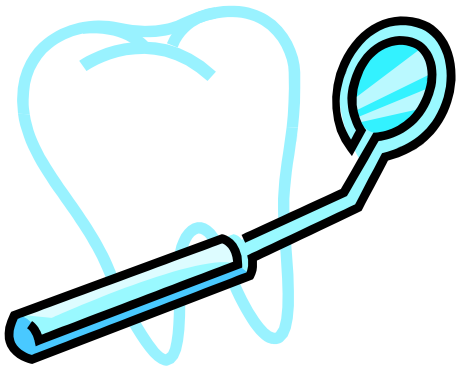
ORAL HEALTH SURVEY OF MARYLAND SCHOOL CHILDREN, 2011-2012



Mark D. Macek, D.D.S., Dr.P.H.
Susan Coller, M.A.
Haiyan Chen, M.D., M.S., Ph.D.
Richard J. Manski, D.D.S., M.B.A., Ph.D.
Michael Manz, D.D.S., Dr.P.H.
Daphene Altema-Johnson, M.B.A., M.P.H.
Harry S. Goodman, D.M.D., M.P.H.

ORAL HEALTH SURVEY OF MARYLAND SCHOOL CHILDREN, 2011-2012

Mark D. Macek, D.D.S., Dr.P.H.
Susan Coller, M.A.
Haiyan Chen, M.D., M.S., Ph.D.
Richard J. Manski, D.D.S., M.B.A., Ph.D.
Michael Manz, D.D.S., Dr.P.H.
Daphene Altema-Johnson, M.B.A., M.P.H.
Harry S. Goodman, D.M.D., M.P.H.

Suggested citation:
Macek MD, Coller S, Chen H, Manski RJ, Manz M, Altema-Johnson D, Goodman HS. Oral health survey of Maryland school children, 2011-2012. Baltimore, MD: University of Maryland School of Dentistry, 2013.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF TABLES (CONTINUED)

LIST OF TABLES (CONTINUED)

LIST OF APPENDICES

ACKNOWLEDGMENTS

The *Oral Health Survey of Maryland School Children, 2011-2012* was a labor-intensive project that spanned three years and involved countless persons who provided administrative assistance, technical support, and tireless commitment. We would like to take this opportunity to thank the many individuals who thoughtfully guided this project to completion.

At the Maryland State Department of Education, we would like to especially acknowledge the former State Superintendent of Schools, Dr. Nancy Grasmick, for her invaluable support. We would also like to thank Ms. Donna Mazyck and Ms. Alicia Mezu, Health Services Specialists, who were very helpful contacts.

We also extend our appreciation to the Association of State and Territorial Dental Directors for providing their technical assistance for this project, specifically in the area of sampling design and application.

At the local level, we would like to thank the administrators and teachers from each of the participating school districts, as well as the nurses, support staff, and other key personnel, and volunteers from each school. Without their assistance, the project would not have been possible.

We would like to thank our dentist examiners. We commend Drs. Carol Anderson, Ronald Chenette, Sidney Fogelman, William Maas, Robert Shub, and Mark Wagner for their enthusiasm and dedication to the study. Our thanks, also, to Ms. Janet Weber and Mr. Bradley Langley, who assisted us with data collection.

We express our appreciation to Ms. Patty Warren, for her many contributions to the study. She skillfully handled transportation arrangements and also served as the primary data recorder.

We offer our special thanks to Ms. Darlene Watkins and Ms. Carol Stilwell, at the University of Maryland School of Dentistry, who provided administrative support and handled many details associated with this project.

We are grateful to Ms. Laura Kozak and her staff at the Office of External Affairs, University of Maryland, Baltimore, for producing the printed elements of the Information Packet and other supporting documents.

Finally, we would like to acknowledge The State of Maryland Department of Health and Mental Hygiene which funded this project.

The *Oral Health Survey of Maryland School Children, 2011-2012* was funded by the Maryland Department of Health and Mental Hygiene.

EXECUTIVE SUMMARY

Dental caries is the most common chronic disease affecting children. According to the National Health and Nutrition Examination Survey, 42 percent of children between the ages of 2 and 11 have experienced dental caries in their primary teeth (7).

Senate Bill 590 (Ch. 113 of the Acts of 1998) required the Department of Health and Mental Hygiene's Office of Oral Health (the Office) to conduct a statewide follow-up survey on the oral health status of school children in 2000. This report is a result of SB 181 (2007) (Ch. 527 of the Acts of 2007, Health - General §13-2506), which required the Office to conduct yet another survey by June 1, 2011. Recognizing these surveys as valuable tools in assessment and planning, the Office has exceeded statutory requirements by also conducting this survey in 2005. Each survey has included: (1) a health questionnaire that is sent to parents to assess the child's oral health, including access to dental services; (2) a screening to determine the current oral health status of the child; and (3) a report sent to the parents with the child's screening results.

The goal of the statewide oral health assessment is to appraise oral health status and access to dental care for kindergarten and third grade public school students in the State. A total of 1,723 students in 52 schools participated in the survey, and 1,486 in the oral health screening examinations. Data was compiled by region: Central Baltimore, Central D.C. (except Montgomery County), Eastern Shore, Southern (Maryland), and Western (Maryland).

