Delaware
Oral Health Assessment
of
Third Grade Children

May 2002

Delaware Health and Social Services
Division of Public Health
PO Box 637
Dover, Delaware 19903

Acknowledgements

The Delaware Division of Public Health wishes to thank the parents, students, school nurses, administrators, and teachers for their cooperation to make this survey a success.

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Introduction

During May and June 2002, the Delaware Health and Social Services' Division of Public Health initiated an oral health assessment of third grade children in Delaware. This study is the first of its kind to comprehensively study children's oral health in Delaware.

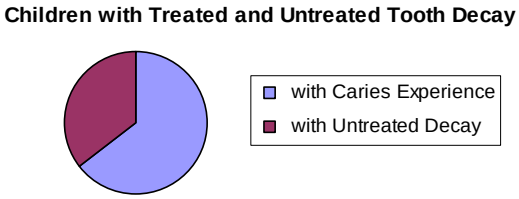
The survey collected information on the prevalence of tooth decay, the accessibility of oral health care services and the impact of race, ethnicity and socio-economic status on each of these issues. The study will provide a baseline for evaluating changes in the oral health status of Delaware's children. Survey results will be used to focus prevention and treatment programs and services where they are needed most.

The assessment consisted of two separate data collection methods – a parent questionnaire and an oral health screening completed by a dentist. Data was stratified by county, race and ethnicity, and eligibility in the free and reduced price school meal program as a measure of socio-economic status. All data presented in this report have been weighted for non-response.

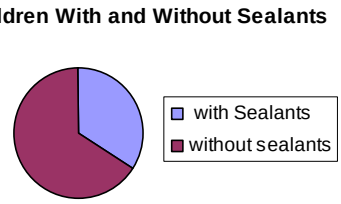
The report also takes a comparative look at where Delaware's children rate with regard to the national Healthy People 2010 oral health objectives.

Overview of Key Findings

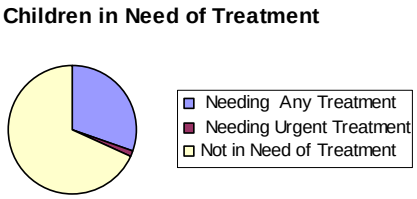
Key Finding #1: 30 percent of the children screened had untreated decay at the time of the examination



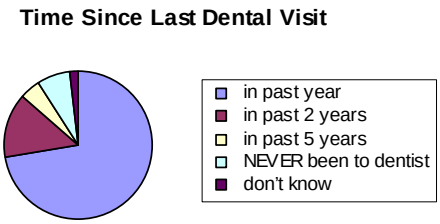
Key Finding #2: 34 percent of the children had a dental sealant on one or more permanent molar



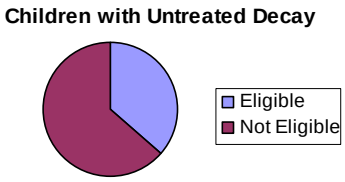
Key Finding #3: 30 percent of the children screened needed dental care

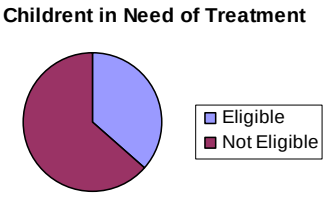


Key Finding #4: 72 percent of the children had been to the dentist in the last year while 7 percent had never been to the dentist

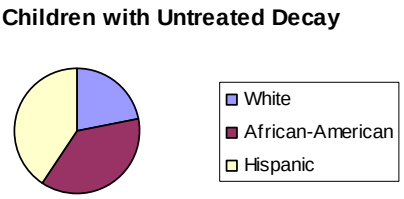


Key Finding #5: Children who are eligible for the free/reduced price meal program are significantly more likely to have untreated decay and need dental care

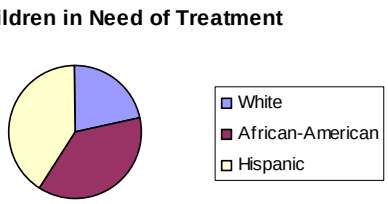




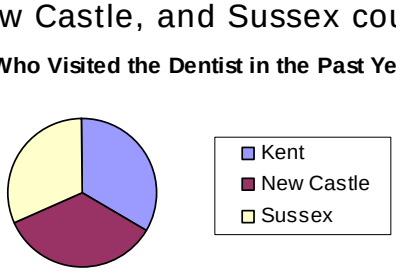
Key Finding #6: African-American and Hispanic children were significantly more likely to have untreated decay compared to white children



Key Finding #7: African-American and Hispanic children were significantly more likely to need dental treatment compared to white children



Key Finding #8: There was no significant difference in oral health status between children in Kent, New Castle, and Sussex counties



Study Findings: Quick Reference

The following section provides an overview of the findings of the oral health assessment of third grade children in Delaware. These finding are based on a written survey and oral health evaluation of 1,032 children in 19 public schools statewide.

Oral Health Status

45.5 percent of the children screened were caries free while 54.5 percent had a history of dental caries (at least one tooth with untreated decay and/or a filling)

30 percent of the children screened had untreated decay at the time of the examination

34 percent of the children had a dental sealant on one or more permanent molar

30 percent of the children screened needed dental care

For all of the children screened, the mean number of decayed primary and permanent teeth was 0.66 teeth while the mean number of filled primary and permanent teeth was 1.21 teeth

Of those children with at least one untreated cavity, the mean number of decayed primary and permanent teeth was 2.22 teeth

Access to Care

81 percent of the parents reported having some type of dental insurance for their child – 59 percent reported private insurance while 22 percent reported having Medicaid

72 percent of the children had been to the dentist in the last year while 7 percent had never been to the dentist

The primary reasons for not having been to the dentist in the last year were “cost”, “no reason to go”, “do not have or know a dentist” and “difficulty in getting appointment”

28 percent of the parents reported that during the last 2 years there was a time when they wanted dental care for their child but they could not get it

The primary reasons for not being able to get dental care were “could not afford it” and “no insurance”

Key Findings by County

There was no significant difference in oral health status between children in Kent, New Castle, and Sussex Counties

Children in Sussex county were significantly less likely to have private dental insurance (46%) compared to children in New Castle County (65%)

Children in Sussex county were significantly more likely to have no dental insurance (29%) compared to children in both Kent (17%) and New Castle (17%) Counties

Key Findings by Eligibility for the Free/Reduced Price Meal Program

Children who are eligible for the free/reduced price meal program are significantly more likely to have untreated decay (40% vs. 23%) and need dental care (40% vs. 23%)

Children who are eligible for the free/reduced price meal program are significantly less likely to have dental sealants (22% vs. 42%)

Children who are eligible for the free/reduced price meal program have significantly more decayed primary and permanent teeth than children not eligible for the program (0.9 vs. 0.5)

Children who are eligible for the free/reduced price meal program are significantly less likely to have private dental insurance (31% vs. 79%)

Children who are eligible for the free/reduced price meal program are significantly more likely to have Medicaid (50% vs. 3%)

Children who are eligible for the free/reduced price meal program are significantly less likely to have been to the dentist in the last year (56% vs. 85%)

Children who are eligible for the free/reduced price meal program are significantly more likely to report having trouble accessing dental care in the last 2 years (49% vs. 13%)

Key Findings by Race and Ethnicity

White non-Hispanic children were significantly less likely to be eligible for the free and/or reduced price meal program (25%) compared to both African-American (69%) and Hispanic (77%) children

African-American and Hispanic children were significantly more likely to have untreated decay (40% and 43% respectively) compared to white children (23%)

Hispanic children were significantly less likely to have sealants (5%) compared to both African-American (30%) and white children (41%)

African-American and Hispanic children were significantly more likely to need dental treatment (40% and 44% respectively) compared to white children (24%)

Hispanic children were significantly less likely to have private dental insurance (33%) compared to white children (66%)

African-American and Hispanic children were significantly less likely to have been to the dentist in the last year (64% and 29% respectively) compared to white children (81%)

Hispanic children were significantly more likely to have NEVER been to the dentist (21%) compared to white children (5%)

When stratified by race/ethnicity, there were significant differences in the proportion of children who reported having trouble accessing dental care in the last two years. Twenty percent of the white children reported trouble compared to 36 percent of the African-American children and 68 percent of the Hispanic children.

Study Methodology

At participating schools, parents were sent a letter describing the needs assessment along with a consent form and a short questionnaire (Appendix A). Only those children whose parents provided positive consent were screened.

One dentist completed all of the screenings during May and June 2002. The screenings were completed using gloves, a penlight, and a disposable mirror. The diagnostic criteria outlined in the Association of State and Territorial Dental Director's Basic Screening Surveys: An Approach to Monitoring Community Oral Health was used.

Sampling

The oral health assessment was designed to provide a representative sample of Delaware public school children in third grade. The sample design was a random selection of schools from Delaware's public school system. Schools were selected from a list generated from Delaware Department of Education data. Implicit stratification on county was used for the school selections. The list of Delaware schools was sorted by the three counties - this method ensures proportional sampling from the counties in the state.

Precision of population estimates in cluster sample designs is affected more by the number of clusters (schools) that can be visited for assessments than by the actual number of children examined. Planning focused on maximizing the number of schools to be sampled. Resources allowed for an original target of 20 schools. This target number was used for designing the sample frame and calculating sample intervals.

An alternate selection was made for Sussex County after the initial selection of schools. Sussex County has a lower population and fewer elementary schools than the other counties. The low population in this region resulted in only three school selections from the sampling strategy. The investigators determined that six schools would be selected in this region to gain more precise population estimates for this region. A new list of Sussex County schools was created and a sampling interval was calculated for six school selections.

The sample consisted of 23 schools with a total third grade enrollment of 2,739. Of the 23 schools selected, 19 agreed to participate in the survey for a school response rate of 83 percent. These 19 schools had a total third grade enrollment of 2,395. Parental consent was received for a total of

1,032 children, which resulted in a response rate of 43.1 percent among participating children from the 19 schools.

When compared to the entire sample, those schools that agreed to participate had a slightly higher proportion of children receiving free and/or reduced-price meals (36.7% vs. 35.4%). This suggests that higher-income schools were less likely to participate in the oral health needs assessment.

Sample Weighting

The probability of selection of the school was the inverse of the number of schools participating in the county divided by the total number of schools in the county (Kent=21/5=4.20, New Castle=37/8=4.63, Sussex=14/6=2.33). This basic weight was used to evaluate oral health status with no adjustment for non-response. To adjust for student non-response, the basic weight was multiplied by the following factor: school enrollment divided by the number of responding students at the school.

