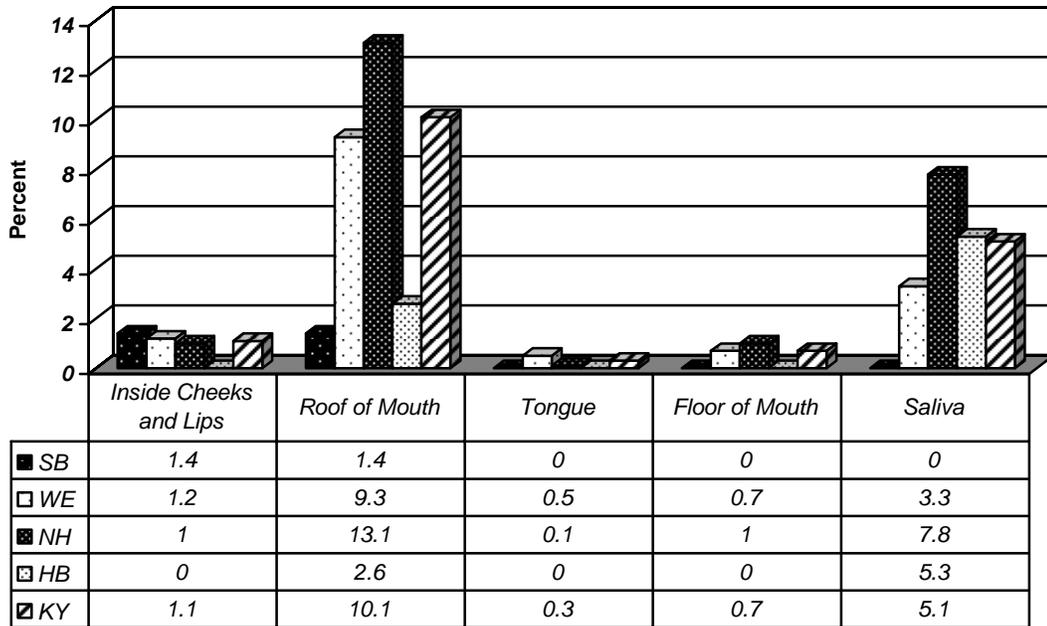
Statewide, extraoral pathology found in sampled elders was highest in the TM joint (19.7%) and lowest (2.3%) in the face and neck area.

Regarding the elder groups, lesions of the face and neck were found in only 10 (2.3%) of well-elders, 11 (2.7%) of NH elders, 1 (2.6%) of HB elders and not at all in the SB subgroup. Although the face and neck pathology noted was small, this finding represented potentially serious skin cancer. All these patients were advised to follow up with their physician or dermatologist for further exam and possible biopsy. A similar percent of TM joint pathology was noted in all four groups: 20% SB, 23% WE, 16.2% NH and 18.4% HB. The majority of elders who had TM joint pathology did not complain, but popping or cracking was discovered during palpation. There was more pathology in the lips and corners of the mouth in the HB group (10.5%), but only 8% (38/473) participated in the clinical screening exam. The NH and WE groups were noted to have more lips/corners of mouth pathology present (6.8% and 5.4% respectively) than the SB group (1.4%). The main type of pathology noted in the lips and corners of the mouth was angular cheilitis (a fungal infection at the corners of the mouth).

KEOHS Elders' Intraoral Pathology (CQ5-CQ9)

Intraoral pathology includes the inside of the cheeks and lips, the roof of the mouth, tongue, floor of mouth and saliva. **Inside of the cheeks and lips pathology** includes a white or red patch that is more than 2 weeks old, bleeding, swelling or lump, or an ulcer. **Roof of mouth pathology** is present if there is a sore or color change more than 2 weeks old, swelling or lump or an ulcer. **Tongue pathology** includes any ulcers or sores more than 2 weeks old, burning or pain, white/red patch which can't be removed, or smooth or shiny area on the top or side of the tongue. **Floor of mouth pathology** includes any color change more than 2 weeks old, any swelling or lump, or an ulcer. **Saliva pathology** is present if saliva is absent or there is no moisture, or the saliva is ropy or thick. Saliva pathology may be manifested by dry tongue or poor denture retention.

Elders with Intraoral Pathology

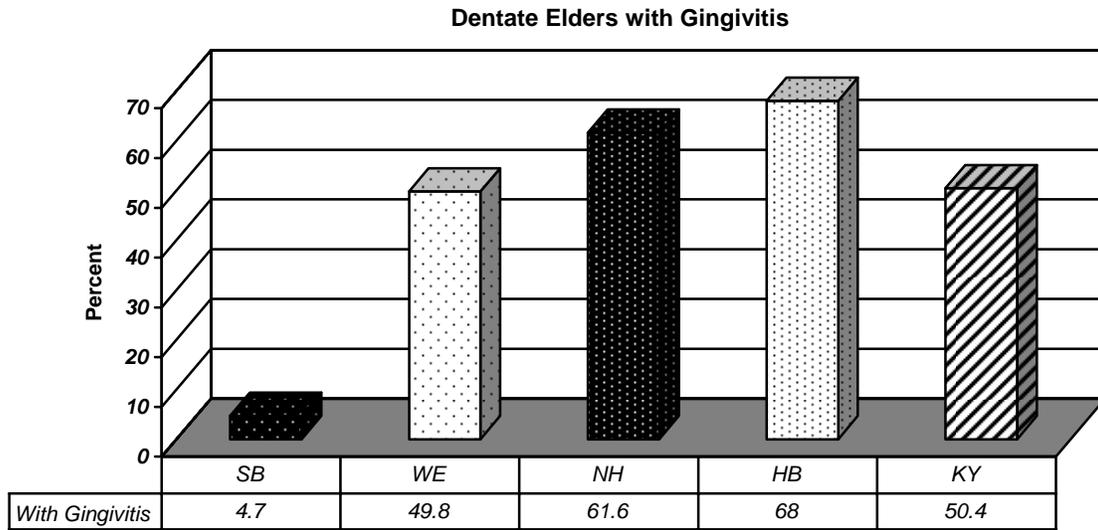


Intraoral Pathology	Number and percent () of total sample for Intraoral Pathology				
	Inside Cheeks and Lips	Roof of Mouth	Tongue	Floor of Mouth	Saliva
Sanders-Brown Group N = 70	1 (1.4)	1 (1.4)	0 (0.0)	0 (0.0)	0 (0.0)
Well Elders N = 430	5 (1.2)	40 (9.3)	2 (0.5)	3 (0.7)	14 (3.3)
Nursing Home Elders N = 413	4 (1.0)	54 (13.1)	1 (0.1)	4 (1.0)	32 (7.8)
Homebound Elders N = 38	0 (0.0)	1 (2.6)	0 (0.0)	0 (0.0)	2 (5.3)
KY Statewide Elders N = 951	10 (1.1)	96 (10.1)	3 (0.3)	7 (0.7)	48 (5.1)

Statewide, the highest percentage of intraoral pathology was found in the roof of the mouth (10.1%). This pathology was clinically diagnosed as denture stomatitis in the majority of these cases. Salivary pathology (dry or thick mucous) was seen in 5.1% of the elders sampled. A low number of nursing home and well elders had pathology inside cheeks and lips (4, 1% and 5, 1.2%, respectively, and the floor of mouth, 4 (1%) NH, and 3 (0.7%) WE. In contrast, the only pathology found in the SB group was in 1 person (1.4%) inside cheeks and lips, and one person (1.4%) with roof of mouth pathology, which was thought to be denture stomatitis.

KEOHS Dentate Elders' Clinical Screening Exam Findings of Gingivitis (CQ13)

This page describes the clinical exam findings of gingival inflammation.



	Clinical Screening of Gingivitis	Total Dentate Sample	Dentate Sample with Gingivitis	Percent of Total Dentate Sample
Sanders-Brown Group	N = 70	64	3	4.7
Well Elders	N = 430	247	123	49.8
Nursing Home Elders	N = 413	232	143	61.6
Homebound Elders	N = 38	25	17	68.0
KY Statewide Elders	N = 951	568	286	50.4

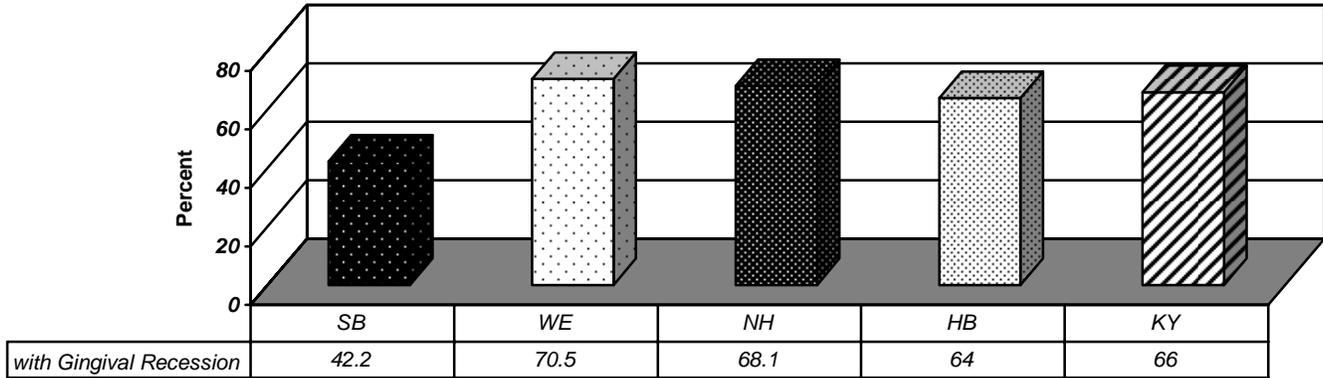
Statewide, 50.4% of dentate elders were found to have gingivitis.

Regarding elder groups, almost 50% of well elders were found to have gingival inflammation as compared to only 4.7% of the Sanders-Brown Group. The highest percent of gingivitis in the dentate elders was found in the homebound sample (68.0%) and NH elders (61.6%). Gingival inflammation is a good indicator of gingivitis and periodontal disease.

Dentate KEOHS Elders' Clinical Screening Exam Findings of Gingival Recession (CQ14)

This page describes the clinical exam findings of gingival recession.

Dentate Elders with Gingival Recession



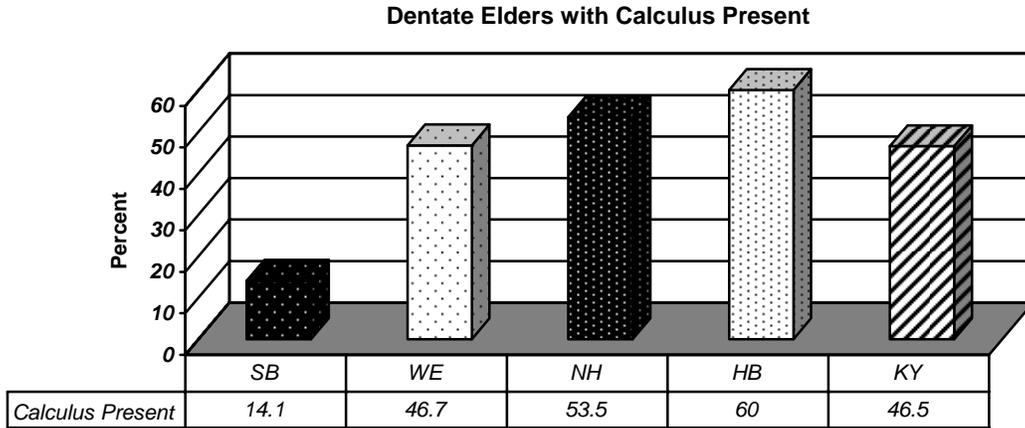
	Clinical Screening of Gingival Recession	Total Dentate Sample	Dentate Sample with Gingival Recession	Percent of Total Dentate Sample
Sanders-Brown Group	N = 70	64	27	42.2
Well Elders	N = 430	247	174	70.5
Nursing Home Elders	N = 413	232	158	68.1
Homebound Elders	N = 38	25	16	64.0
KY Statewide Elders	N = 951	568	375	66.0

Statewide, 66% of elders had gingival recession. This ranged from a low of 42.2% (SB) to 64% (HB) to 68.1% (NH) to 70.5% (WE).

Gingival recession exposes the root surfaces of teeth, making them at higher risk for root-surface caries (cavities).

Dentate KEOHS Elders' Clinical Screening Exam Findings of Calculus Present (CQ15)

This page describes the clinical exam findings of calculus present.

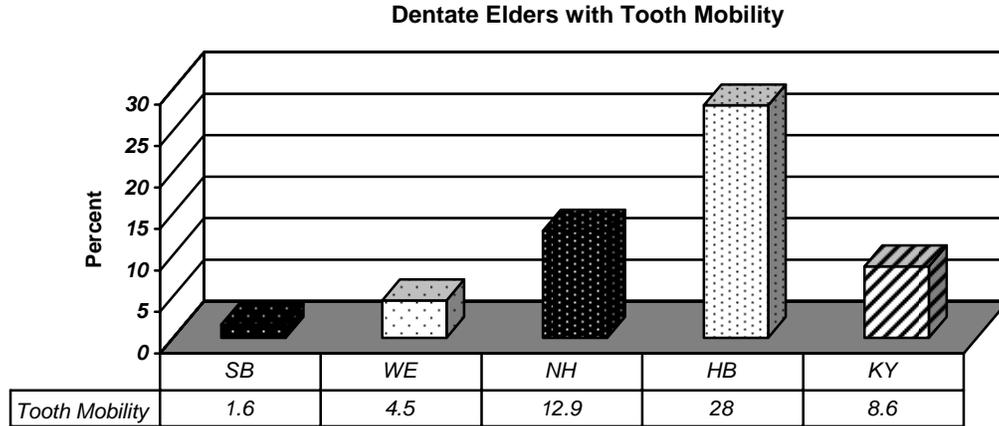


	Clinical Screening of Calculus Present	Total Dentate Sample	Dentate Sample with Calculus Present	Percent of Total Dentate Sample
Sanders-Brown Group	N = 70	64	9	14.1
Well Elders	N = 430	247	116	46.7
Nursing Home Elders	N = 413	232	124	53.5
Homebound Elders	N = 38	25	15	60.0
KY Statewide Elders	N = 951	568	264	46.5

Statewide, 46.5% of the sampled elders clinically had calculus present. The percentage ranged from a low of 14.1% for the SB group, to a high of 60% in the HB elders.