Overall the population surveyed exceeded the national averages for percentage of dental visits, dental sealants, and untreated tooth decay over the past decade. The number of children in Maryland with untreated tooth decay decreased by approximately 41 percent between 2001 and 2011. In addition, Maryland has already exceeded by 12 percent the target recommended by Healthy People 2020, an initiative of the U.S. Department of Health and

Human Services that provides science-based, 10-year national objectives for improving the health of all Americans.

Other key findings include:

- 83 percent of school children in the State reported seeing a dentist within the last year, compared to 78 percent at the national level.
- 75 percent of school children in the State reported having a usual source of dental care.
- About 40 percent of third grade school children in the State had at least one dental sealant on their permanent first molars, compared to 32 percent nationwide.
- About 14 percent of school children in the State had untreated dental caries, compared to 23 percent in 2000-2001.

The oral health status of Maryland school children has improved over the last decade. This progress may be attributable to many factors, including a series of reforms instituted after the death of a 12 year-old Maryland child due to an untreated dental infection. Following this tragic event, Maryland committed itself to preventing another such case. Resulting reforms have improved access to care, prompted a statewide expansion of public health preventive programs, and increased community awareness through programs like Maryland's *Healthy Teeth, Healthy Kids* campaign, which offers culturally literate oral health information to high-risk, low-income families. In addition to bringing about significant improvements in the oral health of school children, the collective impact of these efforts has earned Maryland recognition as a national leader in oral health.

BACKGROUND AND PURPOSE

The Office of Oral Health at the Maryland Department of Health and Mental Hygiene contracted with the Department of Health Promotion and Policy at the University of Maryland School of Dentistry to conduct the *Oral Health Survey of Maryland School Children 2011-2012 (Oral Health Survey)*. A Memorandum of Understanding, dated July 1, 2010, indicated that services were to commence on or about September 1, 2010 and terminate on June 30, 2013.

Pursuant to Maryland Health-General Code Ann. § 13-2506, the Department of Health and Mental Hygiene is required to conduct a statewide follow-up survey of the oral health status of school children in Maryland. The sample for the study, consistent with recommendations from the Centers for Disease Control and Prevention (CDC) and the Association of State and Territorial Dental Directors (ASTDD), was selected so that the resulting estimates would be representative of all Maryland public school children in kindergarten and third grade.

The *Oral Health Survey* for 2011-2012 was a follow-up to earlier oral health surveillance projects conducted in 1994-1995 (1), 2000-2001 (2), and 2005-2006 (3). The present project utilized methodology that was adapted from the earlier studies. The consistency in approach allowed for temporal oral health surveillance. However, the 2005-2006 project did not calculate caries experience. Therefore, data for caries experience is not available for 2005-2006.

Findings from the *Oral Health Survey* are intended to facilitate personnel and public program planning, as well as funding allocations. In addition, findings are useful for assessing the current status of oral health and other health-related issues, including access to preventive and treatment services.

The study period spanned three years. Activities in the first year consisted of planning for the survey, designing the project, hiring personnel, purchasing equipment and supplies, developing materials, contacting school superintendents/principals and

scheduling visits with appropriate local school personnel. Also, during the first year, commitment to conduct the survey was secured from then Maryland State Superintendent of Schools, Dr. Nancy Grasmick.

Activities in the second year consisted of sample selection and data collection. Data analysis and report generation occurred during the third year. In July of 2013, a final report was presented to the Office of Oral Health.

METHODS

The *Oral Health Survey* consisted of two components, a health survey and an oral screening examination. The following paragraphs describe the methods and study design used for each component and the study, overall. A list of key acronyms used throughout this report is included as Appendix O (p. 173).

Institutional Review Board Approval

Institutional Review Board (IRB) approval for the project was required by the University of Maryland, Baltimore and the Maryland Department of Health and Mental Hygiene. IRB approval was granted initially by both IRBs and then again during the second and third years of the study (Appendix A, p. 82). Consent forms were printed two times, reflecting the annual IRB expiration dates (Appendix B, p. 113).

Project Coordinator

The Project Coordinator was responsible for general oversight and administration of the project. Her responsibilities included the following: contacting state and local school officials; scheduling school visits; recruiting dental examiners and arranging for their compensation; coordinating training of the dental examiners; managing equipment and supply purchases; developing materials; arranging for the materials to be delivered to the sample schools prior to the site visit; ensuring the data was collected properly; handling

budget oversight; responding to inquiries from family members of children who were screened; and assisting in the production of final reports, as required.

Clearance from State Superintendent

During the first year of the study period (preparation stage), Dr. Nancy Grasmick (retired in 2011), Maryland State Superintendent of Schools, was contacted to enlist her support for the project. After reviewing the study's purpose, she agreed to promote it among Maryland's public elementary schools. Dr. Grasmick provided a letter (Appendix C, p. 130) addressed to the superintendents of each school district requesting their participation in the study. In her letter, she described the project and referenced the 2005-2006 version of the study (3). Dr. Grasmick's letter was also included in the information packet sent to each of the sample schools (described later in this report).