Study Findings: Detailed Discussion

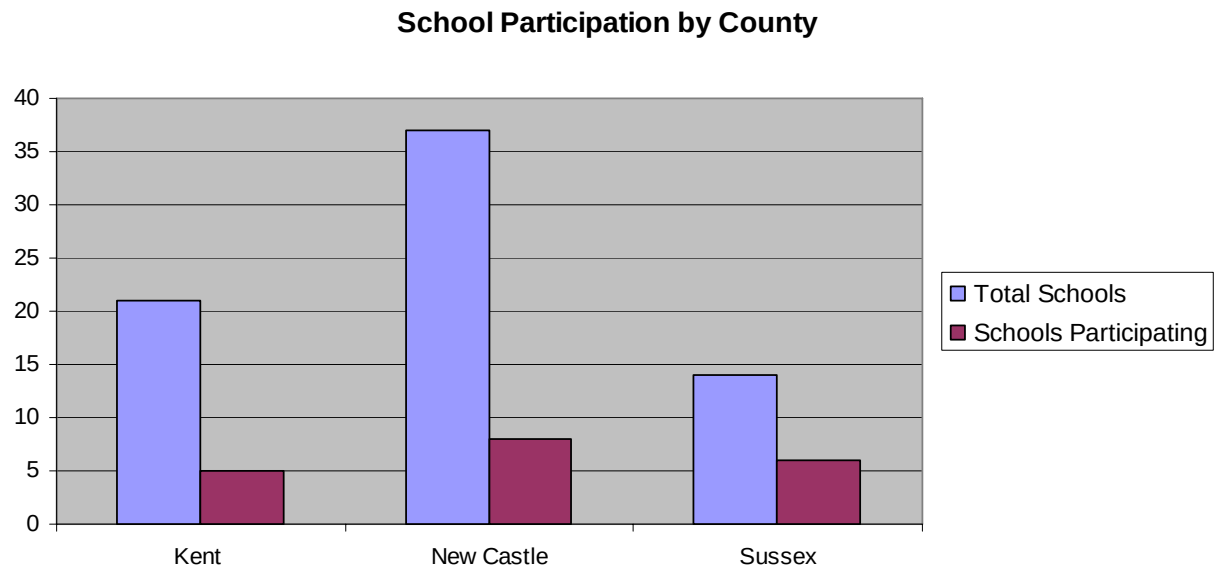
This section provides a detailed discussion of the data resulting from the oral health assessment of third grade children in Delaware. The data is reported in three sections:

Demographics
Oral Health Status
Access to Care

All data presented in these sections is stratified by county, race/ethnicity, and eligibility for the free/reduced school meal program, which serves as an indicator for socio-economic status.

Demographics

Nineteen of the 72 Delaware public schools with third grade children participated in the study. The study involved 24 percent of Kent County schools, 22 percent of New Castle County schools and 43 percent of schools in Sussex County. All survey results were weighted for schools that did not respond to the survey.



A total of 1,032 children from the 19 schools participated in the oral exam and their parents completed the written survey.

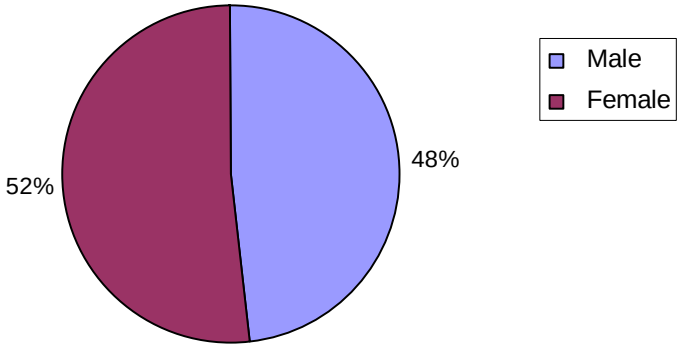
Age

The third-grade children screened ranged in age from 7 to 11 years with an average (mean) age of 8.9 years. Most of the children screened (67%) were 9 years of age.

Gender

Fifty-two percent of the children in the study were female and 48 percent were male. Females in the study were slightly overrepresented when compared to the population of children in this age range statewide (51% male and 49% female).

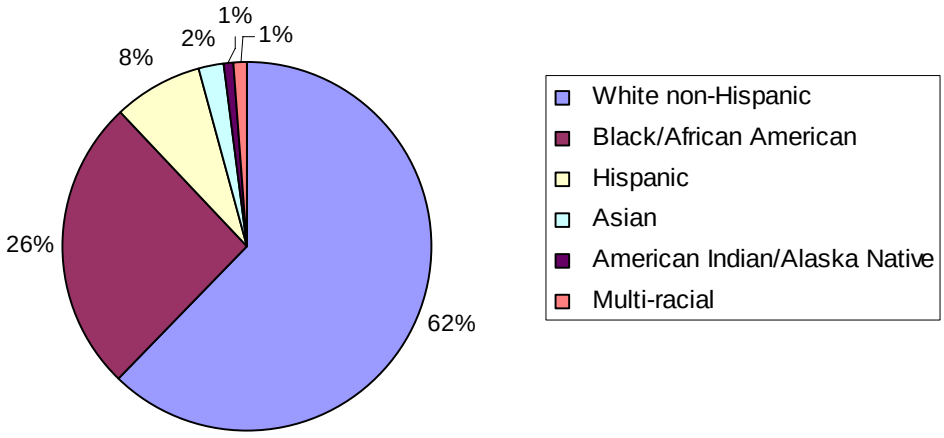
Gender of Children Screened



Race and Ethnicity

Information on race/ethnicity was provided by 96 percent of the parents (n=989) responding to the survey. Of these children, 62 percent were white non-Hispanic, 26 percent were African American, and 8 percent were Hispanic. The racial composition of the study group is statistically comparable to that of the State.

Race/Ethnicity of Children Screened



Socio-Economic Status

Eligibility for the free/reduced school meal program is based on family income. Children from families with incomes at or below 130 percent of the federal poverty level (currently $24,505 for a family of four) are eligible for free meals. Those with incomes between 130 percent and 185 percent of the poverty level (currently up to $34,873 for a family of four) are eligible for reduced-price meals.

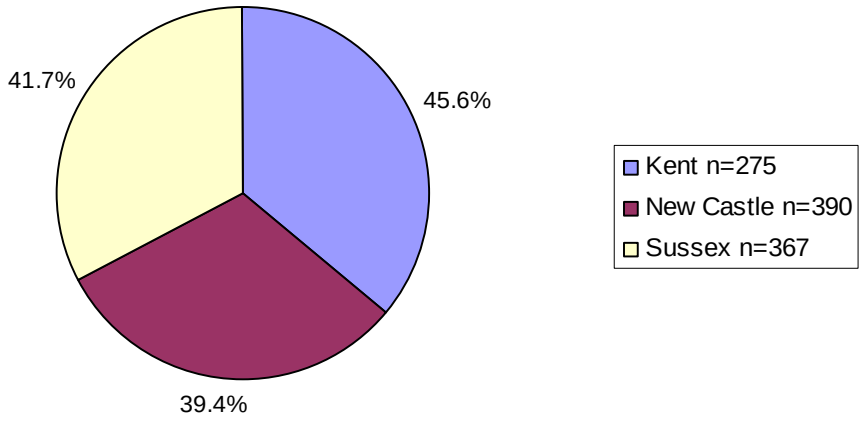
Information on eligibility for the free and/or reduced price meal program was provided by 93 percent of the parents (n=964). Of the 964 children for whom information was available, 41 percent reported being eligible for the free and/or reduced price meal program.

The following table compares the proportion of children eligible for the free and/or reduced price meal program for the state, the schools in the original sample, the participating schools, and the participating children. The proportion of free/reduced meal participation for the schools in the sample and the schools participating in the study is less than the proportion for all elementary schools with third grade. However, the proportion of children participating in the study and eligible for the program is similar to the statewide average.

	% Eligible for Free/Reduced Lunch
All Delaware Elementary Schools with 3rd Grade Enrollment	40.4
Schools in Sample (n=23)	35.4
Participating Schools (n=19)	36.7
Participating Children (n=964)	41.4

Eligibility for the free/reduced school meal program is consistent across the state, with a slightly higher percentage of respondents in Kent County reporting eligibility in the program. The following chart illustrates the distribution by county of program eligibility among respondents.

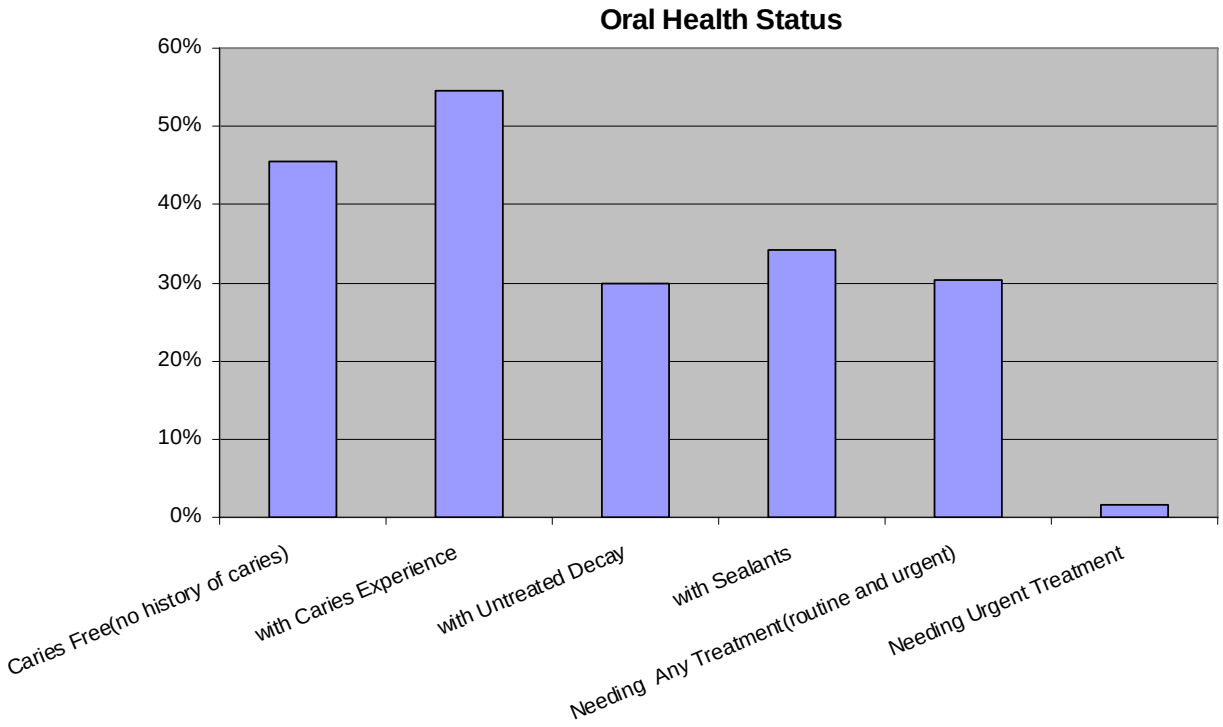
Children Eligible for Free/Reduced Meal Program



Race and ethnicity play a significant role in eligibility for the free/reduced meal program. White non-Hispanic children were significantly less likely to be eligible for the free and/or reduced price meal program (25%) compared to both African-American (69%) and Hispanic (77%) children.