KEOHS Dentate Elders' Clinical Screening Exam Findings of Tooth Mobility (CQ16)

This page describes the clinical exam findings of tooth mobility.

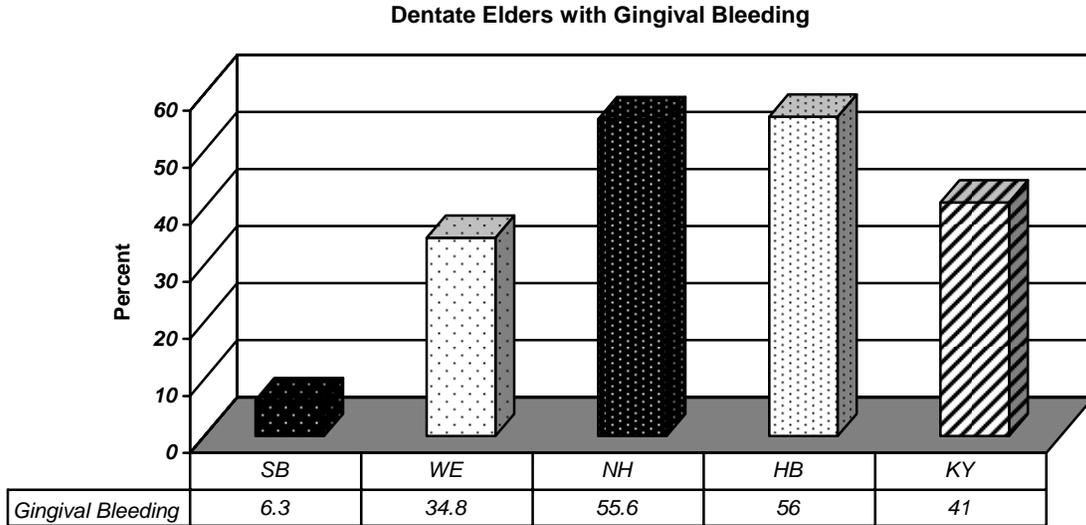


	Clinical Screening of Tooth Mobility	Total Dentate Sample	Dentate Sample with Tooth Mobility	Percent of Total Dentate Sample
Sanders-Brown Group	N = 70	64	1	1.6
Well Elders	N = 430	247	11	4.5
Nursing Home Elders	N = 413	232	30	12.9
Homebound Elders	N = 38	25	7	28.0
KY Statewide Elders	N = 951	568	49	8.6

Only 8.6% of the dentate elders were found to have tooth mobility. This ranged from a low of 1.6% in SB elders to a high of 28.0% in the HB elders. Tooth mobility may indicate moderate to advanced periodontal disease.

KEOHS Dental Elders' Clinical Screening Exam Findings of Gingival Bleeding (CQ17)

This page describes the clinical exam findings of gingival bleeding.. Gingival bleeding was measured by instructing the elder to floss between the lower middle teeth (#24 and #25), if present and noting if there was any bleeding. If the two lower middle teeth were not present, then the next two proximal tooth surfaces were used.



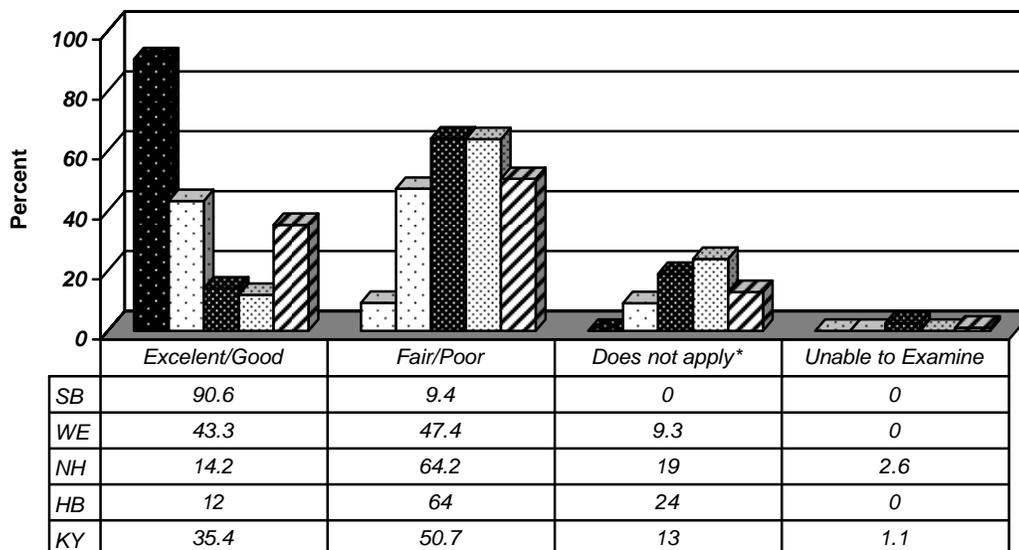
	Clinical Screening of Gingival Bleeding	Total Dentate Sample	Dentate Sample with Gingival Bleeding	Percent of Total Dentate Sample
Sanders-Brown Group	N = 70	64	4	6.3
Well Elders	N = 430	247	86	34.8
Nursing Home Elders	N = 413	232	129	55.6
Homebound Elders	N = 38	25	14	56.0
KY Statewide Elders	N = 951	568	233	41.0

Statewide, 41% of dentate elders were found to have gingival bleeding. The range of gingival bleeding was from 6.3% in the SB group to 56% in the HB group. Gingival bleeding is a good indicator of gingivitis and/or periodontal disease.

KEOHS Dental Elders' Clinical Screening Exam Findings of Overall Periodontal Health (CQ18)

This page describes the clinical exam findings of overall periodontal oral health. The overall periodontal health was determined by the number of positive responses to the five previous criteria (in questions CQ13-17): gingival inflammation, recession, presence of calculus, tooth mobility and gingival bleeding. If all five criteria were present, the periodontal health was marked **poor**; if two to four criteria were present, the periodontal health was marked **fair**; if all criteria were not present, the periodontal health was marked **excellent**; and if all criteria were not present (except for gingival recession and/or calculus), the periodontal health was marked **good**.

Dentate Elders' Overall Periodontal Health



	Clinical Screening of Periodontal Oral Health Status	Total Dentate Sample	Percent of Total Dentate Sample
Sanders-Brown Group N = 70	Excellent/Good	64	100
	Fair/Poor	58	90.6
	Does not apply*	6	9.4
	Unable to examine	0	0.0
Well Elders N = 430	Excellent/Good	247	100
	Fair/Poor	107	43.3
	Does not apply*	117	47.4
	Unable to examine	23	9.3
Nursing Home Elders N = 413	Excellent/Good	232	100
	Fair/Poor	33	14.2
	Does not apply*	149	64.2
	Unable to examine	44	19.0
Homebound Elders N = 473	Excellent/Good	25	100
	Fair/Poor	3	12.0
	Does not apply*	16	64.0
	Unable to examine	6	24.0
	Unable to examine	0	0.0

	Clinical Screening of Periodontal Oral Health Status	Total Dentate Sample	Percent of Total Dentate Sample
KY Statewide Elders	N = 951	568	100
	Excellent/Good	201	35.4
	Fair/Poor	288	50.7
	Does not apply*	73	13.0
	Unable to examine	6	1.1

*"Does not apply" means that there were not enough or not any indicator teeth present for the clinical screener to assess overall periodontal health.

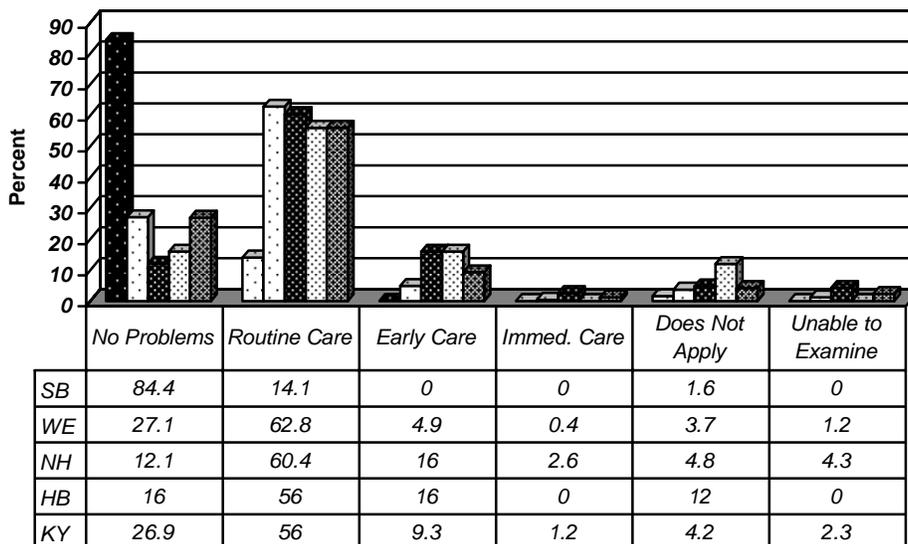
Statewide, the overall periodontal health among elders was clinically found to be good to excellent in 35.4% and fair to poor in 50.7% of those sampled.

Regarding elder groups, 43.3% of the well elders were clinically found to have "good to excellent" overall periodontal health, and 47.4% reported as "fair to poor" compared to 90.6% with overall periodontal health of "good to excellent" and only 9.4% described as "fair" in the Sanders-Brown Group. The majority of the HB and NH elders were found to have fair to poor periodontal health (64.0% and 64.2%, respectively). Periodontal disease is a primary cause of tooth loss in the adult and elder population.

KEOHS Dentate Elders' Urgency of Periodontal Problems (CQ19)

This page describes the dentate elders' urgency of periodontal treatment needed, broken down by four categories: **no problems detected** (recommend routine 6 month to 1 year recalls), **routine care** (needs to be seen by dentist within 6 months; represents no acute problems, but chronic problems needing routine care), **early care** is required (within 1 month; isolated or symptomatic chronic problem), and **immediate care** (needs to be seen as soon as possible; represents acute and symptomatic, emergency care needed).

Urgency of Periodontal Problems for Dentate Elders



		Number and Percent of Total Dentate Sample Reporting # ()						
		Total Dentate Sample	No Problems	Routine Care	Early Care	Immed. Care	Does Not Apply	Unable to Examine
SB Group	N = 70	64	54 (84.4)	9 (14.1)	0 (0.0)	0 (0.0)	1 (1.6)	0 (0.0)
Well Elders	N = 430	247	67 (27.1)	155 (62.8)	12 (4.9)	1 (0.4)	9 (3.7)	3 (1.2)
NH Elders	N = 413	232	28 (12.1)	140 (60.4)	37 (16.0)	6 (2.6)	11 (4.8)	10 (4.3)
HB Elders	N = 38	25	4 (16.0)	14 (56.0)	4 (16.0)	0 (0.0)	3 (12.0)	0 (0.0)
KY Statewide Elders	N = 951	568	153 (26.9)	318 (56.0)	53 (9.3)	7 (1.2)	24 (4.2)	13 (2.3)

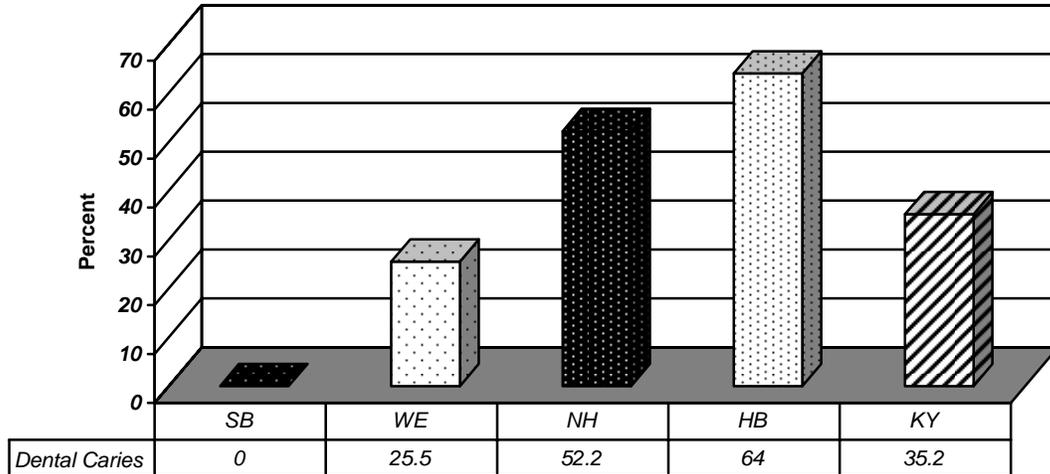
Statewide, the majority of elders (56%) were found to need routine care. Almost one-third (26.9%) had no problems. About 10% (9.3%) needed early care and 1.2% were found to need immediate care.

Regarding elder groups, 62.8% of well elders needed routine care within six months due to chronic periodontal problems, 4.9% needed early care and less than 1% (0.4%) needed urgent or immediate care. Only 27.1% of the well elders did not need any treatment for periodontal disease. Similarly, 60.4% of NH elders needed routine care within 6 months due to chronic periodontal problems, and over half (56.0%) of the HB sample needed routine periodontal care. Another 16% in both HB and NH groups needed early care and 6 NH persons (2.6%) needed immediate care. Only 12.1% of the NH elders did not need any treatment for periodontal disease, and only 4 of the 25 (16%) HB elders who were did not need treatment for periodontal disease.

KEOHS Elders' Clinical Screening Exam Findings of Dental Caries (CQ20)

This page describes the clinical findings of dentate elders who had decay on at least one tooth surface.