Support of the Maryland State Department of Education (MSDE) was critical to the success of the project. Gaining access to the elementary schools, parents, and school children would have been very difficult without the support of the State Superintendent of Schools and MSDE staff.

Letter of Support from Office of Oral Health

Also, during the first year of the study, Dr. Harry Goodman, Director of the Office of Oral Health at the Maryland Department of Health and Mental Hygiene, was asked to write a letter supporting the project. His letter (Appendix D, p. 132) was also included in an information packet sent to each of the sample schools.

Sample Design

Children were selected for the *Oral Health Survey* through a stratified, probability-proportional-to-size (PPS) probability sampling method. In planning for the survey, it was determined that resources allowed for selection and screening at 60 schools, statewide.

Regional level estimates of oral health indicators were desired. There are 5 geographic regions (Western, Eastern Shore, Central Baltimore, Central D.C., and Southern) in the state, which vary significantly in population size, so disproportionate stratified sampling was used to attain enough school selections in the smaller regions (Western, Eastern Shore, and Southern) to achieve better precision of oral health indicator estimates, while retaining good precision of overall state estimates.

There were 24 county/school districts in the 5 regions of the state (see Figure 1 and Table 1). Sampling ultimately involved public elementary schools in 23 of 24 school districts, as one school district (Montgomery County) declined participation. Separate (stratified) sampling was done for each of the five regions of the state. School selection was systematic PPS from ordered lists of schools to achieve implicit stratification by ordering on free/reduced lunch rates in the three smaller regions, and by county and free/reduced lunch rates in the two largest regions (Central Baltimore and Central D.C.) to achieve additional geographic stratification in these larger regions. Sampling used kindergarten and third grade enrollment numbers to select a single set of schools for screening of both kindergarten and third grade students for logistical efficiency of arranging and conducting the school screenings. A total of 52 schools were selected in the participating school districts.

Replacements were selected for any schools that declined to participate in the survey from the original sample of schools. Replacement schools were selected using a random probability proportional to size selection method from the same sampling interval as a declining school to ensure the replacement school was similar, both geographically and in free/reduced lunch percentage, to the abstaining school. Of the 52 schools selected in the participating school districts, 50 original or replacement selections ultimately consented and participated.

Communicating with Local Department of Education Superintendents

The Project Coordinator identified the superintendents whose jurisdictions were in the sample. She wrote a letter of introduction (Appendix E, p. 134) to each official and provided a description of the project, including sample copies of materials that would be sent to school officials and the parents/guardians of children in kindergarten and third grade.

The intent of the letter was to introduce the study and request permission to administer the survey. The letter called attention to oral health problems often found in elementary school children, especially those in the third grade. In addition to the letter of introduction, the letters of support from Drs. Grasmick and Goodman were also enclosed. School superintendents were encouraged to participate in the study by referencing the benefits that would occur, such as determining oral health needs in their locales and identifying resources in their communities.

About two weeks following the mailing, initial follow-up telephone contacts to the superintendents were made by the Project Coordinator. The purpose of the calls was to provide additional information, answer questions, and obtain the names and contact information of principals and other key contacts among sample schools.

Communication and coordination with the superintendents was time intensive, particularly as initial contact was attempted during the summer holiday. During this period, several superintendents were on vacation, working off-site, or attending meetings. In some cases, the offices had limited staff/hours during the summer months. More than once, the correspondence that the Project Coordinator had initiated was lost or misplaced, and the process had to be started again. In time, most of the school district superintendents agreed to take part in the study and provided contact names, without question. Others asked for additional information in order to answer specific questions and/or concerns.

Participation in the Study

Twenty one (21) of the 24 school districts agreed to participate without further question or concern. However, three school districts requested additional information, as well as proof of university- and health department-based IRB approval prior to supporting the study. These school districts were Anne Arundel County, Baltimore City, and Montgomery County. The Coordinator of Research, Division of Assessment, Accountability and Research with Anne Arundel County Public Schools informed us that his office required completion of an *Application to Conduct Research* before our screening request could be honored. Mandated under their Board of Education research policy guidelines, submission of the application was an important component of the County's formal review process. The document was completed, submitted, and accepted.

The Baltimore City Public Schools Division of Research, Evaluation, Assessment and Accountability also requested additional information about the study. We were informed that the survey request would not be reviewed until a *Research Application Packet* was submitted and approved. The completed application was submitted by the Principal Investigator, and approval to proceed was granted by the Baltimore City Public Schools Chief Accountability Officer.

The third school district, Montgomery County, also requested additional documentation for review. The lengthy application was submitted and reviewed but the request was ultimately denied. The Montgomery County School District stated that no "research-related" activities would be allowed during regular school hours. The school district stated that it would only allow the study to proceed if the data collection was conducted either before or after regular school hours; a process that was neither logistically feasible nor practically suitable for the students and their families. Given that it was not reasonable to proceed, the study team withdrew its application. This decision resulted in a loss of eight schools that had been selected as part of the sample from that school district.