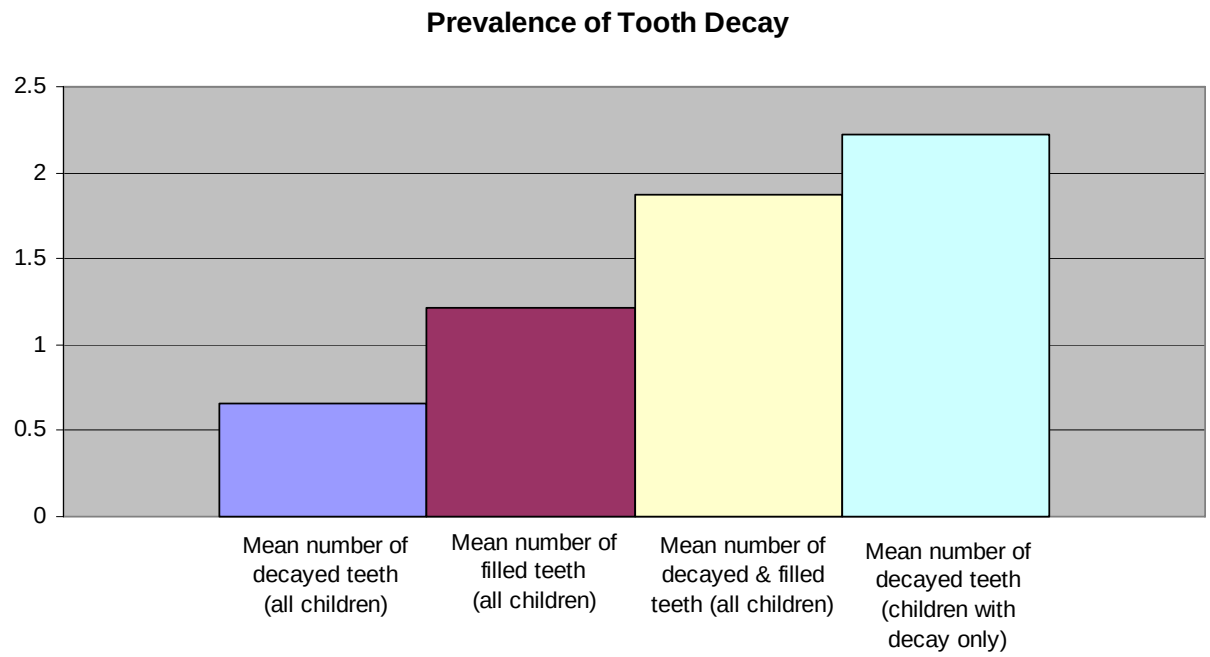
Oral Health Status

Oral health status was determined by a dental exam conducted by a Delaware licensed dentist using the diagnostic criteria outlined in the Association of State and Territorial Dental Director's Basic Screening Surveys: An Approach to Monitoring Community Oral Health. The exam evaluated the presence of dental caries, fillings and sealants and the need, both routine and urgent, for a dental visit. The following graph illustrates the results of the oral health exam by percentage of the children studied.



Forty-six percent of children screened had no history of tooth decay. This is contrasted by the 55 percent that had dental caries experience and the 30 percent that had untreated decay. Thirty percent of children were in need of treatment and less than two percent of them required urgent care. Thirty-four percent of children had sealants in at least one of their permanent molars.

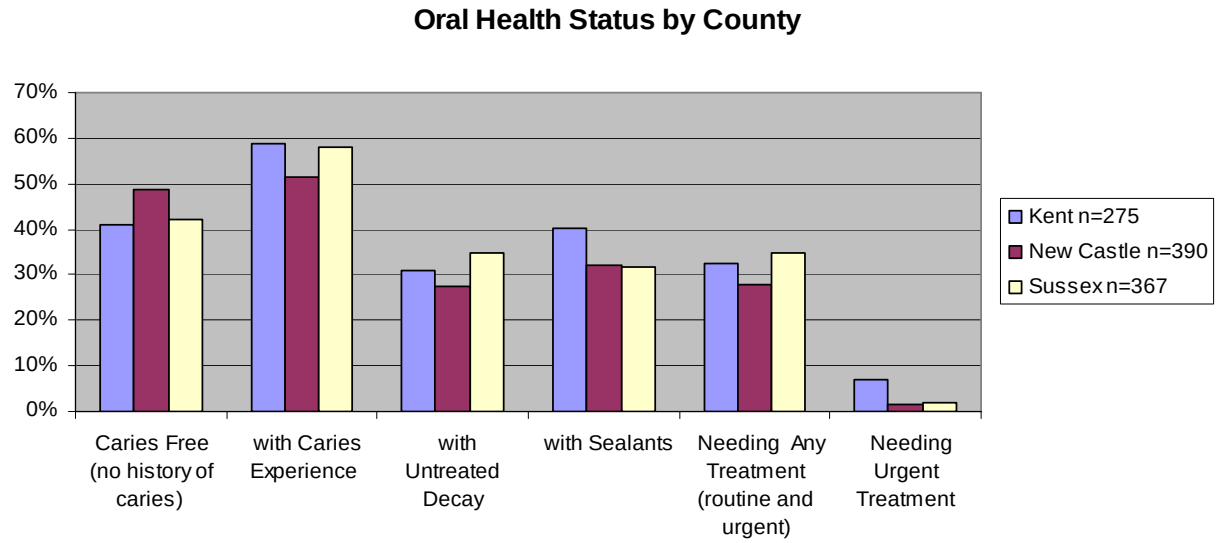
For all of the children screened, the average number of primary and permanent teeth with decay was less than one tooth. However, the average number of teeth that had been filled was slightly greater than one tooth per child. Children who had untreated cavities had an average of more than two primary and permanent teeth that were decayed. The chart below provides an overview of the mean (average) number of teeth with decay—treated and untreated—for all children screened.



Oral Health Status by County

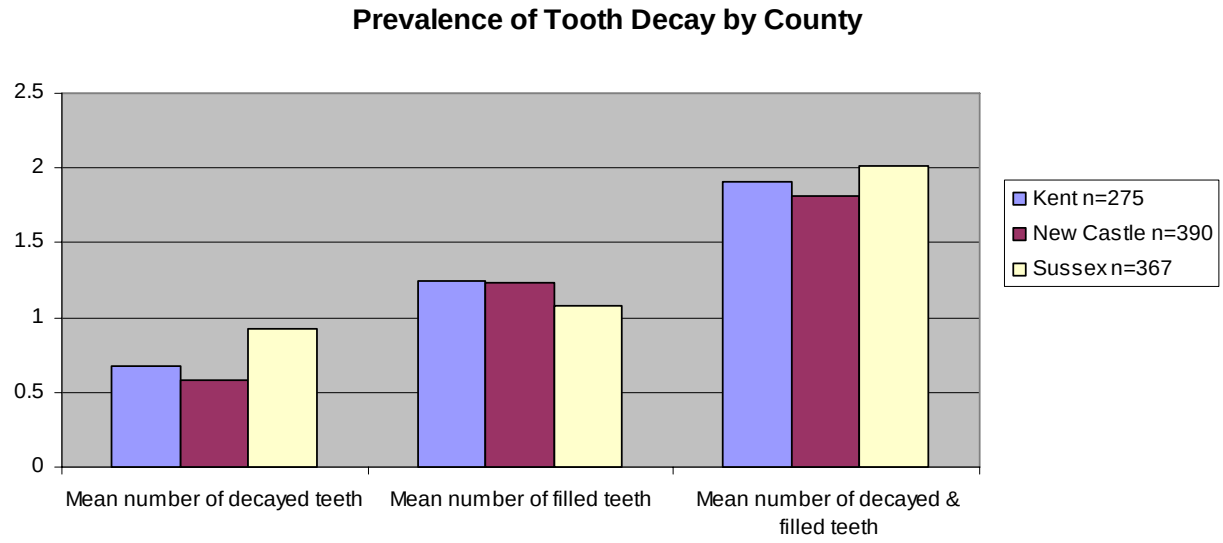
Overall, the county in which a child resides has no statistical significance with respect to oral health status.

The following graph depicts the results of the oral health exam by county. It illustrates the percentage of children who had experience with dental caries—treated and untreated—as well as the prevalence of sealants among third grade children. In addition, it provides an understanding of the current need for treatment—urgent and routine—among children studied.



When looking at oral health status by county, there is no significant variation across the state. Children in New Castle County are somewhat more likely (by approximately 6%) to have no experience of dental caries. While children in Kent County are slightly more likely to have experience with dental caries, they are also about 8 percent more likely to have dental sealants. While children in Sussex County are most likely to have untreated decay, those living in Kent County have three times the need for urgent treatment than children in the other two counties.

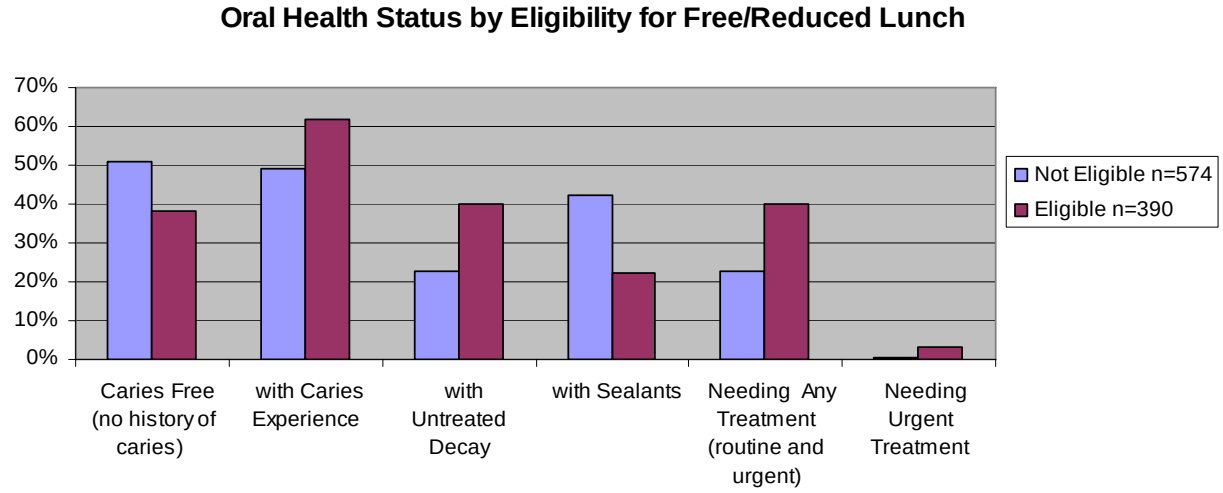
When looking at the prevalence of tooth decay among children screened, on average, there is no significant difference between the counties with regard to decayed and filled teeth. Children in Sussex County have very slightly more decayed and filled teeth, while children in Kent County and New Castle Counties have a slightly higher number of filled teeth on average.



Oral Health Status by Socio-Economic Status

Study finding indicate that when oral health status is stratified income (i.e., whether a child is eligible for the free and reduced school meal program), low income children (those eligible for the program) have a significantly diminished oral health status as compared to higher income children (those not eligible for the program).

The graph below illustrates the variance in oral health status—caries experience, prevalence of sealants and need for treatment—between those eligible and not eligible for the free/reduced school meal program.