Dentate Elders with Dental Caries



	Clinical Screening of Dental Caries	Total Dentate Sample	Dentate Sample with Dental Caries	Percent of Total Dentate Sample
Sanders-Brown Group	N = 70	64	0	0.0
Well Elders	N = 430	247	63	25.5
Nursing Home Elders	N = 413	232	121	52.2
Homebound Elders	N = 38	25	16	64.0
KY Statewide Elders	N = 951	568	200	35.2

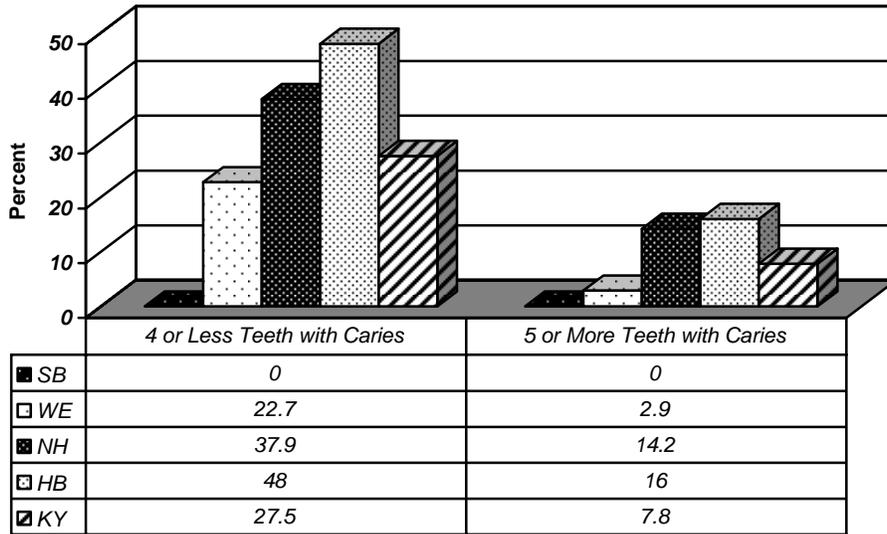
Statewide, 35.2% of dentate elders were found to have dental caries.

Regarding elder groups, 25.5% of well elders clinically had at least one tooth surface with decay as compared to no clinical evidence of tooth decay noted in the Sanders-Brown group. The percentage of active decay is highest in the Homebound (64%) and NH elders (52.2%).

KEOHS Dentate Elders' Clinical Screening Exam Findings of Number of Teeth with Dental Caries (CQ21)

This page describes the clinical findings of dentate elders who had decay on at least one tooth surface (including root tips).

Dentate Elders' Teeth with Dental Caries



	Clinical Screening of Dental Caries	Total Dentate Sample	4 or less teeth w/caries = Few # (%)	5 or more teeth w/caries = Many # (%)
Sanders-Brown Group	N = 70	64	0 (0.0)	0 (0.0)
Well Elders	N = 430	247	56 (22.7)	7 (2.9)
Nursing Home Elders	N = 413	232	88 (37.9)	33 (14.2)
Homebound Elders	N = 38	25	12 (48.0)	4 (16.0)
KY Statewide Elder	N = 951	568	156 (27.5)	44 (7.8)

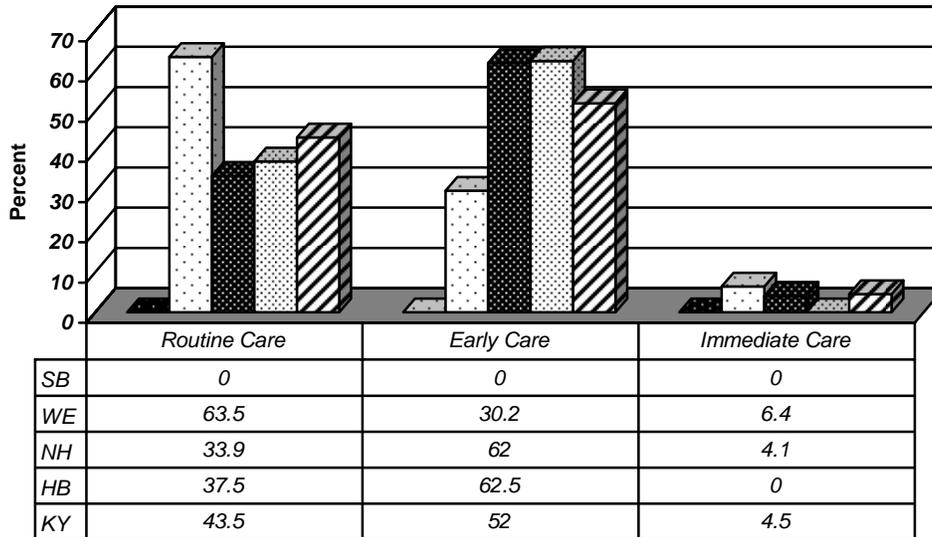
Statewide, 27.5% of dentate elders had 4 or less teeth with caries (few) and 7.8% had 5 or more teeth with caries (many).

Regarding elder groups, the homebound elders had the highest percentage of dental caries (64%). Dentate elders in the Sanders-Brown group were found to have no caries.

KEOHS Dentate Elders' Urgency of Caries (CQ22)

This page describes the urgency of dental caries. There are three categories: **Routine care** means that cavities are present but it is unlikely that the caries will become symptomatic, so dental treatment is recommended within 6 months. **Early care** means that cavities are present and may be currently asymptomatic but it is likely that the dental caries will become symptomatic, so dental treatment is recommended within 1 month. **Immediate care** means that the dental caries detected are symptomatic and/or pulp exposure is present or imminent. Care is required as soon as possible

Urgency of Caries for Dentate Elders



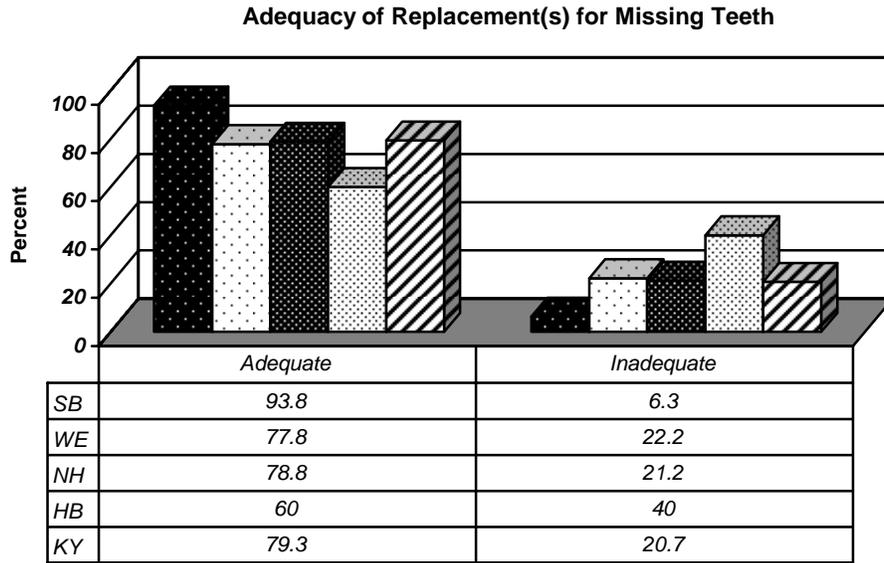
Total Sample	Total Dentate Sample	Dentate Sample w/Caries	# (%) of Dentate Sample w/Caries		
			Routine Care	Early Care	Immediate Care
Sanders-Brown Group N = 70	64	0	0 (0.0)	0 (0.0)	0 (0.0)
Well Elders N = 430	247	63	40 (63.5)	19 (30.2)	4 (6.4)
Nursing Home Elders N = 413	232	121	41 (33.9)	75 (62.0)	5 (4.1)
Homebound Elders N = 38	25	16	6 (37.5)	10 (62.5)	0 (0.0)
KY Statewide Elders N = 951	568	200	87 (43.5)	104 (52.0)	9 (4.5)

Statewide, 52% (104/200) of the dentate elders with caries needed early care. Forty-four percent (43.5) needed routine care and 4.5% needed immediate care.

Regarding the elder groups, there were no caries noted in the elders in the Sanders Brown Group. In contrast, 63.5% of well elders needed routine care within six months due to caries present. Thirty percent (30.2%) of well elders needed early care within one month, and only four well elders (6.4%) needed restorative care as soon as possible. The HB and NH elders had the greatest percentage of elders needing early care (62.5% and 62% respectively). The NH group had 5 elders (4.1%) needing immediate care.

KEOHS Dentate Elders' Adequacy of Replacement(s) for Missing Teeth (CQ26)

This page describes the adequacy of replacements for dentate elders' missing teeth. Adequacy is in the patient's opinion, not the examiner's. If the person responded positively to these three criteria (replacements for missing teeth are comfortable, they function/work well, and look good), their prosthesis(es) was/were adequate. Replacement(s) could mean either removable or fixed partial bridge(s).



	# Reporting	Adequate* (comfort, function, esthetics)	Inadequate (comfort, function, esthetics)
Sanders-Brown Group N = 70	32	30 (93.8)	2 (6.3)
Well Elders N = 430	135	105 (77.8)	30 (22.2)
Nursing Home Elders N = 413	118	93 (78.8)	25 (21.2)
Homebound Elders N = 38	10	6 (60.0)	4 (40.0)
KY Statewide Elders N = 951	295	234 (79.3)	61 (20.7)

Statewide, 20.7% of elders sampled reported that their prostheses were inadequate.

Regarding the elder groups, the SB group had a majority of responses confirming they felt their prostheses were adequate (30/32, 93.8%). The majority of well elders also felt their prostheses were adequate (105/135, 77.8%). Similar findings were evident for HB and NH elders (6/10, 60% adequate, and 93/118, 78.8% adequate, respectively). However, almost one-fourth (22.2%) of the WE, 21.2% of the NH elders and 40% of the HB elders felt their prostheses were inadequate based on at least one of the three criteria.

KEOHS Dentate Elders' Clinical Screening Exam Findings of Overall Oral Health Status (CQ27)

This page describes the dentate elders clinical screening report of their overall oral health status. Overall oral health status considers oral pathology, overall cleanliness of dentition, and presence or absence of oral symptoms. Examiners were calibrated to ensure that the overall oral health status rating was consistent with the most severe rating of periodontal disease or caries. For example, a person with five or more teeth with caries should not be able to rank as excellent. Specifically, for each criteria, the following guide was given:

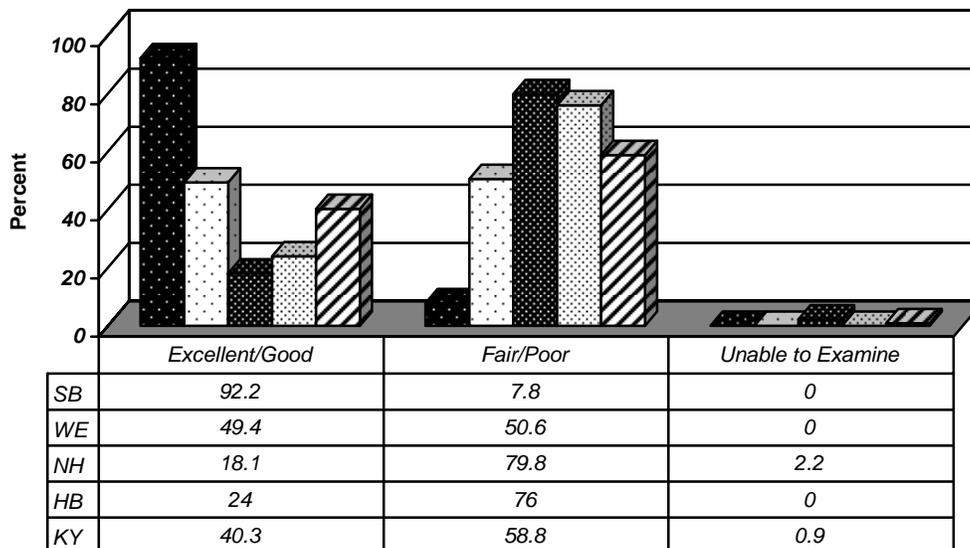
Excellent=Excellent periodontal health; no caries

Good =Good periodontal health; four teeth or fewer with caries

Fair =Fair periodontal health; and five teeth or more with caries

Poor =Poor periodontal health; and teeth with caries which are symptomatic or close to the pulp

Overall Oral Health Status for Dentate Elders



	Clinical Screening of Overall Oral Health Status	Total Dentate Sample	Percent of Total Dentate Sample
Sanders-Brown Group N = 70		64	100
	Excellent/Good	59	92.2
	Fair/Poor	5	7.8
	Unable to examine	0	0.0
Well Elders N = 430		247	100
	Excellent/Good	122	49.4
	Fair/Poor	125	50.6
	Unable to examine	0	0.0
Nursing Home Elders N = 413		232	100
	Excellent/Good	42	18.1
	Fair/Poor	185	79.8
	Unable to examine	5	2.2
Homebound Elders N = 38		25	100
	Excellent/Good	6	24.0
	Fair/Poor	19	76.0
	Unable to examine	0	0.0

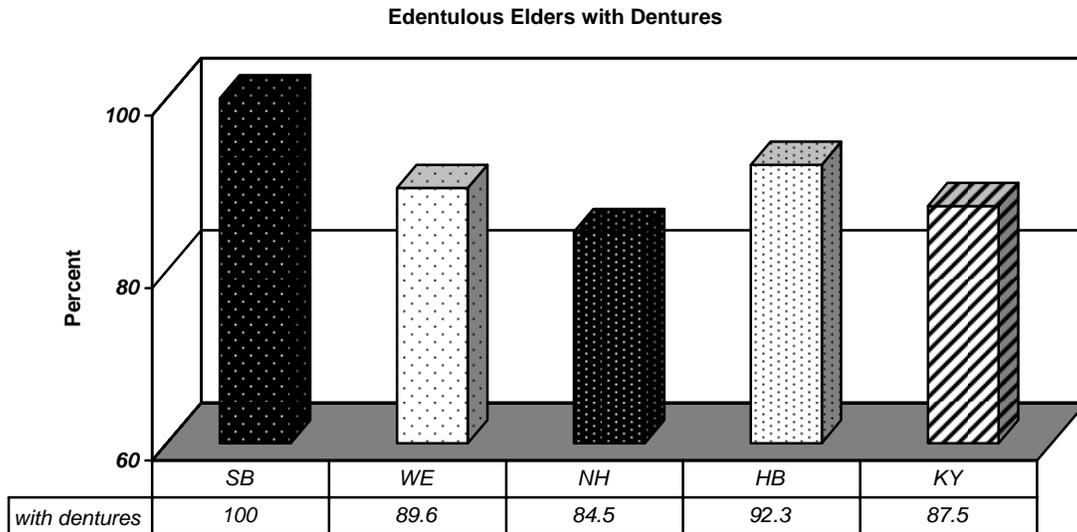
	Clinical Screening of Overall Oral Health Status	Total Dentate Sample	Percent of Total Dentate Sample
KY Statewide Elders N = 951		568	100
	Excellent/Good	229	40.3
	Fair/Poor	334	58.8
	Unable to examine	5	0.9

Statewide, 40.3% of dentate elders were found to have excellent to good overall oral health and 58.8% had fair to poor oral health.