Establishing the Data Collection Schedule

Once school districts provided their approval to proceed, the Project Coordinator contacted the principals of the selected schools by telephone. During the calls, she described the project and established a tentative school visit date. Often, the process of securing a date required several calls. In some cases, the contact persons had not been briefed by their superintendents about the project, and they were unsure about how to proceed. In other cases, the principals were otherwise occupied with daily tasks and responsibilities.

Once the principal or contact person was contacted, other obstacles to selecting a school visit date were sometimes encountered. For example, the study competed with several other school activities, including screening for vision and hearing, as well as the administration of standardized achievement tests. In these cases, it was necessary to inform school personnel that the study was important because the results had the potential of maximizing students' ability to concentrate following the removal of oral pain and improving school attendance following the identification and referral of dental problems.

Items Requested by the Study Team

After the school visit date was scheduled, the Project Coordinator sent a letter to each principal confirming the arrangements. The letter included an introduction to the project (Appendix F, p. 137) and a sample packet of information that would be sent home to the parents/guardians of children in kindergarten and third grade. The letter to the principals also included a list of items that the study team requested on the day of the school visit (Appendix G, p. 139). Requested items included a room with accessible electrical outlets, heavy duty electrical cords, several tables for supplies and record keeping, as well as chairs for the dental team and the children who were waiting to be screened. The letter stated that a quiet, well-lit, private room/area was desired.

The letter also asked that volunteers/school aides be available to assist the dental team. Previous experience revealed that volunteers/aides would be useful in escorting children to and from their classrooms, as they would be more familiar with the school's layout than members of the dental team. Fortunately, most schools provided someone to help.

Information Packet

An Information Packet (Appendix H, p. 141) was designed specifically for the study. The packet was intended to be sent home to the parents/guardians of children in kindergarten and third grade. It was meant to describe the study, provide useful information, and document consent. The packet consisted of a 9"x12" white envelope, printed with color graphics and text (English and Spanish versions were available) and containing the following documents:

- Letter of invitation to parents/guardians;
- *Frequently Asked Questions* flyer, printed on blue paper;
- Two copies of the consent form, printed on blue and yellow paper, respectively (previously described - Appendix B, p. 113);
- Two copies of the Health Insurance Portability and Accountability Act (HIPAA) forms, printed on blue and yellow paper, respectively; and
- Health survey, printed on yellow paper.

As noted above, two copies of the consent and HIPAA forms were included in the packet. The instructions contained on the outside of the envelope asked parents/guardians to sign and date the consent and HIPAA forms and return the yellow copies to the child's teacher. The instructions also asked parents/guardians to retain the blue copies of the consent and HIPAA forms, along with the blue *Frequently Asked Questions* flyer, for their records.

In order for a child to participate in the screening, signed consent and HIPAA forms were required. The consent form granted permission to have the child participate in the study and the HIPAA form granted permission to have the child's dental screening examination results shared with the school nurse.

Parents/guardians were asked to complete the health survey and return it in the packet, even if their child was not going to participate in the oral screening examination component of the study. The packet was to be sealed prior to returning it to the school in order to protect the confidentiality of the enclosed materials. Generally, the packet was turned in to the homeroom teacher who gave it to the school nurse or other contact person at the school. School officials were asked to keep the sealed packets in a secure area until the dental team arrived on the school visit date.

Delivering Packets to the Schools

A courier service was contracted to deliver materials to each location approximately three weeks prior to the school visit date. The Project Coordinator determined the number of Information Packets that were to be delivered to each school by speaking by telephone with the school nurse or other administrative staff person. During this telephone conversation, the Project Coordinator also determined how many packets would be required in Spanish. Additional copies of the Information Packet were always sent to the schools in the event some envelopes were lost and/or additional copies were requested for school files. To ensure that deliveries had taken place, contact persons at each school were asked to contact the Project Coordinator when the packets arrived. This process reduced the likelihood that packets would be delivered to the school and inadvertently misplaced (as happened occasionally).

Generally, the Information Packets were distributed by classroom teachers to the school children as soon as the packets arrived. The classroom teachers then instructed the children to return the completed forms in their sealed envelope as soon as possible.

Translation of Materials

All written materials for the project that were to be seen by parents/guardians were translated from English into Spanish. Approximately 10 percent of the printed documents were made available in Spanish.

One school requested a copy of the materials in Vietnamese. While we were unable to provide a translation, a student enrolled at the school had a translator available who was able to translate the written materials accordingly.

Equipment and Supplies

As the dental screening examinations were conducted on site, the study required portable dental equipment. Included among these items were a portable dental chair, head lamps, and several dollies for transporting the equipment and supplies.

Supplies for the study were divided into two main categories, clerical and clinical. Clerical supplies included items such as paper, folders, pens and pencils, and other similar items. The clinical supplies included items such as cotton gauze, disinfectants, paper goods, wipes, hand sanitizers, facial tissue, paper towels, table covers, disposable plastic dental mirrors, disposable examination gowns, safety goggles, mouth masks, and other similar items. In addition, every screened child received a toothbrush suitable for his or her age. These toothbrushes were also included among the necessary supplies ordered for the project. A list of selected equipment and supplies is available in the appendix section of this report (Appendix I, p. 156).