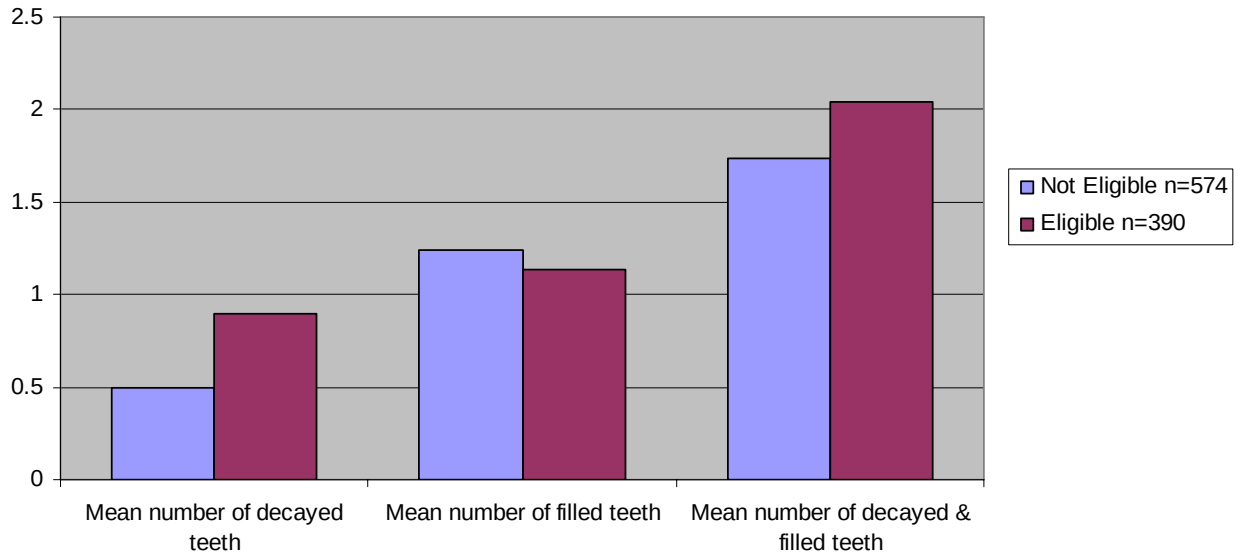
Children eligible for the program were 17 percent more likely to have untreated decay as well as be in need of treatment. Conversely, children not eligible for the program were found in the oral exam to be 13 percent more

likely to be caries free and 20 percent more likely to have sealants in one or more primary and permanent molar. While there were few children in either group needing urgent care, those eligible for the program were 10 times as likely to need urgent care than those not eligible.

The following graph provides an illustration of the mean (average) number of teeth having decay or fillings among children who were and were not eligible for the free/reduced school meal program.

While there is little difference between these groups with respect to the number of filled and decayed and filled teeth, children eligible for the program had nearly twice the number of decayed primary and permanent teeth than did children not eligible for the program.

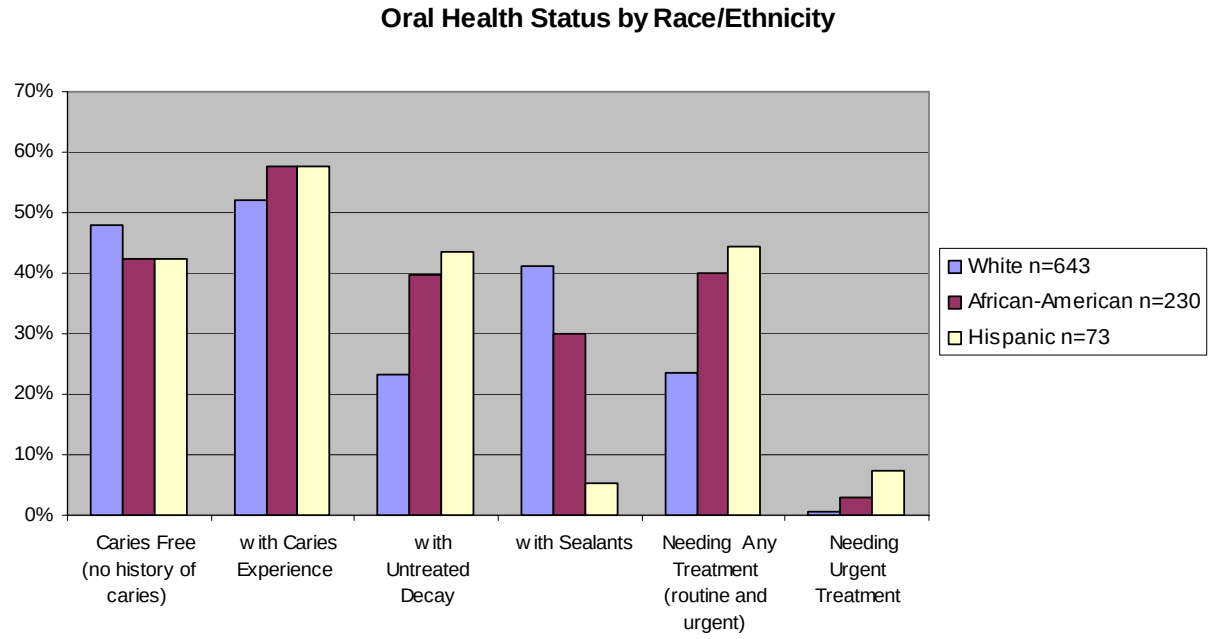
Prevalence of Tooth Decay by Eligibiltiy for Free/Reduced Lunch



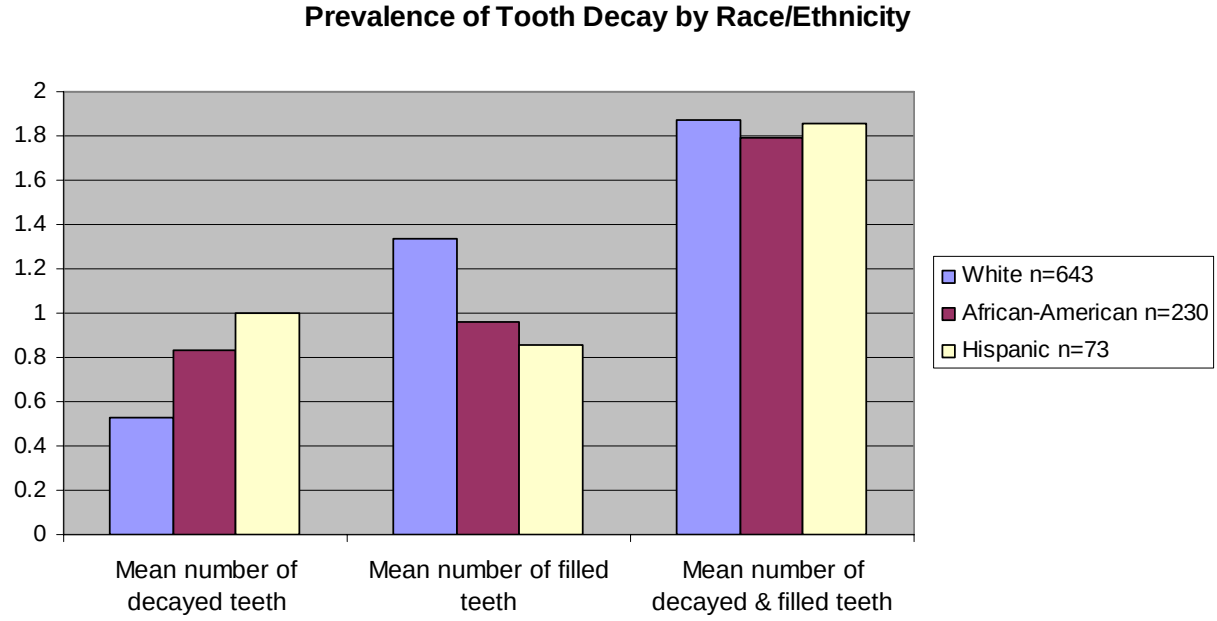
Oral Health Status by Race and Ethnicity

Race and ethnicity were significant factors in the oral health status of children in the study. As illustrated in the chart below, African-American and Hispanic children were two times more likely to have untreated decay and be in need of treatment as were white children. Hispanic children were 6-8 times less likely to have sealants than both African-American and white children. In addition, these children were more than twice as likely as African American children and 15 times more likely than white children to be in urgent need of treatment. However, there was little difference among race/ethnic groups with regard to dental caries experience—whites were

slightly (6%) more likely to be caries free than both Hispanics and African Americans.



With regard to the mean (average) number of decayed teeth discovered during the oral exam, the graph below illustrates that Hispanic children had twice the number of decayed teeth than did white children. White children also had a slightly higher number of filled teeth than other children in the study. There is no significant difference among race/ethnic groups on the average number of primary and permanent teeth decayed and filled.



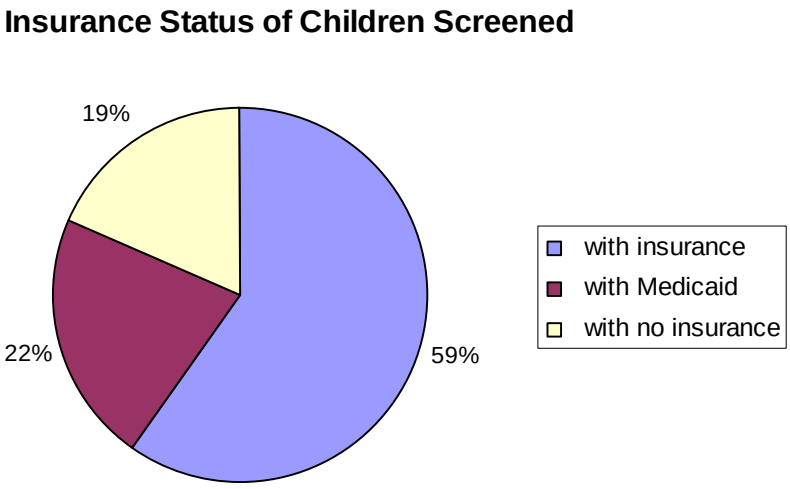
Access to Care

For the purpose of this oral health assessment of third grade children, access to care is measured by dental insurance coverage, frequency of dental visits and reported difficulty getting care. The following sections look at these three areas as well as the impact of race/ethnicity and socio-economic status on them.

Dental Insurance Coverage

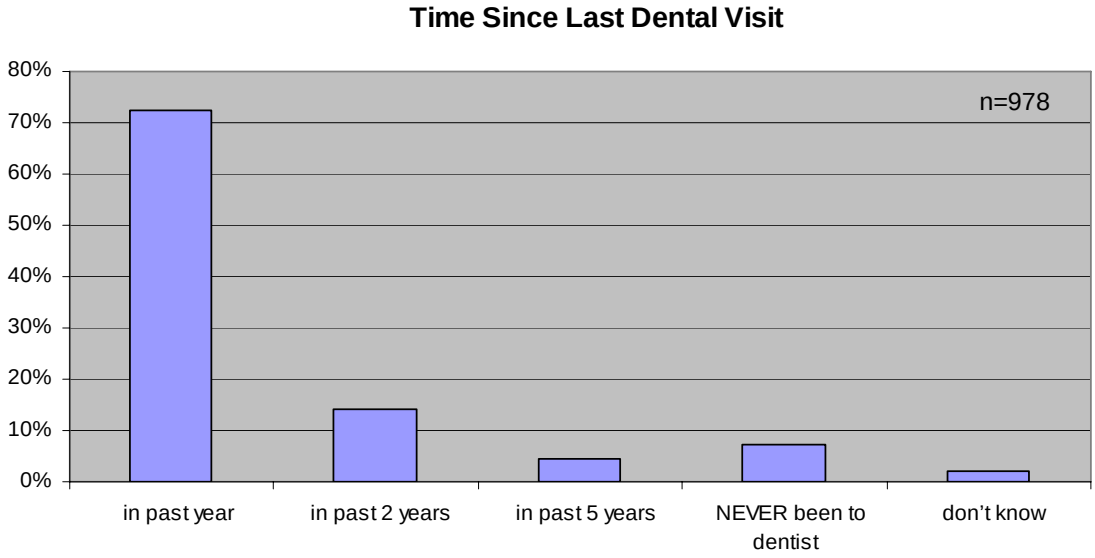
Approximately 81 percent of the survey respondents reported having either private insurance or Medicaid, which covers some or all of their children's dental care. Included is insurance obtained through work, purchased directly or received from government programs, such as Medicaid.