Regarding elder groups, 49.4% of the well elders' overall oral health status was clinically found to be excellent to good and 50.6% as fair to poor. Significantly, 92.2% of the Sanders-Brown group's overall oral health was described as excellent to good and only 7.8% as fair to poor. Conversely, the NH elders' overall oral health status was clinically found to be fair to poor (79.8%) and good to excellent only 18.1%. Similarly, the HB elders were found to have an overall oral health status of fair to poor (76%) and excellent to good, in only 24% of the sample.

KEOHS Edentulous Elders' Clinical Screening Exam Findings of Dentures (CQ28)

This page describes the edentulous (those having no remaining natural teeth) elders' clinical findings of having dentures.



Clinical Screening Report of Having Dentures	Total Edentulous Sample	Edentulous Sample with Dentures	Percent of Edentulous Sample with Dentures
Sanders-Brown Group N = 70	6	6	100.0
Well Elders N = 430	183	164	89.6
Nursing Home Elders N = 413	181	153	84.5
Homebound Elders N = 38	13	12	92.3
KY Statewide Elders N = 951	383	335	87.5

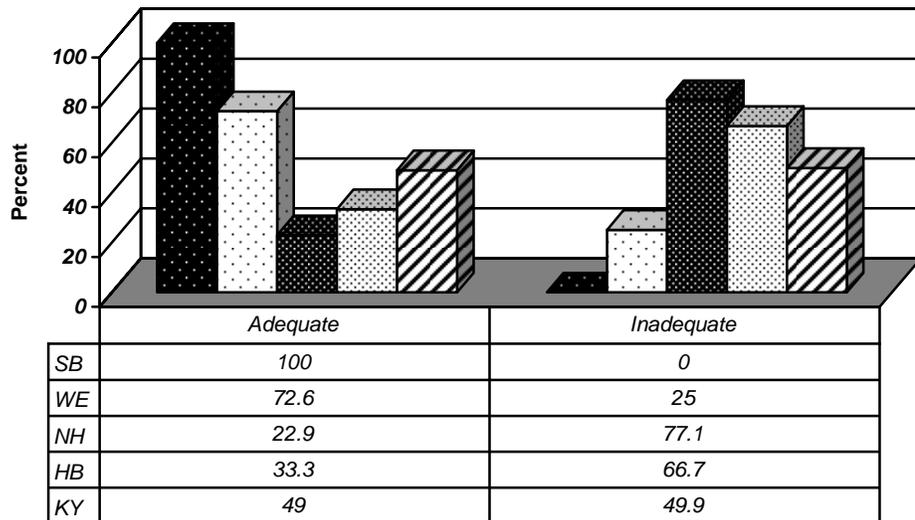
Statewide, 87.5% of the edentulous elders (those with no remaining natural teeth) had dentures.

Regarding elder groups, all of the Sanders-Brown group of well elders who were edentulous had dentures and almost 90% of the edentulous well elders had dentures. Similarly, 92.3% of the HB group had dentures, as did 84.5% of the NH sample.

KEOHS Edentulous Elders' Clinical Screening Exam Findings of the Adequacy of Dentures (CQ31)

This page describes the clinical findings of the adequacy of replacements of complete (upper/lower) dentures. Similar to the partially edentulous person with replacements, adequacy was in the perception of the person being examined. As before, adequacy had to meet three criteria: the dentures are comfortable, they function/work well and look good. If one or more of these criteria were not met, the person reported his/her denture to be inadequate.

Adequacy of Dentures for Edentulous Elders



Adequacy of Dentures		Total Edentulous Sample	Edentulous Sample w/ dentures	Percent of Edentulous Sample w Dentures	Sample reporting* adequate	Sample reporting* not adequate
Sanders-Brown Group	N = 70	6	6	100.0	6 (100.0)	0 (0.0)
Well Elders	N = 430	183	164	89.6	119 (72.6)	41 (25.0)
NH Elders	N = 413	181	153	84.5	35 (22.9)	118 (77.1)
HB Elders	N = 38	13	12	92.3	4 (33.3)	8 (66.7)
KY Statewide Elders	N = 951	383	335	87.5	164 (49.0)	167 (49.9)

*Totals do not add to 100% (of edentulous sample with dentures), due to some people responding in the categories: **does not apply** (because person did not have dentures) or **unable to examine**.

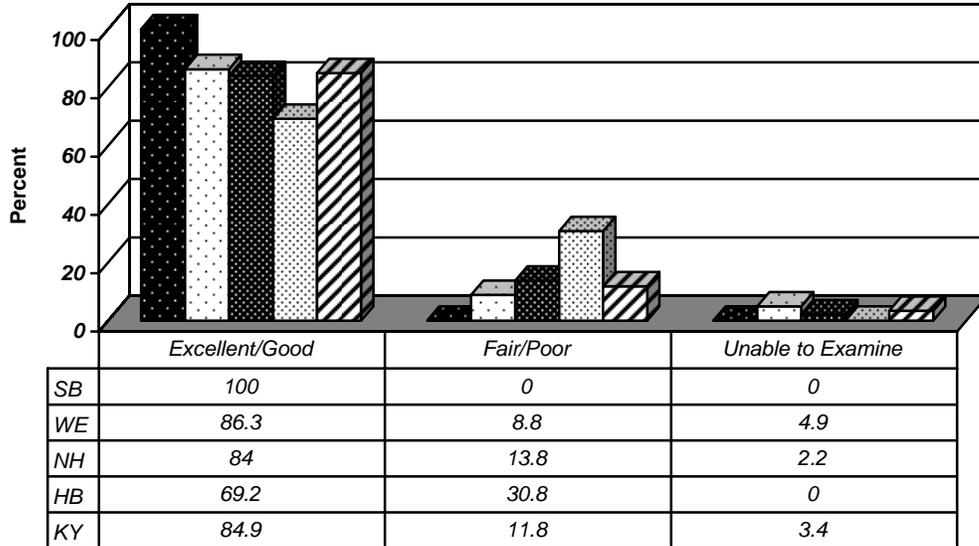
Statewide, about half (49.9%) of the edentulous sample with dentures reported their dentures were **inadequate** based on problems perceived in comfort, function, or esthetics.

Regarding elder groups, The SB group all reported their dentures to be adequate. The great majority of well elders found their dentures to be adequate (119, 72.6%), although 25% did report their dentures to be inadequate on at least one of the three criteria. Conversely, the great majority of NH elders found their dentures to be inadequate (118/153, 77.1%), and only 22.9% were adequate. The HB sample found 8/12 (66.7%) reporting their dentures were inadequate.

KEOHS Edentulous Elders' Clinical Screening Exam Findings of Overall Oral Health Status (CQ32)

This page describes the clinical findings of overall oral health status. The overall oral health status considers the presence or absence of oral/perioral lesions or debris, the condition of the alveolar ridges, mucosa, oral tissues and TMJ. The examiner **did not** consider the presence or absence of dentures and the conditions of dentures if present.

Overall Oral Health Status for Edentulous Elders



Clinical Screening of Overall Oral Health Status-Edentulous	Total Edentulous Sample	Percent of Total Edentulous Sample
Sanders-Brown Group N = 70	6	100
Excellent/Good	6	100.0
Fair/Poor	0	0.0
Unable to examine	0	0.0
Well Elders N = 430	183	100
Excellent/Good	158	86.3
Fair/Poor	16	8.8
Unable to examine	9	4.9
Nursing Home Elders N = 413	181	100
Excellent/Good	152	84.0
Fair/Poor	25	13.8
Unable to examine	4	2.2
Homebound Elders N = 38	13	100
Excellent/Good	9	69.2
Fair/Poor	4	30.8
Unable to examine	0	0.0
KY Statewide Elders N = 951	383	100
Excellent/Good	325	84.9
Fair/Poor	45	11.8
Unable to examine	13	3.4

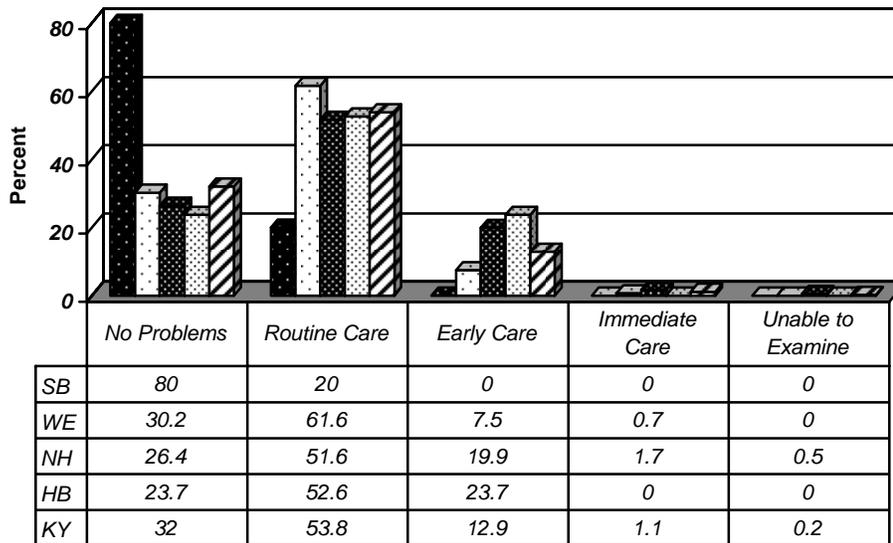
Statewide, the majority (84.9%) of the edentulous elders were found to have an oral health status of excellent or good. The 11.8% of edentulous elders found to be clinically fair or poor had denture sores, denture stomatitis, and oral conditions resulting from chronic use of dentures or poor oral hygiene.

Regarding elder groups, 100% of the SB group were found to have excellent to good oral health. The remaining groups had a range of fair/poor oral health from 8.8% of the well elders to 30.8% of the homebound elders. Many of these factors regarding fair to poor oral health were felt to be reversible if a dentist could adjust or relin dentures or could evaluate that elder.

Overall Treatment Urgency For All KEOHS Elder Participants CQ33)

Overall treatment urgency is broken down into four categories. **No problems** means that there were no problems detected with the screening and recommends yearly recalls if edentulous, or 6 months to 1 year if dentate. **Routine dental care** means that dental care is required within 6 months of this screening because chronic or other noted problems need further evaluation and treatment. **Early care** means that dental care is required within 1 month of this screening because there may be chronic problems that, if not taken care of, may result in emergency care if not seen soon. **Immediate care** means that dental care is required as soon as possible because there is an acute, emergent or symptomatic problem needing immediate attention.

Overall Treatment Urgency for All Elder Participants



Treatment Urgency	No Problems	Routine Dental Care	Early Care	Immediate Care	Unable to Examine
Sanders-Brown Group N = 70	56 (80.0)	14 (20.0)	0 (0.0)	0 (0.0)	0 (0.0)
Well Elders N = 430	130 (30.2)	265 (61.6)	32 (7.5)	3 (0.7)	0 (0.0)
Nursing Home Elders N = 413	109 (26.4)	213 (51.6)	82 (19.9)	7 (1.7)	2 (0.5)
Homebound Elders N= 38	9 (23.7)	20 (52.6)	9 (23.7)	0 (0.0)	0 (0.0)
KY Statewide Elders N = 951	304 (32.0)	512 (53.8)	123 (12.9)	10 (1.1)	2 (0.2)

Statewide, clinical treatment urgency for all elders (dentate, partially dentate, and edentulous) is shown broken down into four categories:

- No problems seen, recommend seeing dentist yearly (32%)
- Routine dental care, recommend seeing dentist within 6 months (53.8%)
- Early care, recommend seeing dentist within 1 month (12.9%)
- Immediate care, recommend seeing dentist ASAP (1.1%).

The significant findings for those elders who needed early care were related to dental problems (caries, periodontal disease, broken dentures, etc.) whereas the elders noted to have immediate care needs were potentially life threatening (possible oral cancer or serious oral infection).

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If you would like more information or have questions, please contact Dr. Bob Henry at robert.henry@med.va.gov.

APPENDIX 1

KENTUCKY ELDER ORAL HEALTH SURVEY
FORM A: (to be given to all groups except homebound/AOA clients)

INTERVIEWER: _____ PARTICIPANT NAME: _____
PARTICIPANT ID#: _____

INSTRUCTIONS: Please fill in or circle answers as appropriate
It is not necessary to answer any questions in this survey that you do not wish to answer

DEMOGRAPHIC INFORMATION

1. What is your gender?
1 Male
2 Female
2. What is your date of birth?
_____/_____/_____
Month Date Year
3. In what town is your primary residence? _____
4. In what county is your home located? _____
5. What is your ZIP CODE? ____ ____ ____ ____ ____ ZIP
6. What is your Area of Residence? Urban ____ Rural ____
7. Which of the following best describes your current living situation?
1 Home (house, apartment, mobile home, etc.) 4 Other _____
2 Nursing home 8 Don't know/Not sure
3 Assisted living facility 9 Refused
8. What is your marital status?
1 Never married 4 Divorced 8 Don't know/Not sure
2 Separated 5 Married 9 Refused
3 Widowed
9. What is your household composition?
1 Live alone 4 With relatives 8 Don't know/Not sure
2 With spouse 5 With non-relatives 9 Refused
3 With children 6 Live in Nursing Home/Assisted Living Facility
10. What is your race?
1 Asian/Pacific Island 4 Hispanic
2 American Indian/Alaskan Origin 5 White/Non-minority
3 Black/African American 8 Don't know/Not sure
9 Refused

DEMOGRAPHIC INFORMATION (continued)

11. What is the highest level of education (school) that you have completed?

Circle years of education completed.