Dental Screening Examinations

The dental team responsible for administering the oral screening examination component of the project consisted of a dentist examiner, data recorder, and the Project Coordinator. Five dental examiners and four recorders were recruited for the project. All of the dentist examiners were licensed in Maryland and all were faculty members of the

University of Maryland School of Dentistry. Data recorders were trained to use the computer-based data entry program and to assist with paperwork and set-up.

While the Project Coordinator was at the school site, she served as the contact person with the school's staff and she also helped with paperwork, distribution of toothbrushes, and other necessary and related functions. Upon arriving at the school on the visit date, the Project Coordinator met with the designated contact person and introduced members of the dental team. The volunteer or aide usually escorted the group to the designated screening area. Once the equipment and supplies were transported from the vehicles to the designated room, set-up took approximately 30 minutes.

While the dentist examiner and data recorder unpacked the supplies and arranged the room to maximize efficiency, the Project Coordinator reviewed the packets that the contact person had been holding until the arrival of the dental team. The purpose of the review was to determine if the parent/guardian had signed the consent and HIPAA forms and completed the questionnaire. No child was screened unless the consent form was signed. Screening examination results were not shared with school officials unless the HIPAA form was also signed by the parent/guardian.

Once the team was ready to commence the screening examinations, approximately 5-6 children were escorted by the volunteer to the screening room. Each child was given his or her dental packet (containing the signed consent and HIPAA forms and the completed health survey) to hand to the dental team when his or her turn was called. A sequential number was written at the top of the child's packet before the screening began, and the same number was placed on the questionnaire and the report of findings ("report card") (Appendix J, p. 158) once the screening began. The coding was used so that all of the forms related to the same child and anonymity could be maintained.

Puzzles (Appendix K, p. 161) were made available to keep the children occupied while they were waiting to be screened. Two different puzzles were available; one suitable for the younger children and one suitable for the older ones. Students were

encouraged to complete the puzzles while they were waiting. Both puzzles were very popular.

As the dentist performed the dental screening examination, findings were conveyed to the data recorder who entered the information into a Windows-based database software program. The screening examination focused on assessments of dental caries (disease that causes decay and cavities in teeth), dental sealants, and treatment need (described later in this report). Once the screening examination was completed, each child received a toothbrush, a report of findings ("report card"), and a summary of dental resources in their area (Appendix L, p. 164). These items were placed in a clear plastic bag with zip closure ordered especially for this project. The children were encouraged to take the bag home and share the information with their family. The children were then escorted back to their classrooms by the volunteer/aide.

For recording treatment needs, the dentist examiner could select from among the following categories on the report card:

1. A dental infection or abscess – child needs immediate attention;
2. Tooth decay – child should be taken to a dentist in next 4-6 weeks;
3. Need for a dental cleaning – child should see a dentist in next 4-6 weeks; or
4. No obvious dental problems – child should go for regular dental checkups every 6 months.

Combination codes were also allowed, such as when dental caries and the need for a dental cleaning occurred concurrently.

One copy of the report card was sent home with each child, as previously described. The second copy was given to the school nurse (when the HIPAA form had been signed by the parent/guardian). The Project Coordinator stressed the importance of follow-up communication with family members, as well as referrals to a location in the jurisdiction if the child was an episodic user of dental services. The third copy was retained by the Project Coordinator.

In addition to the report card, the Project Coordinator gave the school nurse a summary of the day's events (Appendix M, p. 169). The summary described the number of children who were screened, with corresponding categorization of treatment needs, as well as the number of children who would benefit from dental sealants. The summary also described how many school children did not assent to the screening and/or were absent from school.

After the screening examinations were completed, and prior to leaving the school, the Project Coordinator and data recorder reviewed the inventory list to determine which supplies needed to be replaced.

Resource Information

In addition to the materials described above, each school nurse was presented with a copy of the *Oral Health Resource Guide, 2011* (*Resource Guide*), a comprehensive dental care access resource guide that was developed by the Office of Oral Health at the Maryland Department of Health and Mental Hygiene. The *Resource Guide* was designed to assist parents/guardians in locating an affordable source of dental care services in Maryland. Only those dental public health programs or facilities that provided discounted, low-cost, or special dental services (*e.g.,* for homebound patients) were listed in the directory.

Although the Resource Guide booklet was a useful resource, the study team also developed a one-page summary handout that highlighted public dental clinics available in the county where the child resided. The county-specific one page resource sheet (printed front and back) was available in English and Spanish and featured local dental offices/clinics with corresponding services and eligibility information (Appendix L, p. 164).

After the screening visit, the Project Coordinator sent a "thank you" note to the school principal, referencing the school nurse and any volunteers that were involved (Appendix N, p. 171).

Examination Criteria

We based the dental caries and dental sealant assessments on established examination criteria. The dental caries assessment was based broadly on those developed by Radicke, as published in the Proceedings of the Conference on the Clinical Testing of Cariostatic Agents (4), with two modifications. The first modification was the elimination of the "extraction indicated" code for the primary dentition, and the second was the use of a periodontal probe as a guide for the presence of dental caries. Similar criteria have been used in other assessments (5). Teeth were considered eligible for scoring if either the entire incisal edge or occlusal surfaces were erupted and visible.