The chart below illustrates the survey responses with respect to the type of dental insurance coverage.



Frequency of Dental Visits

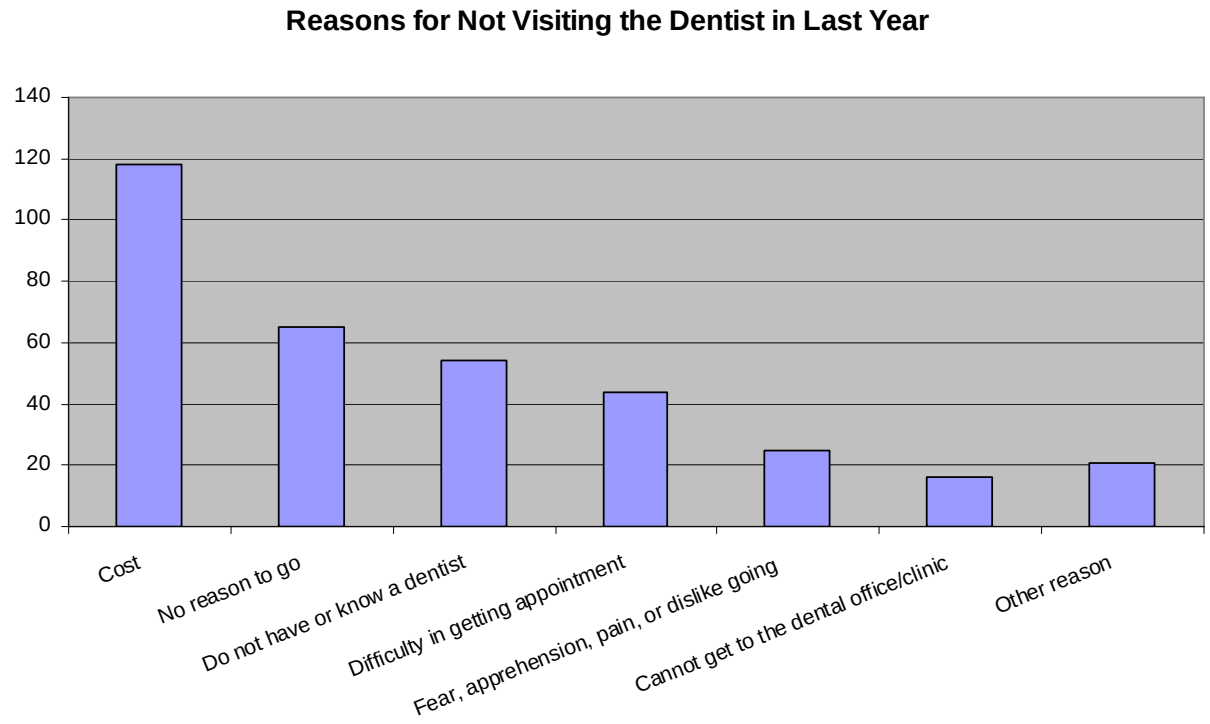
An overwhelmingly large proportion (72 percent) of parents reported that their children had visited the dentist or a dental clinic in the past year. Fourteen percent reported not having been to the dentist for two years and 7 percent reported never having been to the dentist. The following chart depicts the answers parents gave regarding the length of time since their child had last visited the dentist.



The 271 parents who answered that their child had not been to the dentist in the past year, were also asked to indicate the main reason their child had not visited the dentist. The primary reason for not visiting the dentist in the past year was "cost", which was selected by 44 percent of the parents. More than 20 percent of parents also chose "no reason to go" and "do not have or know a dentist" as reasons for their child not visiting a dentist in the previous year.

Sixteen percent of parents cited "difficulty getting an appointment" as a reason for not getting dental care. While the survey offered the option for parents to select "my child is too young to see a dentist" as a reason for not visiting the dentist, none of the respondents chose this answer.

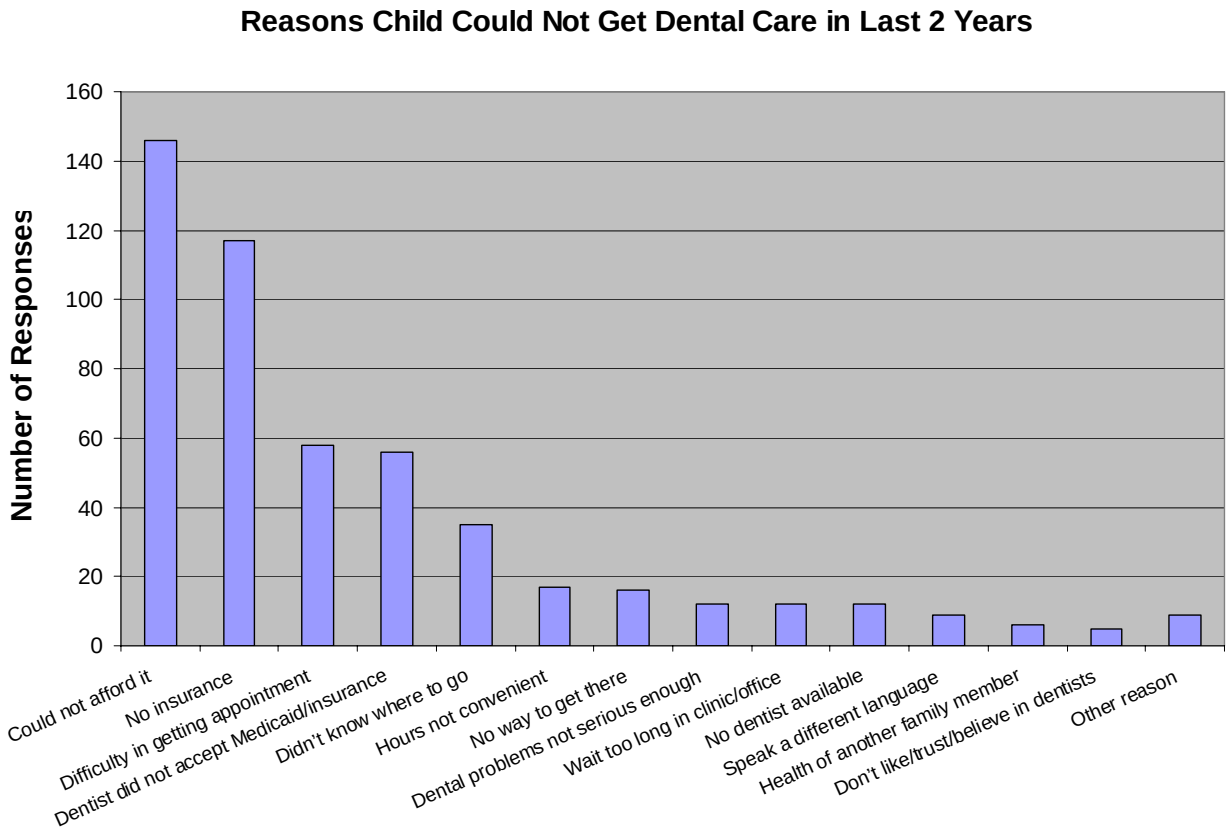
The graph below represents the number of responses to each of the reasons parents selected for not accessing care for their children in the past year. Parents were given the option to select more than one reason.



Difficulty Getting Dental Care

All parents were asked, “During the past two years, was there a time when you wanted dental care for your child but could not get it?” Twenty-eight percent of parents responded that they had wanted care but could not get it.

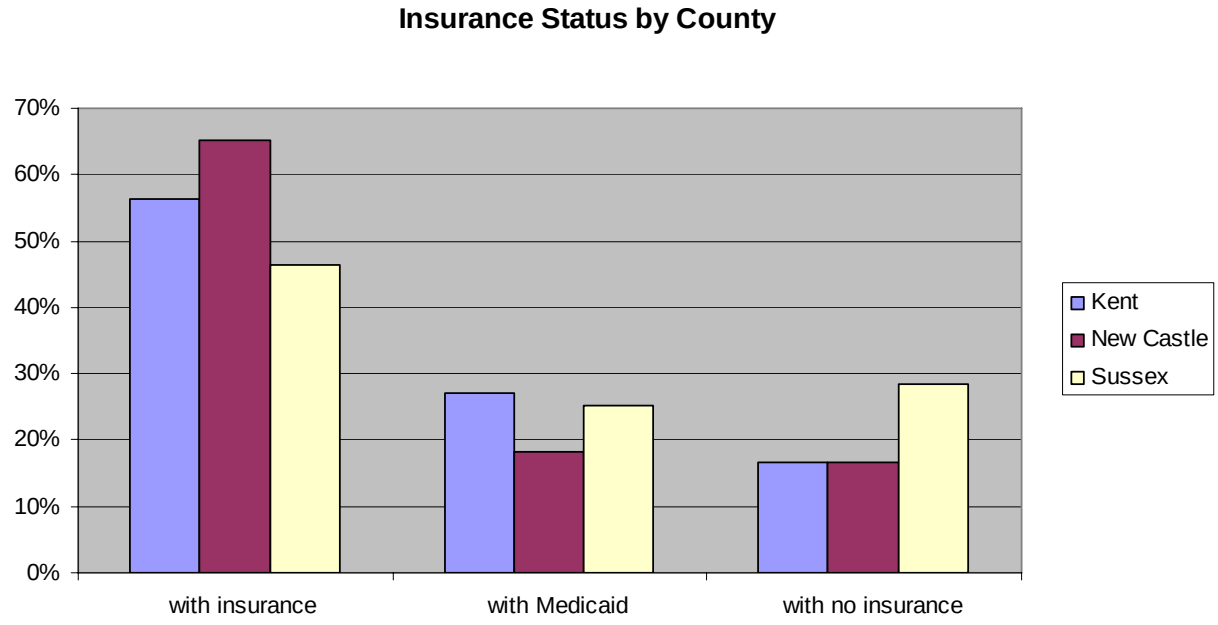
The following graph illustrates the reasons cited by these parents (267) for their child not getting care when they wanted it during the past two years. The main reasons provided were they “could not afford it” (146 responses or 55%) and “no insurance” (117 responses or 44%). “Difficulty getting an appointment” and “dentist did not accept Medicaid/insurance” were reasons given by 22 percent of the parents.