If you are currently in school, mark the highest level completed.

- | | | | |
|---|--|---------|------------------------------|
| 1 | 8 th grade or less | 5 | Associate degree |
| 2 | 9 th – 12 th grade | 6 | Bachelor's degree |
| 3 | High school graduate or GED | 7 | Graduate/Professional degree |
| 4 | Some college, no degree | 8 | Don't know/Not sure |
| | 9 | Refused | |

12. Do you have any dental insurance that covers all or part of the cost of your dental treatment?

- 1 No dental insurance
- 2 Private dental insurance
- 3 Medicaid (any Medicaid recipient is eligible for some dental benefits)
- 4 Government pay program (such as Veteran's Administration)
- 8 Don't know/Not sure
- 9 Refused

Explanation of Dental Insurance: *This is dental insurance only. This does not include general health insurance. This is insurance that covers you, not necessarily others in the family. "Private insurance" is traditional dental insurance such as Delta Dental or other private pay dental reimbursement plans.*

Medicaid *is also known as KMAP, MA, MAP, The Medical Card, The Card medical Assistance, Kentucky Medical Assistance Plan*

Medicaid is not the same as Medicare.

Medicare *is medical insurance for older (over 65) and disabled Americans.*

Medicare does not have any dental coverage. Medical does have some dental coverage.

13. Please give us an estimate of your family's income (for total annual household income).*

Circle only one response.

- | | | | |
|---|---------------------|----|---------------------|
| 1 | Less than \$3,000 | 10 | \$15,000 - \$19,999 |
| 2 | \$3,001 - \$4,000 | 11 | \$20,000 - \$24,999 |
| 3 | \$4,001 - \$5,000 | 12 | \$25,000 - \$34,999 |
| 4 | \$5,001 - \$6,000 | 13 | \$35,000 - \$49,999 |
| 5 | \$6,001 - \$7,000 | 14 | \$50,000 - \$74,999 |
| 6 | \$7,001 - \$8,000 | 15 | \$75,000 and above |
| 7 | \$8,001 - \$9,000 | | |
| 8 | \$9,001 - \$9,999 | 88 | Don't know/Not sure |
| 9 | \$10,000 - \$14,999 | 99 | Refused |

****Your best estimate of total family income. From all sources including all family members living at home.***

GENERAL HEALTH

14. Would you rate your overall general health as being:

- | | | | |
|---|-----------|---|------|
| 1 | Excellent | 3 | Fair |
| 2 | Good | 4 | Poor |

GENERAL HEALTH (continued)

15. Please indicate health problems experienced during the past 12 months. Circle all that apply.

- | | |
|--------------------------------|---------------------------------------|
| 1 Anemia (low blood/iron) | 16 Osteoporosis (bone loss) |
| 2 Arthritis/Rheumatism | 17 Paralysis |
| 3 Back Problems | 18 Parkinson's Disease (Palsy) |
| 4 Cancer/Leukemia | 19 Prostate Enlargement |
| 5 Circulation Problems | 20 Recent Surgery |
| 6 Cirrhosis | 21 Shingles |
| 7 Constipation | 22 Stroke |
| 8 Diabetes (sugar) | 23 Urinary Tract Disorder |
| 9 Foot or nail problems | 24 Vertigo (Dizziness) |
| 10 Gout | 25 TB |
| 11 Heart problems | 26 Hepatitis |
| 12 High Blood Pressure | 27 Methicillin Resistant Staph Aureus |
| 13 Injuries from fall/accident | 28 Other (specify)_____ |
| 14 Jaundice | 29 None |
| 15 Lung problems | 88 Don't know/Not sure |
| | 99 Refused |

16. Are you diabetic?

_____ No _____ Yes _____ Don't know/Not sure _____ Refused

If Yes, how do you control your diabetes?

- | | |
|--|-----------------------|
| 1 No control measures | 8 Don't know/Not sure |
| 2 Exercise and diet only (No medication) | 9 Refused |
| 3 Take pills | |
| 4 Use insulin (shots) | |

17. Are you taking any medication now?

_____ No _____ Yes _____ Don't know/Not sure _____ Refused

If Yes, how many medications are you taking?

_____ Number of prescriptions

_____ Number of over-the-counter medications

18. Do you regularly use mouthwash?

_____ No _____ Yes _____ Don't know/Not sure _____ Refused

If Yes:

What brand do you use? _____

How many times a day? _____

19. Have any of the following conditions/diseases limited your mobility? Circle all that apply.

"Limited in mobility" means difficulty in going to church, doctor appointments, community centers, etc.

- 1 Stroke
- 2 Fall
- 3 Fracture (hip, knee, ankle)
- 4 Mental health (Explain: _____)
- 5 Physical health (Explain: _____)
- 6 Other _____
- 7 No limitations in mobility (**SKIP TO QUESTION #21**)
- 8 Don't know/Not sure
- 9 Refused

GENERAL HEALTH (continued)

20. If you have a limitation in mobility, how long has it lasted?

- 1 Less than 1 month 5 More than 1 year
- 2 1-3 month 6 Other _____
- 3 4-6 months 7 Not applicable
- 4 7-12 months 8 Don't know/Not sure
- 9 Refused

21. Are you able to feed, bathe, and toilet yourself?

_____ Yes _____ No

If No, who is your primary caregiver? (the one who feeds, bathes and/or toilets you?). 1 Spouse

- 5 Caregiver in a nursing home or assisted living facility
- 2 Child 6 Other _____
- 3 Relative 8 Don't know/Not sure
- 4 Neighbor 9 Refused

These next 2 questions are asked to determine your risk for oral health problems and are not meant to be invasive in any way. Please answer as appropriate.

22. Regarding tobacco products:

22a. Do you smoke cigarettes every day, some days, or not at all?

- 1 Every day 8 Don't know/Not sure
- 2 Some days 9 Refused
- 3 Not at all (**SKIP TO QUESTION #22b**)

22a1. When you smoke, how many cigarettes a day do you smoke?

- 1 Less than 1 cigarette a day 8 Don't know/Not sure
- 2 1-3 cigarettes per day 9 Refused
- 3 4-19 cigarettes (less than 1 pack) per day
- 4 20 cigarettes (1 pack) per day
- 5 More than 20 cigarettes (>1 pack) per day

22b. Do you now use spit tobacco (dip, snuff or chew) every day, some days, or not at all?

- 1 Every day
- 2 Some days
- 3 Not at all (**SKIP TO QUESTION #23**)

22b1. When you use spit tobacco, how many times a day do you use it?

- 1 Less than 1 time a day 8 Don't know/Not sure
- 2 1-3 times per day 9 Refused
- 3 4-19 times per day
- 4 More than 20 times per day

23. Regarding alcohol.

23a. Do you drink alcohol every day, some days, or not at all? A drink of alcohol is 1 can or bottle of beer, 1 glass of wine, 1 can or bottle of a wine cooler, 1 cocktail, or 1 shot of liquor.

- 1 Every day 8 Don't know/Not sure
- 2 Some days 9 Refused
- 3 Not at all (**SKIP TO QUESTION #24**)

GENERAL HEALTH (continued)

23a1. When you drink alcohol, how much do you drink on the average per day?

- | | | | |
|---|---------------------------|---|----------------------------|
| 1 | Less than 1 drink per day | 5 | More than 6 drinks per day |
| 2 | 1 drink per day | 8 | Don't know/Not sure |
| 3 | 2-3 drinks per day | 9 | Refused |
| 4 | 4-6 drinks per day | | |

23a2. Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks on one occasion?

- | | | | |
|-------|-----------------|---|---------------------|
| _____ | Number of times | 8 | Don't know/Not sure |
| | | 9 | Refused |

ORAL HEALTH STATUS

24. Would you rate your overall oral health (that is, the condition of your teeth and gums) as being:

If you have no teeth, then the rating is for your gums and other oral tissues.

- | | | | |
|---|-----------|---|------|
| 1 | Excellent | 3 | Fair |
| 2 | Good | 4 | Poor |

25. Do you regularly brush your teeth?

_____No _____Yes _____Don't know/Not sure _____Refused

If Yes, how many times per day? Circle only one answer.

- | | |
|---|-------------------------|
| 1 | 1-2 times per day |
| 2 | 3-4 times per day |
| 3 | 5 or more times per day |

If No, why not? _____

26. Do you regularly floss or clean between your teeth?

_____No _____Yes _____Don't know/Not sure _____Refused

If Yes, how many times per day? Circle only one answer.

- | | |
|---|-------------------------|
| 1 | 1-2 times per day |
| 2 | 3-4 times per day |
| 3 | 5 or more times per day |

If No, why not? _____

27. Overall, are you satisfied with: (whether you have natural teeth or have dentures, please answer).

- | | | | | |
|-----------|---|--------|-------|------------------------|
| a. | your ability to <u>chew any foods</u> that you want? | Yes___ | No___ | Don't know/Not sure___ |
| b. | your ability to <u>speak clearly?</u> | Yes___ | No___ | Don't know/Not sure___ |
| c. | the <u>appearance of your teeth?</u> | Yes___ | No___ | Don't know/Not sure___ |

28. Do you have any current dental problems? Yes___ No___ Don't know/Not sure___

29. Do you have any pain in your teeth, gums or jaws?

Yes___ No___ (**SKIP TO QUESTION #32 IF NO**) Pain indicates pain in the teeth, gums, oral tissues, jaws, TMJ (jaw joint) or oral musculature.

ORAL HEALTH STATUS (continued)

30. How long has your pain been present?

- | | |
|---------------------|-------------------------|
| 1 1 week or less | 5 7-12 months |
| 2 Less than a month | 6 Greater than one year |
| 3 1 to 3 months | 8 Refused |
| 4 4-6 months | 9 Don't know/Not sure |

31. What type of dental pain do you have?

- | | |
|-----------------|--|
| 1 Pain in teeth | 3 Pain in jaws (including jaw joint/TMJ) |
| 2 Pain in gums | 4 Other (Explain: _____) |

32. Have you lost any natural teeth for any reason?

___ No ___ Yes

If yes, how many teeth have you lost?

- | |
|---|
| 1 Minimal tooth loss (5 or less teeth) |
| 2 Some or partial tooth loss (6 or more, but not all teeth) |
| 3 No remaining teeth (SKIP TO QUESTION #36) |

33. How many of your teeth have been removed because of tooth decay or gum disease?

Teeth extracted because of pain, swelling, loose teeth, etc. have been removed because of gum disease or caries. Do not include teeth lost for other reasons, such as injury, orthodontics, or wisdom teeth removal.

- | | |
|--------------------------|-----------------------|
| 1 None | 8 Don't know/Not sure |
| 2 1 to 5 | 9 Refused |
| 3 6 or more, but not all | |
| 4 All | |

33a. If you have teeth remaining:

33a1. Do you presently have any restorations in your teeth? (white or silver fillings, gold or porcelain crowns or bridges)

- | | |
|-------|-----------------------|
| 1 Yes | 8 Don't know/Not sure |
| 2 No | 9 Refused |

33a2. Do you believe that you presently have any active decay/dental cavities in any of your teeth?

- | | |
|-------|-----------------------|
| 1 Yes | 8 Don't know/Not sure |
| 2 No | 9 Refused |

33a3. Do your gums often bleed when you brush or floss?

- | | |
|-------|-----------------------|
| 1 Yes | 8 Don't know/Not sure |
| 2 No | 9 Refused |

33a4. Are your gums often red, tender or swollen?

- | | |
|-------|-----------------------|
| 1 Yes | 8 Don't know/Not sure |
| 2 No | 9 Refused |

33a5. Do your gums pull away from your teeth in places?

- | | |
|-------|-----------------------|
| 1 Yes | 8 Don't know/Not sure |
| 2 No | 9 Refused |

ORAL HEALTH STATUS (continued)

33a6. Are your permanent teeth loose or separating?

- | | | | |
|---|-----|---|---------------------|
| 1 | Yes | 8 | Don't know/Not sure |
| 2 | No | 9 | Refused |

33a7. Do you have any tartar/calculus or buildups on your teeth?

- | | | | |
|---|-----|---|---------------------|
| 1 | Yes | 8 | Don't know/Not sure |
| 2 | No | 9 | Refused |

33a8. Do you frequently have bad breath?

- | | | | |
|---|-----|---|---------------------|
| 1 | Yes | 8 | Don't know/Not sure |
| 2 | No | 9 | Refused |

33a9. Is the way your teeth bite together changing?

- | | | | |
|---|-----|---|---------------------|
| 1 | Yes | 8 | Don't know/Not sure |
| 2 | No | 9 | Refused |

34. If you have partial tooth loss, have you had all or some of your lost teeth replaced? *This means you wear a denture, partial denture, bridge or dental implant.*

- | | |
|---|---|
| 1 | Yes, I have replacements for all of my lost teeth. |
| 2 | Yes, I have replacements for some, but not all of my lost teeth. |
| 3 | No, I do not have replacements for any of my lost teeth. (SKIP TO QUESTION #43) |
| 8 | Don't know/Not sure |
| 9 | Refused |

35. If you answered that you have replacements for some or all of your lost teeth, are your partials or bridges adequate? *Adequate means they are comfortable, they function/work well, and they look good. Must meet all three criteria.*

- | | | | |
|---|-----|---|---------------------|
| 1 | Yes | 8 | Don't know/Not sure |
| 2 | No | 9 | Refused |

PERSONS WITH DENTURES

If you have ANY natural teeth AND DO NOT WEAR DENTURES SKIP TO QUESTION #43.