Individual tooth scores were aggregated into tooth-level indexes (dft, DMFT, dft+DMFT). Lower-case letters represented scores for the primary dentition and upper-case letters represented scores for the permanent dentition. The *d* and *D* codes represented decayed teeth in the primary and permanent dentitions, respectively. The *M* code represented missing teeth in the permanent dentition. The *f* and *F* codes represented filled teeth in the primary and permanent dentitions, respectively.

Permanent first molar teeth were considered eligible for scoring when the occlusal surface was fully erupted and was not restored with a crown. For the analysis of dental sealant prevalence in the permanent dentition, at least one permanent tooth needed to be present in the oral cavity. If a tooth or tooth surface appeared to have been restored with a resin restorative material and concomitantly covered with a dental sealant, the tooth was scored as having a resin restoration and not a sealant. We based the dental sealant assessment on visual and tactile cues.

We strived to standardize the screening examination protocol as much as possible. In order to minimize examiner-specific differences, each examiner used identical dental chairs, light sources, equipment, and supplies. In order to reduce bias from subjective assessments of dental caries, examiners used a standard, disposable World Health Organization periodontal probe to determine whether pits, fissures, and voids in the

surface of the tooth were larger than 0.5 mm. Only lesions that met this criterion were considered to be decayed.

Examiner Calibration

Five dentist examiners participated in the project. Each examiner received a training manual containing general information about the oral examination component, specific scoring criteria, and other useful information approximately two weeks before they began examining children in selected schools. Scoring criteria were designed to be clear and objective, eliminating subjective influences.

Variables

Both the independent and dependent variables were collected through the health survey and oral screening examination components. Non-clinical dependent variables included assessments of dental visits, having a usual source of dental care, having experienced a toothache in the last 12 months, access to dental care, and dental insurance status. Clinical dependent variables included dental caries experience for the primary dentition only, as well as for the primary and permanent dentitions, combined. Clinical dependent variables also assessed the presence of dental sealants. Dental caries experience variables were unique to dentition, and are described later in this report.

Independent variables included region, grade level (kindergarten, third grade), sex, race/ethnicity (non-Hispanic white, non-Hispanic black, non-Hispanic other, Hispanic, undetermined), eligibility for free or reduced meals at school (yes, no, undetermined), parents' education level (<12 years, 12 years or GED, >12 years, undetermined), and dental insurance status (private dental insurance, public dental insurance, no dental insurance, undetermined). For all independent variables, the "undetermined" category represented either, "don't know" or "refused" responses.

Primary dentition. The sum of the decayed and filled teeth (*dft*) was the measure of overall dental caries history for the primary dentition. This measure was further broken down to include decayed teeth (*dt*) and filled teeth (*ft*). The *dft* represented lifetime dental caries experience, both treated and untreated. Whereas, the *dt* represented only unmet need (untreated decay) and *ft* represented only met need (treated decay). The proportion of the overall dental caries history that was due to unmet need was represented by the ratio of *dt* to *dft* (represented as *%dt/dft*). The proportion of the overall dental caries history that was due to met need was represented by the ratio of *ft* to *dft* (represented as *%ft/dft*).

Permanent dentition. The sum of the decayed, missing, and filled teeth (*DMFT*) was the measure of overall dental caries history for the permanent dentition. This measure was further broken down to include decayed teeth (*DT*), missing teeth (*MT*), and filled teeth (*FT*). The *DMFT* represented overall dental caries history, both treated and untreated. Note that due to the age of the target population, the permanent dentition is not described separately in this report. It appears only in descriptions of both dentitions, combined (see below).

Both dentitions, combined. The sum of the overall dental caries experiences for teeth in the primary and permanent dentitions (*dft+DMFT*) was the measure of overall dental caries history for both dentitions combined. These two measures were further broken down to include decayed teeth (*dt+DT*) and filled teeth (*ft+FT*). The dft+DMFT represented overall dental caries history, both met and unmet, whereas the *dt+DT* represented only unmet need and *ft+FT* represented only met need. The proportion of the overall dental caries history that was due to unmet need was represented by the ratio of *dt+DT* to *dft+DMFT* (represented by *%dt+DT/dft+DMFT)*. The proportion of the overall dental caries history that was due to met need was represented by the ratio of *ft+FT* to

dft+DMFT (represented by *%ft+FT/dft+DMFT*). Given that so few children in the survey had missing permanent teeth, no descriptive analysis of MT was included.

Data Collection and Data Entry

During the oral screening examination component of the project, carefully trained and calibrated dentist examiners collected dental caries and dental sealant data in sample schools using portable equipment. The dentist examiners used a disposable, non-magnifying dental mirror and a disposable periodontal probe with a 0.5 mm ball at the tip to detect dental caries and dental sealants. New vinyl dental gloves, dental mirrors, and periodontal probes were used with each child. The data recorders (dentist examiners or trained assistants) entered the tooth-specific data directly into a software program designed for this survey. The software program was created in Microsoft Access® and housed on a portable computer.

The health survey information was collected via a health questionnaire (among documents in Appendix H, p. 141). Questions for the health survey were derived from previously tested and validated items or were created specifically for this survey. Carefully trained assistants entered the questionnaire data directly into a software program designed for this survey. The software program was created in Microsoft Excel® and housed on a desktop computer.