Access to Care by County

When looking at insurance coverage by county of residence, there is a significant variance. Children in New Castle County were nine percent more likely to have private insurance than their counterparts in Kent County and nearly 19 percent more likely than those living in Sussex County. Conversely, children in Sussex County were nearly twice as likely to be uninsured than were children in Kent and New Castle Counties. Kent County had the highest rate of children who received Medicaid.

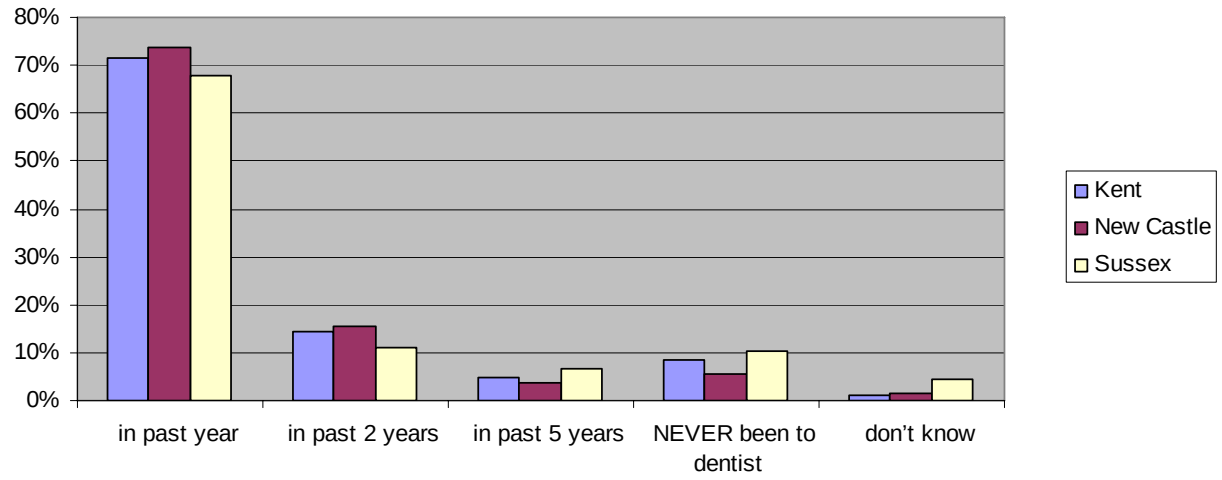
The following graph illustrates the incidence of insurance coverage by type and county.



While parents in Sussex County were least likely to report trouble getting care for their children when they wanted it (see below: children who had trouble access dental care by county), these children were slightly less likely (approximately 5%) to have visited the dentist in the past year. They were also more likely to have never been to the dentist.

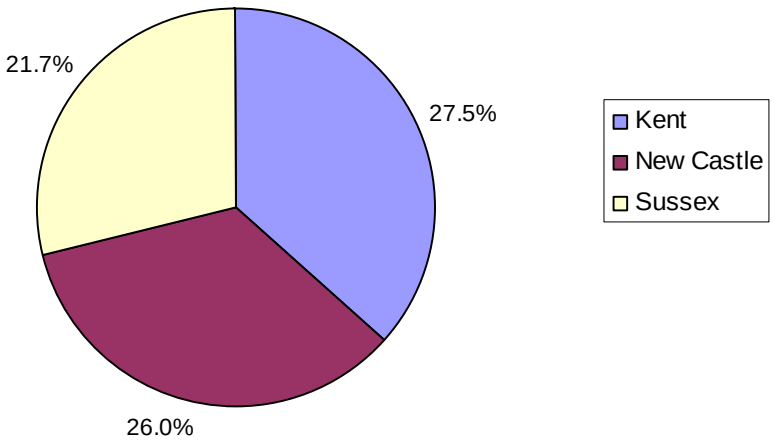
Overall, the graph below illustrates that there is little difference among the counties with respect to the time since third grade children last visited the dentist.

Time Since Last Dental Visit by County



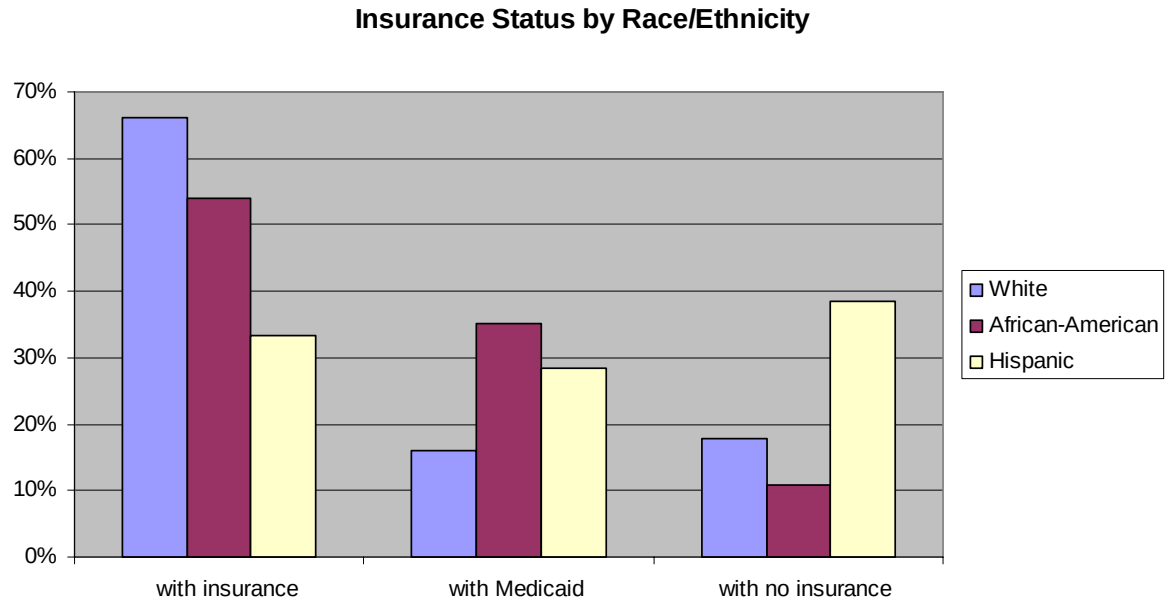
The chart below shows the distribution by county of parents who reported that there was a time during the past two years they wanted dental care for their child but could not get it. There is no significant difference among counties in Delaware with regard to trouble accessing dental care. Parents living in Sussex County, however, reported the least trouble getting care. As discussed above, this may be because fewer sought dental care for their children.

Children Who Had Trouble Accessing Dental Care

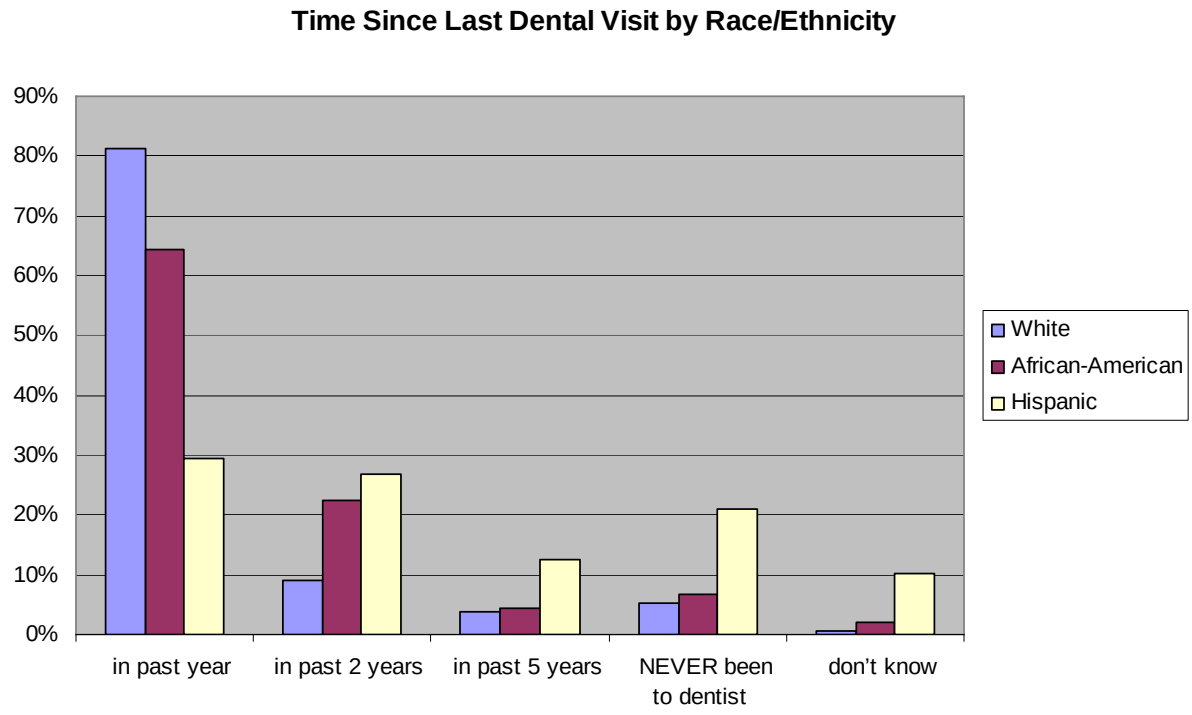


Access to Care by Race and Ethnicity

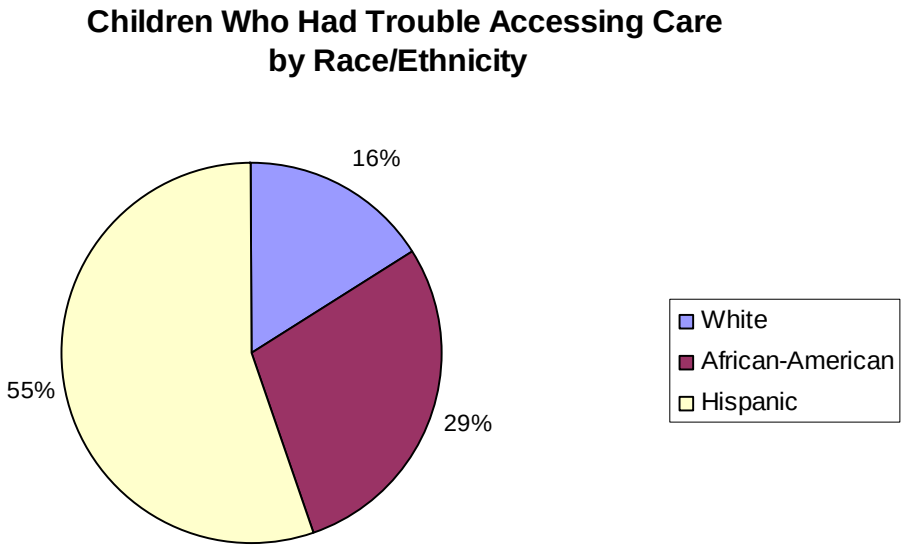
There is a considerable difference between race and ethnic groups regarding dental insurance coverage. Whites are twice as likely to have private dental insurance as are Hispanics. African-Americans are twice as likely to have Medicaid coverage as whites. Hispanics are more than twice as likely as Whites and three times as likely as African-Americans to have no dental insurance.