36. Do you have:

- | | | | |
|---|---------------------------|---|---------------------|
| 1 | Upper and lower dentures | 5 | Other _____ |
| 2 | Upper denture only | 8 | Don't know/Not sure |
| 3 | Lower denture only | 9 | Refused |
| 4 | Implant supported denture | | |

37. Which of these do you wear routinely?

- | | | | |
|---|---------------------------|---|---------------------|
| 1 | Upper and lower dentures | 5 | Other _____ |
| 2 | Upper denture only | 8 | Don't know/Not sure |
| 3 | Lower denture only | 9 | Refused |
| 4 | Implant supported denture | | |

PERSONS WITH DENTURES (continued)

38. How often do you wear your dentures? *Circle only one answer.*

- | | |
|---------------------|-----------------------|
| 1 Every day | 5 Other_____ |
| 2 Some days | 8 Don't know/Not sure |
| 3 Only while eating | 9 Refused |
| 4 Never | |

39. How do you feel your dentures fit?

- | | | |
|-------------|--------|-----------------------|
| 1 Excellent | 3 Fair | 8 Don't know/Not sure |
| 2 Good | 4 Poor | 9 Refused |

40. Do you have any sores or ulcers in your mouth or on your gums that you feel are caused by your dentures?

- No _____ Yes _____ **If yes, how often do you have them?**
- | | | |
|--------------|-----------|-----------------------|
| 1 Frequently | 3 Rarely | 8 Don't know/Not sure |
| 2 Sometimes | 9 Refused | |

41. How long have you had your present dentures?

- | | | |
|--------------------|---------------|-----------------------|
| 1 Less than 1 year | 4 11-20 years | 8 Don't know/Not sure |
| 2 1-5 years | 5 21-30 years | 9 Refused |
| 3 6-10 years | 6 31+ years | |

42. Do you feel you need new dentures made at this time?

- _____ No _____ Yes _____ Don't know/Not sure _____ Refused

If Yes, you need new dentures made at this time, what is the reason? *Circle all that apply.*

- | | |
|---|---|
| 1 Currently, don't have dentures | 5 Not satisfied (appearance, way they feel) |
| 2 Current dentures are worn out | 6 Other_____ |
| 3 Teeth in dentures are broken or missing | 8 Don't know/Not sure |
| 4 Lost dentures | 9 Refused |

USE OF DENTAL HEALTH SERVICES

43. How long has it been since you last visited a dentist or dental clinic for any reason?*

- | | |
|---|-----------------------|
| 1 Within the past year (0 to 12 months ago) | 5 Never |
| 2 Within the past two years (1 to 2 years ago) | 8 Don't know/Not sure |
| 3 Within the past five years (2 to 5 years ago) | 9 Refused |
| 4 5 or more years ago | |

***Your best estimate.**

If you last went to the dentist under or EXACTLY 1-year ago, mark "0-12 months ago."

If you last went to the dentist from 1 year to EXACTLY 2 years ago, mark "1-2 years."

If you last went to the dentist from two years to five years ago, mark "2 to 5 years ago."

If you last went to the dentist EXACTLY or greater than 5 years ago, please mark "5 or more years ago."

If you are unsure, mark "Don't know/Not sure."

USE OF DENTAL HEALTH SERVICES (continued)

44. If you have not visited a dentist in more than 1 year, what is the main reason?

Circle only one answer (the MAIN reason)

- | | |
|---|--------------------------|
| 1 Does not apply/have been to a dentist in the past year | 8 Other priorities |
| 2 Fear, apprehension, nervousness | 9 Have not thought of it |
| 3 Dislike going | 10 Other_____ |
| 4 Cost | _____ |
| 5 Do not have/know a dentist | 88 Don't know/Not sure |
| 6 Cannot get to the office/clinic
(too far away, no appointments available, no transportation) | 99 Refused |
| 7 No reason to go (no problems, no teeth) | |

45. What was the purpose of your most recent visit to the dentist?

Circle only one answer (the MAIN reason)

- | | |
|------------------------------------|-----------------------------|
| 1 Prevention/Cleaning | 5 Dentures/Partial Dentures |
| 2 Pain/Dental Emergency/Extraction | 6 Gum Therapy/Periodontal |
| 3 Restorative/Fillings | 7 Root Canals/Endodontic |
| 4 Crowns/Bridges | 8 Other_____ |

HEALTH ACCESS BELIEFS AND QUESTIONS

46. Do you have any major barriers in getting dental care or services?

Yes_____ No_____ (SKIP TO QUESTION #48)

If Yes, circle all that apply.

- | | |
|--|--|
| 1 Do not have dental insurance | 7 No dentist available |
| 2 Don't like/trust/believe in dentists | 8 No way to get there (transportation) |
| 3 Did not know where to go | 9 Limitation of mobility |
| 4 Could not afford (no money) | 10 Other_____ |
| 5 Dentist did not accept Medicaid | 88 Don't know/Not sure |
| 6 Difficulty in getting appointment | 99 Refused |

47. Which of the following services do you have difficulty in obtaining? Circle all that apply.

- 1 Basic dental services: check-ups, cleaning and fillings.
- 2 Advanced dental services: crowns, bridges, implants, periodontal treatment and extractions.
- 3 Emergency dental services: able to make appointment and visit dentist right away for dental pain or oral problem.
- 4 Prosthodontic dental services: having dentures or partial dentures made by dentist.
- 5 Other service (please list) _____
- 8 Don't know/Not sure
- 9 Refused

HEALTH ACCESS BELIEFS AND QUESTIONS (Continued)

48. What are your recommendations for improving your oral health status?

Circle all that apply or write in comment.

- 1 Make dentistry affordable.
- 2 Mobile clinic (mobile van comes to a specific location such as a senior center or church in your community)
- 3 House calls (Dentist or dental hygienist comes to your house)
- 4 Dental offices made more accessible for wheelchairs, parking, etc.
- 5 Other _____

- 8 Don't know/Not sure
- 9 Refused

THANK YOU FOR TAKING TIME TO RESPOND TO THIS QUESTIONNAIRE!

APPENDIX 2

**KENTUCKY ELDER ORAL HEALTH SURVEY
CLINICAL SCREENING FORM**

EXAMINER: _____ **PARTICIPANT NAME:** _____
PARTICIPANT ID#: _____

***Compliance should be checked for EVERY PERSON examined.**
Patient fully compliant _____ Patient partially compliant _____ Patient non-compliant _____

OVERALL ORAL HEALTH MEASURES

EXTRAORAL PATHOLOGY

Directions: Indicate "NO" for no pathology or "YES" for possible pathology for each area examined. *If possible pathology, give your clinical impression.*

1. FACE and NECK: *Pathology = swelling or lump, sore or mole more than 2 weeks old, change in size or color of mole or sore. Do not include variation of normal (freckles, vessels, bruising or non-suspicious color changes).*

_____ **No pathology** _____ **Yes, possible pathology** _____ **Unable to examine**

Variation of normal/Reversible Possible Pathology

- _____ Lipoma _____ Skin cancer (Basal or squamous cell)
_____ Petechia/Ecchymosis (age-related) _____ Unilateral/Bilateral facial swelling
_____ Keratosis (Actinic or Seborrheic) _____ Unilateral/Bilateral Neck Swelling
_____ Varicosities _____ Melanoma
_____ Other _____ Other _____

2. TM Joint: *ONLY INCLUDE as Pathology if one or more of these three symptoms: pain, popping, cracking are reported or discovered during palpation.*

_____ **No pathology** _____ **Yes, possible pathology** _____ **Unable to examine**

If yes, describe: _____

3. LIPS/Corners of Mouth: *Pathology= color change more than 2 weeks old, swelling or lump, ulcer which may bleed.*

_____ **No pathology** _____ **Yes, possible pathology** _____ **Unable to examine**

Variation of normal/Reversible Possible pathology

- _____ Herpes labialis (lip) _____ Cancer (Basal or squamous cell)
_____ Mucocele _____ Angular cheilitis (corners of mouth)
_____ Fibroma _____ Actinic cheilosis (lip)
_____ Other _____ Other _____

INTRAORAL PATHOLOGY

4. Does this person have dentures or partials? _____ **NO.** _____ **YES.** **If yes, ask them to remove. If patient refuses, please check Refused _____.** **Other comments** _____ **Please continue exam.**

5. INSIDE CHEEKS AND LIPS: *Pathology=white or red patch more than 2 weeks old, bleeding, swelling or lump, ulcer*

_____ **No pathology** _____ **Yes, possible pathology** _____ **Unable to examine**

Variant of Normal/Reversible Possible pathology.

- _____ Aphthous ulcer/traumatic ulcer _____ Leukoplakia
_____ Fordyce granules _____ Erythroplakia
_____ Fibroma/linea alba _____ Swelling of lump
_____ Lichen planus (asymptomatic) _____ Lichen planus (ulcerative or symptomatic)
_____ Other _____ Other _____

INTRAORAL PATHOLOGY (continued)

6. **ROOF OF MOUTH:** Pathology=*sore or color change more than 2 weeks old, swelling or lump, ulcer.*

No pathology Yes, possible pathology Unable to examine

<i>Variant of Normal/Reversible</i>	<i>Possible pathology</i>
<input type="checkbox"/> Maxillary torus palatinus	<input type="checkbox"/> Denture stomatitis
<input type="checkbox"/> Nicotine stomatitis	<input type="checkbox"/> Denture related lesion
<input type="checkbox"/> Inflamed salivary gland	<input type="checkbox"/> Ulceration unhealed for > 2 weeks
<input type="checkbox"/> Longstanding exostosis	<input type="checkbox"/> Swelling/enlargement
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

INTRAORAL PATHOLOGY (continued)

7. **TONGUE:** Pathology=*ulcer, burning or pain; white/ red patch which can't be removed; smooth or shiny shiny area on top or side.*

No pathology Yes, possible pathology Unable to examine

<i>Variant of Normal/Reversible</i>	<i>Possible pathology</i>
<input type="checkbox"/> Fissured tongue	<input type="checkbox"/> Ulcer or sore > 2 weeks
<input type="checkbox"/> Candidiasis	<input type="checkbox"/> Erythroplakia
<input type="checkbox"/> Median rhomboid glossitis	<input type="checkbox"/> Leukoplakia
<input type="checkbox"/> Migratory glossitis (Asymptomatic)	<input type="checkbox"/> Migratory glossitis (Ulcerative or symptomatic)
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

8. **FLOOR OF MOUTH:** Pathology=*color change more than 2 weeks old, swelling or lump, ulcer.*

No pathology Yes, possible pathology Unable to examine

<i>Variant of Normal/Reversible</i>	<i>Possible Pathology</i>
<input type="checkbox"/> Torus mandibularis	<input type="checkbox"/> Erythroplakia
<input type="checkbox"/> Lingual varicosities	<input type="checkbox"/> Leukoplakia
<input type="checkbox"/> Hyperplastic lymphoid aggregates	<input type="checkbox"/> Swelling or enlargement
<input type="checkbox"/> Mucocele (small)	<input type="checkbox"/> Ulcer or sore > 2 weeks
<input type="checkbox"/> Other _____	<input type="checkbox"/> Other _____

9. **SALIVA:** Pathology=*absent, no moisture, ropy or thick. May be manifested by dry tongue, poor denture retention.*

No pathology Yes, possible pathology Unable to examine
If yes, describe _____

10. **Dentate status by arch.**

Indicate number of teeth in each arch; do not count root tips. If no teeth present, enter 00 for each arch.

__ __ upper teeth Unable to examine
__ __ lower teeth

11. **Occlusion**

- 1 adequate (premolar or molar natural teeth in bilateral occlusal contact)
- 2 inadequate (lack of bilateral occlusal contact upon mouth closing; no premolar or molar natural teeth occlude)
- 3 adequate prosthetic bilateral occlusal contact
- 4 inadequate prosthetic bilateral occlusal contact
- 7 unable to examine

12. **Oral Hygiene Status**

- 1 excellent (no visible debris or plaque seen)
- 2 good (visible debris on teeth, but less than 25%)
- 3 fair (25-49% visible debris on teeth)
- 4 poor (50% or more visible debris on teeth)
- 7 unable to examine

FOR PEOPLE WITH NATURAL TEETH REMAINING
(IF EDENTULOUS, GO TO QUESTION #28)

PERIODONTAL EXAMS (TEETH #22-27, INCLUSIVE)

For questions #13-17, mark “Does not apply” if there are fewer than **THREE** indicator teeth (#22-27) present.

13. Gingival signs ___No ___Yes ___Unable to examine ___Does not apply

Mark “No” if free or attached gingiva or papillae on the facial surface of 2 or less mandibular anterior teeth are moderately to severely red or blue gingival OR show significant deviations from normal contour or texture (loss of stippling, glossiness, fibrosis, frank swelling or enlargement, hyperplasia, and/or flaccidity of attached gingival); gingiva demonstrates only slight redness or change in contour or texture; signs are the result of a recent surgical procedure; or signs are the result of an obvious recent injury. Mark “Yes” if free or attached gingiva or papillae on the facial surface of 3 or more mandibular anterior teeth are moderately to severely red or blue OR show significant deviations from normal contour or texture (loss of stippling, glossiness, fibrosis, frank swelling or enlargement, hyperplasia, and/or flaccidity of attached gingiva).

PERIODONTAL EXAMS (TEETH #22-27, INCLUSIVE)

For questions #13-17, mark “Does not apply” if there are fewer than **THREE** indicator teeth (#22-27) present.

14. Recession ___No ___Yes ___Unable to examine ___Does not apply

Mark “No” if no mandibular anterior tooth has equal to or less than 1 mm of root surface exposed on the facial surface.

Mark “Yes” if there is more than 1 mm of root surface exposed on the facial surface of any indicator mandibular tooth.

15. Calculus present ___No ___Yes ___Unable to examine ___Does not apply

Mark “No” if no calculus is present, OR 1 mm or less of calculus is present on 3 or less mandibular anterior teeth (lingual surface).