Data Management

We used unique identification code numbers to specify data from each participant. We combined data from the health survey and oral screening examination components so that dependent and independent variables would be linked. Once the data were linked, personal identifiers were removed from the final data set so that the anonymity of each participant can be maintained. Only researchers at the University of Maryland School of Dentistry were allowed access to linked participant information. Data management

procedures were reviewed and approved by the Institutional Review Board at the Maryland Department of Health and Mental Hygiene and the University of Maryland, Baltimore (Appendix A, p. 82).

The final data set, containing linked information from the health survey and oral screening examination, was housed on a secure desktop computer at the University of Maryland School of Dentistry. Multiple backup copies of the final data set are maintained at the School of Dentistry and Department of Health and Mental Hygiene.

Analysis

We used the SAS statistical software program to combine datasets, manage the data, and recode dependent and independent variables. We used the SAS-callable SUDAAN© statistical software program to produce univariate and bivariate estimates for this report. We used the SUDAAN© software program for analysis because it accounted for the complex, multi-stage probability sampling design when deriving standard errors and confidence intervals.

We assessed the statistical significance of differences between estimates by adding or subtracting the product (1.96 times the standard error) to the estimate. The resulting range represented a 95 percent confidence interval that bounded each estimate. Confidence intervals that overlapped were not judged to be statistically significantly different from one another. Confidence intervals that did not overlap were judged to be different from one another. We used a *0.05* alpha value for assessing statistical significance in all analyses.

For some variables and analyses, the standard error of the estimate was rather large relative to the estimate. Larger standard errors were usually due to small sample size. When the standard error was equal to or greater than 30 percent of the estimate, we judged the estimate to not meet the standard for statistical reliability. Such estimates

should be interpreted with caution throughout this report. Individual estimates that included such large standard errors were not included in tests of statistical significance.

Sampling weights were applied to the analyses so that estimates would be representative of public elementary school children in kindergarten and third grade throughout the state. The Montgomery County School District declined to participate in the study, so estimates were not representative of this school district.

RESULTS

Results contained in this report are grouped by survey component. Findings from the health survey are contained in Table 2 and Tables 4-15. Findings from the oral screening examinations are found in Table 3 and Tables 16-32. Dental caries experience data are described both for the primary dentition (solely) and for the primary and permanent dentitions, combined.

As was mentioned earlier in this report, the Montgomery County School District elected not to participate in the Oral Health Survey. Therefore, estimates for the state and especially the Central D.C. Region that included Montgomery County should also be interpreted accordingly throughout the report.

Response Rates

The reader should note that similar to the estimates for the *Oral Health Survey* contained in this report, response rates also are representative of participating counties only, and as stated previously, did not include one of Maryland's 24 jurisdictions. More sampled school children returned a completed health survey (n=1,726) than participated in the oral screening examinations (n=1,486). As such, the response rates for the health survey were slightly higher than they were for the examinations. Table 2 describes the response rates for the health survey, stratified by region and grade level. The overall response rate for children in kindergarten (23.7 percent) was higher than for children in third grade (16.9 percent). For both grade levels, response rates for the health survey were highest in the Western Region and lowest in the Central D.C. Region. The overall response rate for the health survey, considering both grade levels and all regions, was 20.3 percent.

Table 3 describes the response rates for the oral screening examinations, stratified by region and grade level. Consistent with rates for the health survey, screening examination response rates were higher for children in kindergarten (20.2 percent) than

they were for children in third grade (14.7 percent). Also consistent with rates from the health survey, the lowest response rates for the screening examination were from the Central D.C. Region. The highest response rate for children in kindergarten was from the Southern Region, and the highest rate for children in third grade was from the Western Region. The overall response rate for the oral screening examination, considering both grades and all regions, was 17.5 percent.

Sample Characteristics

Tables 4-6 describe both the unweighted and weighted sample characteristics of school children who returned a completed health survey. A total of 1,723 students participated in the health survey, representing 105,509 kindergarten and third grade children in the state. Regarding the overall unweighted findings (Table 4), the sample was most likely to include females, non-Hispanic whites, those with private dental insurance, those living with a parent having >12 years of education, and those not qualifying for free or reduced school meals. The reader should note that we were unable to categorize race/ethnicity, parents' education level, eligibility for free/reduced school meals, and dental insurance status (due to item non-response) for 1.5 percent, 1.0 percent, 7.2 percent, and 2.6 percent of sample children, respectively.

Regarding the region-specific unweighted findings, and compared with other regions (Table 5), the sample from the Central D.C. Region was less likely to include non-Hispanic whites, and was more likely to include Hispanics and those living with a parent having <12 years of education. In addition, the sample from the Eastern Shore Region was more likely to include children eligible for free/reduced school meals. Weighted sample characteristics, stratified by region, are listed in Table 6.