The graph below shows the difference among race/ethnic groups with regard to the frequency in which they access dental care. Whites were 17 percent more likely than African Americans and twice as likely as Hispanics to have visited the dentist in the past year. Conversely, Hispanics were about four times more likely than African Americans and whites to have never been to the dentist. The graph below illustrates the disparity among race/ethnic groups with regard to the frequency in which they visit the dentist.



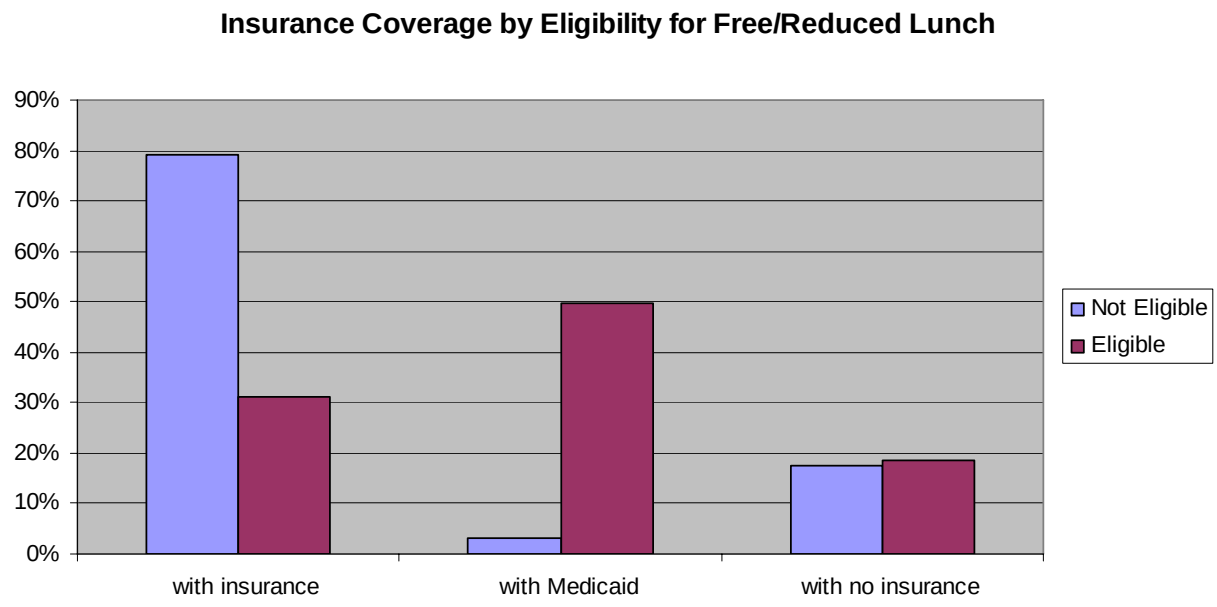
Of the 28 percent of respondents who reported having trouble accessing care for their children, more than half were Hispanic and nearly one-third were African-American.



Access to Care by Socio-Economic Status

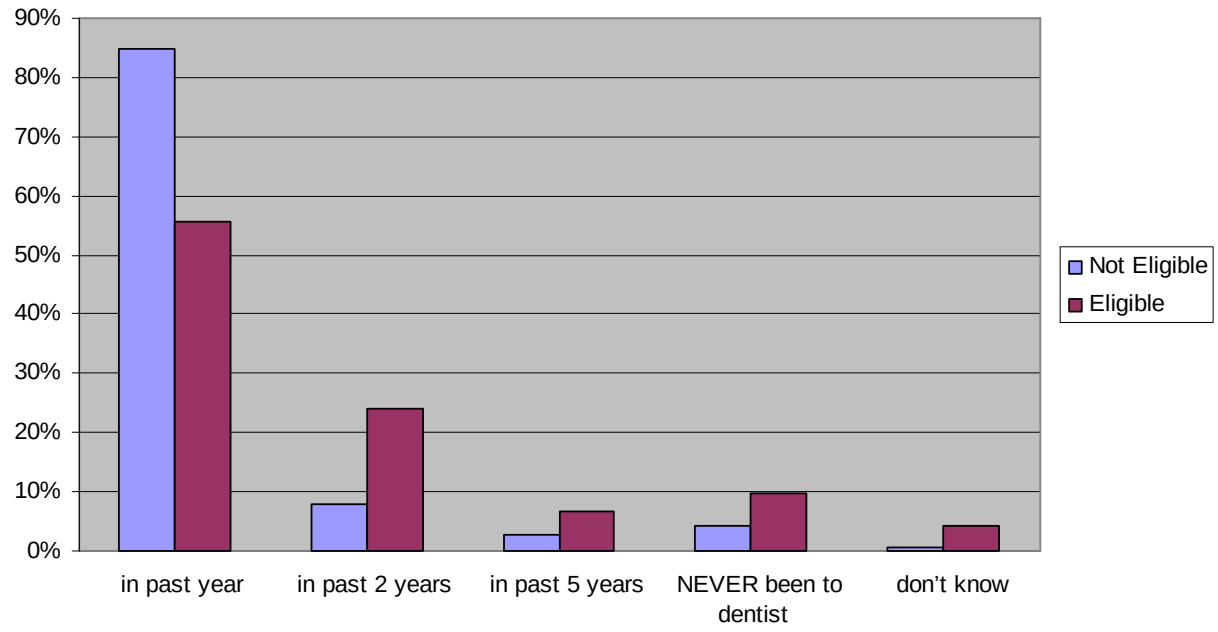
Children eligible for the free/reduced school meal program are two and a half times less likely to have private dental insurance than children who are not eligible for the program. Additionally, children who are eligible for the program are about 17 times more likely to have Medicaid coverage. There is no significant correlation between eligibility for the free/reduced meal program and having no dental insurance coverage.

The graph below depicts the impact of eligibility for the free/reduced meal program on insurance coverage.



As illustrated below, eighty percent of children not eligible for the free/reduced lunch program have had a visit to the dentist in the past year. This is a 30 percent increase over children who are eligible for the program. Twenty-four percent of children eligible for the program have been to the dentist in the past two years, compared to 8 percent of children not eligible. Children eligible for the program are twice as likely never to have been to the dentist as those not eligible for the free/reduced meal program.

Time Since Last Appointment
by Eligibility for Free/Reduced Lunch



Almost 50 percent of parents whose children are eligible for the free/reduced school meal program have experienced difficulty getting dental care for their children when they needed it. This is compared to only 13 percent of children who are not eligible for the program.

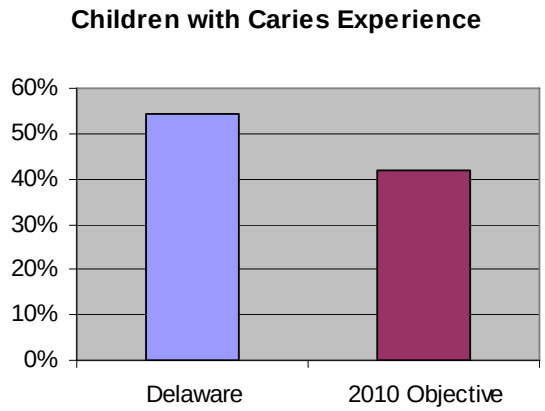
Comparison to Healthy People 2010

The national Healthy People 2010 report presents four objectives to improve oral health status among children. The following section provides a comparison of the findings of the Delaware Oral Health Assessment of Third Grade Children as compared to the national objectives.

Healthy People 2010 Objective: Reduce to 42 percent, the proportion of children with dental caries experience in their primary and permanent teeth.

Delaware Rate: Fifty-five percent of Delaware's third grade children had dental caries experience in their primary and permanent teeth.

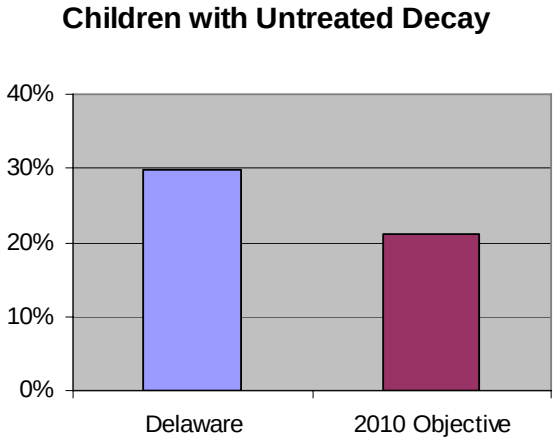
Variance: Delaware's proportion of children who have dental caries experience surpasses the national objective by 13 percent.



Healthy People 2010 Objective: Reduce to 21 percent, the proportion of children with untreated dental decay in primary and permanent teeth.

Delaware Rate: Thirty percent of third grade children in Delaware had untreated dental decay in their primary and permanent teeth.

Variance: Delaware's proportion of children who have untreated tooth decay exceeds the national objective by nine percent.

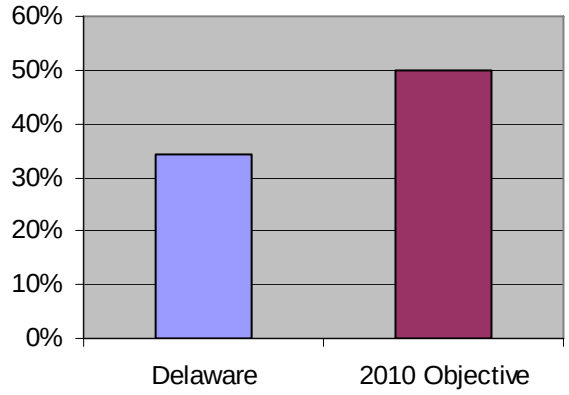


Healthy People 2010 Objective: Increase to 50 percent, the proportion of children who have received dental sealants on their molar teeth.

Delaware Rate: Thirty-four percent of third grade children in Delaware have sealants on at least one of their molars.

Children with Sealants

Variance: Delaware's rate of children with sealants on their molars is 13 percent lower than the national objective.

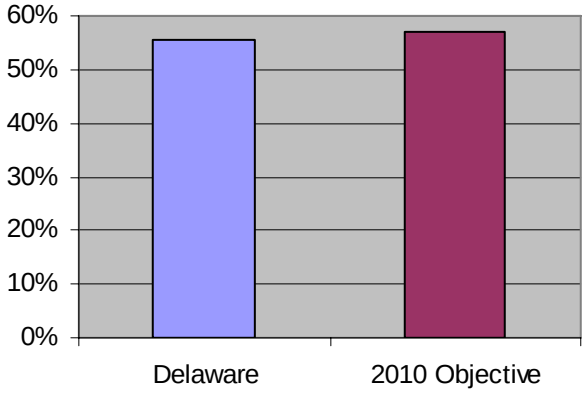


Healthy People 2010 Objective: Increase to 57 percent, the proportion of low-income children and adolescents who received any preventive dental service during the past year.

Delaware Rate: Fifty-six percent of third grade children who are eligible for the free/reduced school meal program in Delaware have visited the dentist in the past year.

Visited the dentist in past year

Variance: Delaware's rate of low income children who have visited the dentist in the past year is very close to the national objective. Delaware is only one percent away from meeting the standard.