Mark “Yes” if there are more than 3 mandibular anterior teeth with more than 1 mm of calculus present on lingual surface.

16. Tooth mobility ___No ___Yes ___Unable to examine ___Does not apply

Mark “No” if no mandibular anterior tooth can be moved 2 or more mm by digital palpation (movement includes buccal-lingual, mesio-distal, or gingival (depression) movements).

Mark “Yes” if any tooth can be moved 2 or more mm by digital palpation by the examiner (movement includes buccal-lingual, mesio-distal, or gingival (depression) movements).

17. Gingival bleeding ___No ___Yes ___Unable to examine ___Does not apply

Instruct the subject to floss between the middle two lower teeth, #24 & #25, if present. Use the disposable flosser provided. Subject should extend flosser to bottom of sulcus. If #24 and #25 are not present, move laterally to the next available proximal tooth surface. Dispose of used flosser. After 30 seconds, observe the lower anterior teeth (#22-27) inclusive for any signs of gingival bleeding.

Mark “No” if there is no evidence of bleeding in the test area, bleeding is the result of an obvious recent injury, or bleeding is the result of an obvious recent dental or surgical procedure.

Mark “Yes” if there is evidence of gingival bleeding on the facial or interproximal surface of one or more of the test teeth (#24 & #25 or substitutes).

18. Overall Periodontal Health – Dentate

- 1 excellent (all 5 responses to questions #13-17 are “No”)
- 2 good (all responses to questions #13-17 are “No” except #14 Recession and/or #15 Calculus)
- 3 fair (2 to 4 responses to questions #13-17 are “Yes”)
- 4 poor (all 5 responses to questions #13-17 are “Yes”)
- 5 does not apply (not enough or no indicator teeth present)
- 7 unable to examine

PERIODONTAL EXAMS (TEETH #22-27, INCLUSIVE) (continued)

19. Urgency of periodontal problems

- 1 no problems detected (recommend routine 6 month to one year recalls)
- 2 routine care is required (within 6 months) (Represent no acute problems, but chronic problems needing routine care)
- 3 early care is required (within 1 month) (Isolated or symptomatic chronic problem)
- 4 immediate care is required (ASAP) (Acute and symptomatic...emergency)
- 5 does not apply
- 7 unable to examine

CARIES EXAM

20. Caries Present

- 1 no (**SKIP TO QUESTION #23**)
- 2 yes
- 7 unable to examine

For the purpose of this survey, caries (active decay) are said to be present if the following two tests are met:

- *there must be cavitation (at least 1/2 mm of tooth surface broken)*
- *there must be discoloration (brownish coloration in the area of the cavitation)*

Circle "1" (No caries present) if:

- teeth are chipped, fractured, crowned or filled, but there are no "caries present"
- one, but not both criteria for "caries present" are true
- teeth are filled or crowned, but there are no "caries present"
- there is white-colored discoloration, but both criteria are not present.

Circle "2" (Caries present) if:

- any tooth or tooth fragment has "caries present" (defined above), a tooth has a restoration or crown and "caries present", a tooth has "caries present" around an existing restoration or crown (recurrent decay), a tooth is broken, chipped, and/or fractured and has "caries present", or there is a retained root.

- 21. If yes, how many caries (including root tips) are visibly seen? _____ (write in # of teeth w/ caries).**
(Four or less than 4 teeth with caries is considered "a few". Five or more carious teeth are considered "many").

22. Urgency of Caries

- 1 routine care is required (within 6 months) (unlikely that caries will become symptomatic)
- 2 early care is required (within 1 month) (currently asymptomatic but likely that caries will become symptomatic)
- 3 immediate care is required (ASAP) (symptomatic or likely that pulp exposure is present or imminent)
- 4 does not apply (no caries present)
- 7 unable to examine

23. Restorations present

- 1 no
- 2 yes
- 7 unable to examine

24. Broken or missing restorations

- 1 none
- 2 1-5
- 3 6-9
- 4 10 or more
- 7 unable to examine

CARIES EXAM (continued)

25. Presence of replacements for missing teeth (dentures, partials or bridges)

- 1 yes, for all missing teeth
- 2 yes for some, but not all missing teeth
- 3 no replacements because none are necessary (**SKIP TO QUESTION #27**)
- 4 no replacements for missing teeth (even if needed) (**SKIP TO QUESTION #27**)
- 7 unable to examine

Specify patient's prosthetic status: (*Section applies to people who have prosthetic replacements*)

Dentures: (check all that apply)	Partials: (check all that apply)	Bridges/Implants: (check all that apply)
<input type="checkbox"/> upper and lower dentures	<input type="checkbox"/> upper and lower partials	<input type="checkbox"/> upper and lower bridges/implants
<input type="checkbox"/> upper denture only	<input type="checkbox"/> upper partial only	<input type="checkbox"/> upper bridge/implants only
<input type="checkbox"/> lower denture only	<input type="checkbox"/> lower partial only	<input type="checkbox"/> lower bridge/implant only
<input type="checkbox"/> implant supported denture	<input type="checkbox"/> no partials for missing teeth	<input type="checkbox"/> no bridges/implants for missing teeth
<input type="checkbox"/> no dentures	<input type="checkbox"/> unable to examine	<input type="checkbox"/> unable to examine
<input type="checkbox"/> unable to examine	<input type="checkbox"/> unable to examine	<input type="checkbox"/> unable to examine

26. Adequacy of replacements for missing teeth. *Adequacy means they are **comfortable**, they **function/work well**, AND they **look good**. Adequacy is the patient's opinion, not the examiner's.*

- 1 no, inadequate (comfort, function, and esthetics)
- 2 yes, adequate (comfort, function, and esthetics)
- 3 does not apply (no replacements)
- 7 unable to examine

27. Overall Oral Health Status – Dentate

*Consider oral pathology, overall cleanliness of dentition, and presence or absence of oral symptoms. The overall oral health status rating **should be consistent with the most severe rating of periodontal or caries exam.***

- 1 excellent (Excellent periodontal health, no caries).
- 2 good (Good periodontal health, four teeth or fewer with caries)
- 3 fair (Fair periodontal health, and five teeth or more with caries)
- 4 poor (Poor periodontal health, and teeth with caries are symptomatic or pulpally or close to being pulpally involved)
- 7 unable to examine

FOR PEOPLE WITH NO NATURAL TEETH REMAINING

28. Does this person have a denture or dentures?

- 1 yes (Continue with question #29)
- 2 no (*Skip to question #30*)

FOR PEOPLE WITH NO NATURAL TEETH REMAINING (continued)

29. Denture evaluation: Circle which denture(s) is/are present: Upper Lower)

Hygiene:

Upper _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Lower _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Occlusion:

Upper _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Lower _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Integrity:

Upper _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Lower _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Stability:

Upper _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Lower _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Retention:

Upper _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Lower _____ Adequate ___ Inadequate ___ Does not apply ___ Unable to examine

Hygiene: adequate – less than 50% of tissue surface of denture with visible debris

inadequate – 50% or more of the tissue surface of denture with visible debris

Occlusion: inadequate – anterior crossbite or lack of bilateral occlusal contact upon mouth closing; no premolar or molars.

Integrity: inadequate – defects of the denture teeth or base, such as broken teeth, broken flanges, inadequate extension, severe discoloration, or unesthetic appearance.

Stability: inadequate – 3 mm or more of lateral movement of the denture when it rests on the edentulous ridge and is manually moved laterally; or displacement of denture from ridge when moderate occlusal force is placed on contralateral premolar teeth.

Retention: inadequate – displacement of the denture from the alveolar ridge when the patient opens the mouth wide but without strain or when light occlusal pressure is placed on incisal of the anterior teeth.

30. Health of Alveolar Ridges: _____ No pathology (good) _____ Yes, possible pathology (fair or poor, depends on severity)

Pathology=denture sore, redness, white area, swelling or lump _____ Unable to examine

If possible pathology, give your clinical impression:

_____ Denture sore _____ Epulis fissuratum _____ Erythroplakia

_____ Denture stomatitis _____ Leukoplakia _____ Other _____

31. Adequacy of replacements for missing teeth (full dentures). Adequacy means they are comfortable, they function/work well, AND they look good. (Adequacy is in the patient's opinion, not the examiner's. May still be adequate if only 1 denture).

1 no, inadequate (comfort, function, and esthetics) 3 does not apply (no replacements present)

2 yes, adequate (comfort, function, and esthetics) 7 unable to examine

32. Overall oral health – edentulous

1 excellent (no pathology) 3 fair (isolated, acute areas) 7 unable to examine

2 good (minor pathology) 4 poor (significant path. or problems)

Consider:

Do Not Consider:

- presence/absence of oral/perioral lesions or debris
- presence/absence of dentures
- condition of alveolar ridges, mucosa, oral tissues, TMJ
- condition of dentures (if any)

OVERALL TREATMENT URGENCY FOR ALL PARTICIPANTS

33. Overall treatment urgency (dentate and edentulous participants)

**(IF A PERSON HAS A CONFLICTING URGENCY BETWEEN PERIODONTAL STATUS AND CARIES EXAM SELECT THE ONE WHICH IS MOST URGENT!)*

- 1 no problems detected with this screening (recommend yearly recalls if edentulous, or 6 months to 1 year if dentate)
- 2 routine dental care is required (within 6 months) (*chronic, noted problems need dental evaluation and treatment*)
- 3 early dental care is required (within 1 month) (*chronic problem(s), may result in emergency if not seen soon*)
- 4 immediate dental care is required (ASAP) (*acute, emergent, or symptomatic problem needing immediate attention*)
- 7 unable to examine

APPENDIX 3



KENTUCKY ELDER ORAL HEALTH SURVEY 2002



DENTAL REPORT CARD

Department for Public Health
Cabinet for Health Services
Commonwealth of Kentucky
Frankfort KY 40621-0001

College of Dentistry
University of Kentucky
Lexington KY 40536-0297

Date _____

Name _____ has received a dental screening without x-ray films.

We found the following:

- 1. **Mouth sores/growth:** ___Present ___Absent ___Unable to examine
(questions 5-8)
- 2. **Oral hygiene:** ___Excellent ___Good ___Fair ___Poor ___Unable to examine
(question 12)
- 3. **Health of gums:** ___Excellent ___Good ___Fair ___Poor ___Unable to examine
(question 18 for dentate; question 30 for edentulous)
- 4. **Tooth decay:** ___None ___Few ___Many ___Does not apply ___Unable to examine
(question 21)
- 5. **Dentures:** ___Adequate ___Inadequate ___Does not apply ___Unable to examine
(question 29)
- 6. **Overall oral health status:** ___Excellent ___Good ___Fair ___Poor ___Unable to examine
(question 27 for dentate; question 32 for edentulous)

Treatment Urgency:

(If a person has a conflicting urgency between periodontal status(question 19) and caries exam (question 22), select the one which is most urgent.)

- _____ No problems detected with this screening. Still, a regular examination at least one time a year is recommended.
- _____ Routine dental care is required (within 6 months). Please schedule a dental appointment at your earliest convenience.
- _____ Early dental care is required (within 1 month). Please schedule a dental appointment as early as possible.
- _____ Immediate dental care is required because of pain and/or infection. Please call your dentist today.
- _____ Unable to examine.

Comments: _____

These findings still need to be confirmed by x-rays. You should receive a dental examination by your dentist before treatment.

If you do not have a dentist and are in need of dental care, you may call the Kentucky Dental Association at 1-800-292-1855. They will be happy to refer you to a licensed dentist in your area. Please specify if you have access problems ,i.e., money, transportation, etc.

APPENDIX 4

Participating Nursing Homes/Assisted Living Facilities

Baptist Convalescent Center
120 Main Street
Newport KY 41071
Region 4: Campbell County

6900 Hopeful Road
Florence, KY 41042
Region 4: Boone County

Baptist Towers
Carl S. Hennigen, Director
800 Highland Avenue
Covington, KY 41011
Region 4: Kenton County

Episcopal Church Home
Keith R. Knapp, Chief Executive Officer
1201 Lyndon Lane
Louisville, KY 40222-4398
Region 2: Jefferson County

Britthaven of Benton
Jennifer Thomas, Administrator
US Highway 641 South
P.O. Box 385
Benton, KY 42025
Region 1: Marshall County

Fern Terrace Lodge of Bowling Green
1030 Shive Lane
Bowling Green, KY 42103
Region 1: Warren County

Britthaven of South Louisville
Robert Flatt, Administrator
9600 Lamborne Boulevard
Louisville, KY 40272
Region 2: Jefferson County

Fern Terrace Lodge of Mayfield
A. Loudean Austin, Administrator
P.O. Box 325
Mayfield, KY 42066
Region 2: Graves County

Brookfield Manor
Rebecca Hammonds, Administrator
2820 Richard Street
P.O. Box 711
Hopkinsville, KY 42240
Region 1: Christian County

Fern Terrace Lodge of Owensboro
45 Woodford Avenue
Owensboro, KY 42301
Region 1: Daviess County

Carmel Home
Sr. Frances Teresa, Director
2501 Old Hartford Road
Owensboro, KY 42301
Region 1: Daviess County

Four Courts Senior Center
Deborah A. May, Executive Director
2100 Millvale Road
Louisville, KY 40205
Region 2: Jefferson County

Carmel Manor
Sr. Teresa Kennedy, Administrator
Carmel Manor Road
Ft. Thomas, KY 41075
Region 4: Campbell County

Franciscan Health Care Center
Suzanne Rinne, Administrator
3625 Fern Valley Road
Louisville, KY 40219
Region 2: Jefferson County

Colonial Gardens
Ken Kaser, Manager

Good Shepherd Community Nursing Center
Priscilla Hager, Executive Director
P.O. Box 424
Phelps, KY 41553
Region 5: Pike County

Laurel Heights Home for the Elderly
Kathy Young, Administrator
208 West Twelfth Street
P.O. Box 1800
London, KY 40743-1800
Region 5: Laurel County