Overall, Delaware falls short of the National Healthy People 2010 oral health objectives. Significant improvements in the presence of dental caries, untreated tooth decay and the application of sealants are needed.

Appendix A

Parental Consent and Survey Instrument

Delaware Smile Survey

Please complete this form and return it to your child's teacher tomorrow.

Child's Name: _____

School _____

Is your child eligible for the free or reduced lunch program? ____No ____Yes

Which of the following describes your child (check all that apply):

____ White ____ Black or African American ____ Hispanic or Latino

____ Asian ____ American Indian or Alaska Native ____ Native Hawaiian or Other Pacific Islander

____ Yes, I give permission **for my child to have his/her teeth checked.**

____ No, I do not give permission **for my child to have his/her teeth checked.**

_____ _____

Signature of Parent or Guardian: **Date:**

Please answer these questions to help us learn more about access to dental care. Your answers will remain private and will not be shared. If you do not want to answer the questions, you may still give permission for your child to have his or her teeth checked.

1. Do you have any kind of insurance that pays for some or all of your child's DENTAL care? Include dental insurance obtained through work, purchased directly, as well as government programs like Medicaid. Specify if Medicaid. ____Yes (____Medicaid) ____ No

2. How long has it been since your child last visited a dentist or a dental clinic for any reason? (Check one)

1 ____ Within the past year (go to question 4)
2 ____ Within the past 2 years (go to question 3)
3 ____ Within the past 5 years (go to question 3)
4 ____ My child has never been to the dentist (go to question 3)
5 ____ Don't know/Not sure (go to question 3)

3. What is the main reason your child has NOT visited the dentist in the last year? (Check all that apply)

1 ____ Cost
2 ____ No reason to go (no dental problems)
3 ____ My child is too young to see a dentist
4 ____ Do not have or know a dentist
5 ____ Difficulty in getting appointment
6 ____ Fear, apprehension, pain, or dislike going
7 ____ Cannot get to the dental office/clinic
8 ____ Other reason _____

4. During the past 2 years, was there a time when you wanted dental care for your child but could not get it?

____Yes (go to question 5) ____No (You are finished – thank you) ____Don't know (You are finished)

5. The last time your child could not get the dental care you wanted for him/her, what was the main reason he/she could not get care? (Check all that apply)

1 ____ Could not afford it
2 ____ No insurance
3 ____ Dentist did not accept Medicaid/insurance
4 ____ Dental problems not serious enough
5 ____ Wait too long in clinic/office
6 ____ Difficulty in getting appointment
7 ____ Don't like/trust/believe in dentists
8 ____ No dentist available
9 ____ Didn't know where to go
10 ____ No way to get there
11 ____ Hours not convenient
12 ____ Speak a different language
13 ____ Health of another family member
77 ____ Other reason _____
88 ____ Don't know/don't remember

Appendix B

Community and School Dental Programs

Delaware School Sealant Program

The Delaware Division of Public Health initiated a school sealant program in 2004 with the endorsement and support of the Delaware Department of Education. Dental sealants are a proven and effective method for preventing occlusal tooth decay by coating the developmental grooves and pits of the chewing surfaces with a plastic material that is bonded to the tooth. School sealant programs, along with community water fluoridation, are the only community oral health programs that have demonstrated effectiveness in reducing dental caries.

The Seal a Smile Program is a collaboration among the Division of Public Health, the Delaware State Dental Society, and the Delaware Dental Hygienists' Association. Volunteer dentists provide dental screenings for second and third grade children and volunteer dental hygienists place dental sealants on permanent molars to protect the teeth from decay. Approximately 1000 children will benefit from this program during the 2004-2005 school year. For more information, contact the Delaware Division of Public Health dental program at 302-741-2960.

Give Kids a Smile Program

The Delaware State Dental Society launched the Give Kids a Smile Program in February 2004. The program provides free dental care for low- income children on a selected day in February. Dentists, dental hygienists, dental assistants, and office staff volunteered to provide comprehensive dental care for 150 children. The program will be expanded to three sites in February, 2005. For more information, call the Delaware State Dental Society at 302-368-7634.

Special Smiles

Special Olympics Delaware sponsors the Special Smiles program during its state games in June at the University of Delaware. Volunteer dentists, dental hygienists, and dental assistants provide the athletes with an oral health screening, dental hygiene products, and information on maintaining oral health. Athletes who do not have a dentist are given referrals for a dentist in their area.

Appendix C

Educational Resources

Dental Residency Programs

General Practice Residency and Oral & Maxillofacial Surgery

Wilmington Hospital Dept. of Oral & Maxillofacial Surgery and Hospital Dentistry
501 West 14th Street
Wilmington, DE 19801
(302) 428-2274

Dental Hygiene Education

Delaware Technical & Community College, Allied Health Technology

Dental Hygiene Technology Program
Terry/Owens Campus Extension
Jack F. Owens Campus
P. O. Box 610
Georgetown, DE 19947
(302) 855-5935

Wilmington Campus
333 Shipley Street
Wilmington, DE 19801-2499
(302) 888-5288

Dental Assistant Education

New Castle County Vocational Technical School District

Dental Assisting Program
Delcastle Technical High School
1417 Newport Road
Wilmington, DE 19804
(302) 995-8100

Hodgson Vo-Tech High School
2575 Glasgow Ave.
Newark, DE 19702
(302) 834-0990

Howard High School of Technology
401 E. 12th Street,
Wilmington, DE 19801
(302) 571-5400

Polytech High School

Dental Assisting Technology Program
P.O. Box 97
823 Walnut Shade Road
Woodside, DE 19980
(302) 697-3255

Appendix D

Delaware Dental Clinics

New Castle County

Del Tech Dental Health Center
2nd and Shipley Streets
Wilmington, DE 19801
302-571-5364
All ages

Henrietta Johnson Medical Center
601 New Castle Avenue
Wilmington, DE 19801
302-655-6190
Children over age 3

Nemours Dental Clinic for Seniors
New Castle, Kent, and Sussex
1801 Rockland Rd.
Wilmington, DE 19803
302-651-4400 or
1-800-292-9538
Pierre Toussaint Dental Office
Senior Citizens

Kent & Sussex Counties

Kent Community Health Center
1095 South Bradford Street
Dover, DE 19904
302-678-2000
All ages

Nemours Dental Clinic for Seniors
See listing under New Castle County
Senior Citizens

Sussex Smiles Dental Clinic
Stockley Center
RD 6 Box 1000
Georgetown, DE 19947
302-934-8031
Low income adults

830 North Spruce Street
Wilmington, DE 19801
302-652-8947
Adults ages 18-64

Westside Health
1802 West 4th Street
Wilmington DE 19805
302-655-5822
All ages

Wilmington Hospital Dept. of Oral & Maxillofacial Surgery and Hospital Dentistry
501 West 14th Street
Wilmington, DE 19801
302-428-2274
All ages

Delaware Division of Public Health Dental Clinics

Medicaid Eligible Children

Kent County

Milford State Service Center
11-13 North Church Avenue
Milford, DE 19963
Phone: (302) 422-1372
Fax: (302) 422-1519

Williams State Service Center
805 River Road
Dover, DE 19901
Phone: (302) 739-4755
Fax: (302) 739-7763

Sussex County

Georgetown State Service Center
546 Bedford Street Extension
Georgetown, DE 19947
Phone: (302) 856-5240
Fax: (302) 856-5061

Shipley State Service Center
350 Virginia Avenue
Seaford, DE 19973
(302) 628-2009
Fax: (302) 628-2029

New Castle County

Belvedere State Service Center
310 Kiamensi Road
Wilmington, DE 19804
Phone: (302) 995-8560
Fax: (302) 633-3720

DeLaWarr State Service Center
500 Rogers Road
New Castle, DE 19720
Phone: (302) 577-2973
Fax: (302) 577-5696

Hudson State Service Center
501 Ogletown Road
Newark, DE 19711
Phone: (302) 283-7560
Fax: (302) 283-7556

Porter State Service Center
509 West 8th Street
Wilmington, DE 19801
Phone: (302) 577-3404
Fax: (302) 577-6958

Appendix E

Fluoridated Public Water Supplies

The following Delaware Public Water Systems contain optimal levels of fluoride. These systems comprise approximately 91% of persons served by public water systems in Delaware.

Artesian Water Company
Bayview Beach Improvement Company, Inc.
Blades Water Department
Camden Wyoming Sewer & Water Authority
Chestnut Grove
Clayton Water Department
Delaware Correctional Center
Delmar Water Department
Dover Air Force Base
Dover Water Department
    Includes Tidewater's West Dover District & Carlisle Village
Eagle Meadows
Felton Water Department
Georgetown Water Department
Holly Hills Estates
Lewes Water Department
Long Farm Estates
Methodist Country House
Middletown Water Department
Milford Water Department
Milton Water Department
New Castle Water Department
Newark Water Department
Pepper Ridge
Seaford Water Department
Selbyville Water Department
South Bethany Water Department
Strimel's Trailer Park
Townsend Water Department
United Water Delaware
Wilmington Water Department

Appendix F

Behavioral Risk Factor Surveillance System (BRFSS)

The BRFSS is a state-based system of health surveys that generate information about health risk behaviors, clinical preventive practices, and health care access. It is a cross-sectional telephone survey conducted by state health departments with technical and methodological assistance provided by the United States Center for Disease Control (CDC). Every year, states conduct monthly telephone surveillance using a standardized questionnaire to determine the distribution of risk behaviors and health practices among non-institutionalized adults. The states forward the responses to the CDC, where the monthly data are aggregated for each state. The data are returned to the states and also published on the BRFSS Web site at http://www.cdc.gov/brfss. Questions on oral health were included in the 2002 and 1999 BRFSS. The following is a summary of survey findings

Delaware State-Wide

	Year	Yes	No
Visited the dentist or dental clinic within the past year for any reason	2002	74.5%	25.5%
	1999	71.3%	28.7%

	Year	Yes	No
Had teeth cleaned by the dentist or dental hygienist within the past year	2002	75.5%	24.5%
	1999	74.2%	25.8%

	Year	Yes	No
Lost 6 or more teeth due to decay or gum disease	2002	19.2%	80.8%
	1999	20.2%	79.%

Selected Metropolitan/ Micropolitan Area Risk Trends 2002

Visited the dentist or dental clinic within the past year for any reason

Statistical Area	Yes	No
Dover (Kent County)	69.6%	30.4%
Seaford (Sussex County)	66.7%	33.3%
Wilmington, DE-MD-NJ (New Castle County, DE; Cecil County, MD, Salem County, NJ)	77.4%	22.6%

Had teeth cleaned by the dentist or dental hygienist within the past year

Statistical Area	Yes	No
Dover (Kent County)	71.7%	28.3%
Seaford (Sussex County)	69.2%	30.8%
Wilmington, DE-MD-NJ (New Castle County, DE; Cecil County, MD, Salem County, NJ)	77.6%	22.4%

Lost 6 or more teeth due to decay or gum disease

Statistical Area	Yes	No
Dover (Kent County)	21.2%	78.8%
Seaford (Sussex County)	27.4%	72.6%
Wilmington, DE-MD-NJ (New Castle County, DE; Cecil County, MD, Salem County, NJ)	16.3%	83.7%