OVER

Laurel Village (Assisted Living)
Kathy Young, Administrator
P.O. Box 1920, 815 Mill St.
London, KY 40743-1920
Region 5: Laurel County

Lexington Country Place
Katherine E. Davis, Administrator
700 Mason Headley Road
Lexington, KY 40504
Region 3: Fayette County

Loretto Motherhouse Infirmary
Sr. Kay Carlew, Administrator
515 Nerinx Road
Nerinx, KY 40049
Region 3: Marion County

Metzmeier Nursing Home, Inc.
Don Metzmeier, Administrator
700 North Central Avenue
Campbellsville, KY 42718-2098
Region 4: Taylor County

Paragon at West Park
Angela Butts, Community Director
4960 Village Square Drive
Paducah, KY 423001
Region 1: McCracken County

Pine Meadows Health Care, Inc.
Jamie Gitzinger, Administrator
1608 Hill Rise Drive
Lexington, KY 40504
Region 3: Fayette County
Richmond Place (Assisted Living)
Carol A. Brinegar, Care Manager
3051 Rio Dosa Drive
Lexington, KY 40509
Region 3: Fayette County

Rockcastle Health and Rehabilitation
Brodhead, KY 40409
Region 5: Rockcastle County

Sacred Heart Village
Leslie Wilson, President/CEO
2120 Payne Street
Louisville, KY 40206
Region 2: Jefferson County

Stanton Nursing & Rehabilitation Center
31 Derickson Lane
Stanton, KY 40380
Region 5: Powell County

Woodland Oaks
Paula F. Long Barker, Administrator
1820 Oakview Road
P.O. Box 1309
Ashland, KY 41105-1309
Region 5: Boyd County

APPENDIX 5

Participating Senior Citizens Centers

Anderson County Senior Citizens Program
160 Township Square
Lawrenceburg, KY 40342
Region 3

Campbell County Senior Center
3504 Alexandria Pike
Highland Heights, KY 41076
Region 4

Casey County Senior Center
P.O. Box 393
Liberty, KY 42539
Region 5

Corbin Senior Citizens Center
P.O. Box 691
Corbin, KY 40701
Region 5: Knox County

Elderserve – Oak & Acorn
631 South 8th St.
Louisville, KY 40211
Region 2: Jefferson County

Elliott County Senior Center
P.O. Box 711, Main St.
Sandy Hook, 41171
Region 5

Estill County Senior Center
532 Stacy Lane Road
Irvine, KY 40336
Region 3

Georgetown/Scott County Senior Center
800 Cincinnati Pike, Suite 10
Georgetown, KY 40324
Region 3

Fleming County Senior Center
Rocky Adkins Community Center
P.O. Box 711
Sandy Hook, KY 41171

Region 5

Green County Senior Center
110 S. First Street
Greensburg, KY 42743
Region 5

Hartford Senior Center
Ohio County Senior Services
2320 Highway 69 North
Region 1

Harrison County Senior Citizens Center
219 Old Lair Road
Cynthiana, KY 41031
Region 3

Jessamine County Senior Center
111 Hoover Drive
Nicholasville, KY 40356
Region 3

McLean County Senior Services
857 Walnut Street
P.O. Box 334
Calhoun, KY 42327
Region 1

Jeffersontown Senior Center/
Jeffersontown Community Ctr. Health Fair
Jeffersontown, KY 40243
Region 2

Jessamine County Senior Center
111 Hoover Drive
Nicholasville, KY 40356
Region 3

Arthur S. Kling Center
219 West Ormsby Avenue
Louisville, KY 40203
Region 2: Jefferson County

Lexington/Fayette County Senior Citizens Center
1530 Nicholasville Road
Lexington, KY 40503
Region 3

Livermore Senior Center
105 W. Third St.
Livermore, KY 42352
Region 1: McLean County

OVER

Madisonville-Hopkins County Senior Center
Pennyrile Senior Citizens Center
Regional Senior Citizens Center
200 North Main
Madisonville, KY 42431
Region 1

Mayfield-Graves County Senior Center
901 North 15th St.
P.O. Box 434
Mayfield, KY 42066
Region 1

Mason County Senior Center
1679 Forest Avenue
Maysville, KY 41056
Region 4

McLean County Senior Services
875 Walnut Street
P.O. Box 334
Calhoun, KY 42327
Region 1

Elizabeth Munday Senior Center
1650 West Second Street
Owensboro, KY 42301
Region 1: Daviess County

Murray-Calloway County Senior Center
P.O. Box 1291
Murray, KY 42071

Nicholas County Senior Citizens Center
124 East Main St.
Carlisle, KY
Region 3

Pendleton County Senior Center
1111 Chipman St.
Falmouth, KY 41040
Region 4

Pulaski County Senior Center
807 Monticello St.
Somerset, KY 42501
Region 5

Robertson County Senior Center
P.O. Box 298
Mt. Olivet, KY 41064
Region 4

Shelby County Senior Center
P.O. Box 305
213 Washington St.
Shelbyville, KY 40066-0305
Region 2

Taylor County Senior Citizens Center
110 N. Jackson St.
Campbellsville, KY 42718
Region 3

Trigg County Senior Center
39 Jefferson St.
P.O. Box 99
Cadiz, KY 42211
Region 1

Woodford County Senior Citizens Center
112 North Main
Versailles, KY 40383
Region 3

APPENDIX 6

Kentucky Area Agencies on Aging

Kentucky Agency on Aging

Jerry Whitley, Director
Frankfort, KY

Karen Rice Sizemore, Aging Planner
P.O. Box 636, 3000 Louisa St.
Catlettsburg, KY 41129-0636

Barren River Area Agency on Aging

Debbie McCarty, Aging Planner
Michelle Hines, Homebound Coord.
177 Graham Ave, P.O. Box 90005
P.O. Box 90005
Bowling Green, KY 42102-9005

Gateway Area Agency on Aging

Charles Jones, Aging Planner
Cheryl Muller, Homebound Coordinator
Court House Annex, Main St.
P.O. Box 1070
Owingsville, KY 40360

Big Sandy Area Agency on Aging

Donna Frazier, Aging Planner
100 Resource Dr.
Prestonsburg, KY 41653

Bluegrass Area Agency on Aging

Peggy Chadwick, Aging Planner
699 Perimeter Dr.
Lexington, KY 40517

Green River Area Agency on Aging

Bill Cooper, Aging Planner
Jennifer Williams, Homebound Coordinator
3860 U.S. Highway 60 West
Owensboro, KY 42301-0200

Buffalo Trace Area Agency on Aging

Caroline C. Ullery, Aging Planner
327 W. 2nd St., P.O. Box 460
Maysville, KY 41056

Kentucky River Area Agency on Aging

Peggy Roll, Aging Planner
917 Perry Park Rd
Hazard, KY 41701

Cumberland Valley Area Agency on Aging

Bernice Miracle, Aging Planner
Tom Doty, Homebound Coordinator
Cathy Frederick
P.O. Box 1740, 342 Old Whitley Rd.
London, KY 40743-1740

KIPDA

Evelyn Tinker, Aging Planner
11520 Commonwealth Dr.
Louisville, KY 40299

FIVCO Area Agency on Aging

Lake Cumberland Area Agency on Aging

Cindy Branscum, Aging Planner
P.O. Box 1570, 2374 Lakeway Dr.
Russell Springs, KY 42642

Lincoln Trail Area Agency on Aging

Nancy Addington, Aging Planner
613 College Street Road
P.O. Box 604
Elizabethtown, KY 42702-0604

N. Kentucky Area Agency on Aging

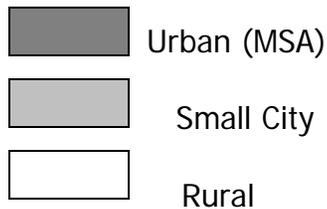
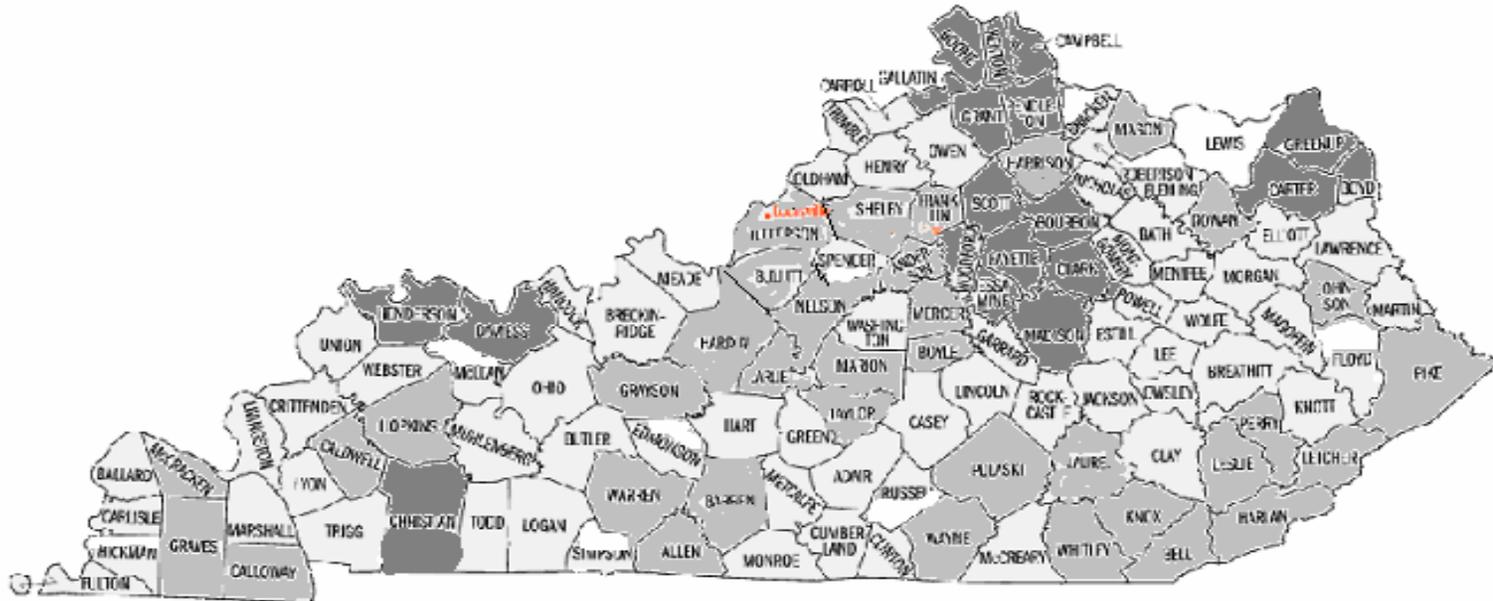
Carol Marek, Aging Planner
Liza Lucas, Homebound Coordinator
16 Spiral Dr., P.O. Box 668
Florence, KY 41022-0668

Purchase Area Agency on Aging

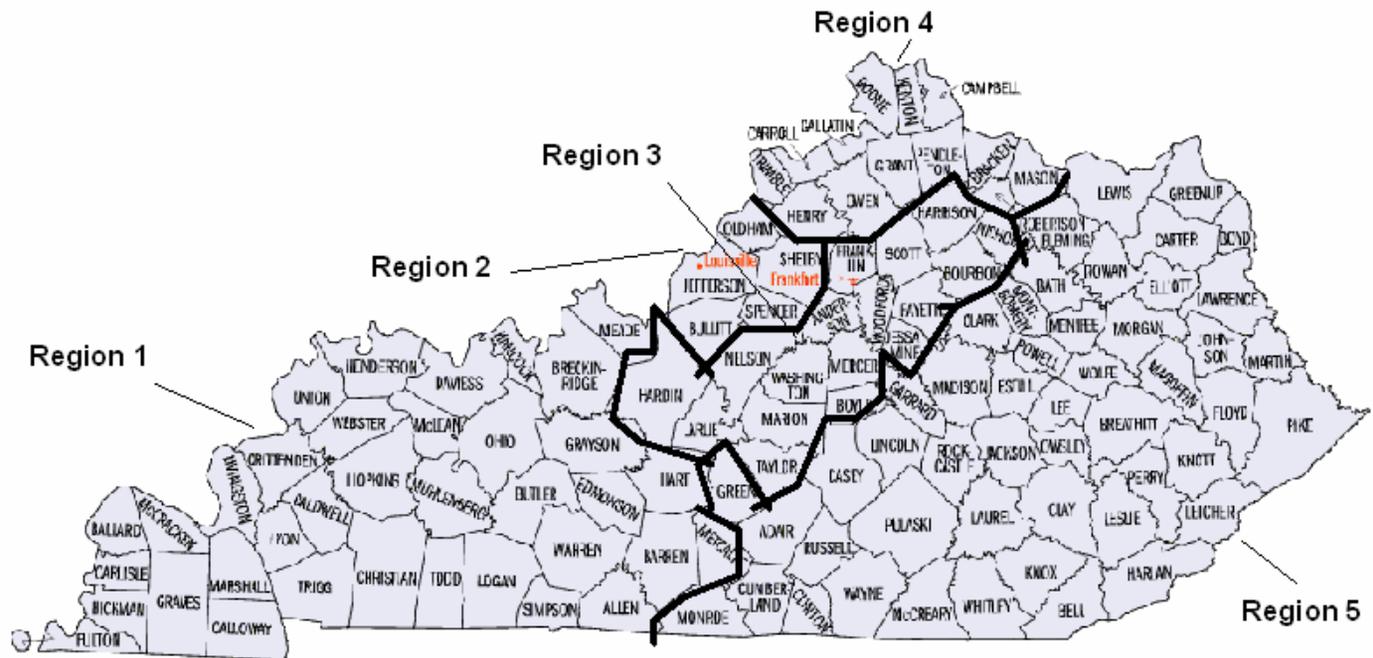
Vicki Williams, Aging Planner
P.O. Box 588, 1002 Medical Dr.
Mayfield, KY 42066

Pennyrile Area Agency on Aging

Agnes Davis, Aging Planner
300 Hammond Dr.
Hopkinsville, KY 42240



Appendix 7: Urban/Rural Location Map



APPENDIX 8: REGIONAL MAP