Findings from the Health Survey

Table 7 describes the weighted prevalence of school children who reported having a dental visit in the last 12 months, stratified by sociodemographic characteristics. Overall, 82.8 percent of students in the state reported a dental visit in the last year. Those who reported their race/ethnicity as non-Hispanic other or Hispanic were significantly less likely to have visited a dentist than were non-Hispanic white children. Those living with a parent having 12 years of education were significantly less likely to have had a dental visit than were those living with a parent having >12 years of education. Children who were eligible for free/reduced school meals were significantly less likely to have reported a visit than were those who were not eligible. Children with no dental insurance were significantly less likely to have had a dental visit than were those with private dental insurance.

Table 8 shows the weighted prevalence of school children who reported having a dental visit in the last 12 months, stratified by region. Those residing in the Central D.C. Region were significantly less likely to have had a visit than were those residing in the Western Region. Within the Central Baltimore Region, children living with a parent having 12 years of education were significantly less likely to have had a dental visit than were those living with a parent having >12 years of education. In addition, those with no dental insurance were significantly less likely to have had a dental visit than were those with private dental insurance. Within the Central D.C. Region, school children who reported their race/ethnicity as non-Hispanic other or Hispanic were significantly less likely to have visited a dentist than were non-Hispanic white children. Children living with a parent having <12 years of education were significantly less likely to have had a dental visit than were those living with a parent having >12 years of education. Those with no dental insurance were significantly less likely to have had a dental visit than were those with private dental insurance. Within the Eastern Shore Region, children living with a parent having 12 years of education were significantly less likely to have had a dental visit than

were those living with a parent having >12 years of education. In addition, school children who were eligible for free/reduced school meals were significantly less likely to have reported a visit than were those who were not eligible. Within the Southern Region, there were no differences that attained statistical significance. Within the Western Region, those living with a parent having 12 years of education were significantly less likely to have visited a dentist than were those living with a parent having >12 years of education. Those who had no dental insurance were significantly less likely to have had a visit than were those with private dental insurance.

Table 9 describes the weighted prevalence of having a usual source of dental care, stratified by sociodemographic factors. In Maryland, three out of four school children in kindergarten and third grade reported having a usual source of care. Children who reported their race/ethnicity as non-Hispanic black, non-Hispanic other, and Hispanic were significantly less likely to have had a usual source of care than were non-Hispanic whites. Those living with a parent having <12 years of education and those living with a parent having 12 years of education were both significantly less likely to have reported a usual source of dental care than were those living with a parent having >12 years of education. Children who qualified for free/reduced meals were significantly less likely to have reported a usual source of care than were those who did not qualify. Finally, those with no dental insurance coverage were significantly less likely to have reported a usual source of care than were those having private dental insurance.

Region-specific findings are listed in Table 10. Overall, children residing in the Central D.C. Region were significantly less likely to have had a usual source of care than were children residing in the Western Region. Within the Central Baltimore Region, non-Hispanic black children were significantly less likely to have a usual source of care than were non-Hispanic white children. Those living with parents having 12 years of education were significantly less likely to have a usual source of care than were those living with parents having >12 years. School children who qualified for free/reduced meals were

significantly less likely to have a usual source of care than were those who did not qualify. Uninsured children were significantly less likely to have a usual source of care than were those with private dental insurance. In the Central D.C. Region, non-Hispanic black, non-Hispanic other, and Hispanic children were all significantly less likely to have a usual source of dental care than were non-Hispanic white children. Within the Eastern Shore Region, children living with parents having 12 years of education were significantly less likely to have a usual source of care than were children living with parents having >12 years. School children eligible for free/reduced school meals were significantly less likely to have a usual source of care than were those who were ineligible. Within the Southern Region, there were no differences that reached statistical significance. In the Western Region, those living with parents having 12 years of education were significantly less likely to have a usual source of dental care than were those living with parents having >12 years. Those with no dental insurance were significantly less likely to have a usual source of care than were school children with private dental insurance.

Table 11 describes the weighted prevalence of a toothache (self-reported) in the last 12 months. Overall, 9.1 percent of school children in Maryland reported a toothache in the previous year. Children who qualified for free/reduced school meals were significantly more likely to have reported a toothache than were children who were not eligible.

Table 12 shows the prevalence of toothaches in the previous year, stratified by region. Children living in the Central Baltimore and Southern Regions were more likely to have reported a toothache in the last 12 months than were children in Central D.C. In the Central Baltimore, Central D.C., Eastern Shore, Southern, and Western Regions, no differences attained statistical significance.

Table 13 shows the prevalence of self-reported access problems (putting off dental care in the last 12 months because of cost), stratified by sample characteristics. Slightly more than 10 percent of school children in the state reported having an access problem.

Overall, Hispanic children were significantly more likely to have reported an access problem than were non-Hispanic children. Children living with parents having <12 years of education were significantly more likely to have experienced problems than were those living with parents having >12 years. Those with no dental insurance were significantly more likely to have reported an access problem than were those with private dental insurance.

According to data in Table 14, children living in the Eastern Shore Region were significantly less likely to have experienced a dental access problem because of cost, presumably due to other more demanding issues (e.g., local availability of dentists), than were children living in the Southern Region. Among those living in the Central Baltimore Region, there were no statistically significant differences between groups. Among children residing in the Central D.C. Region, those living with parents having <12 years of education were significantly more likely to have experienced a dental access problem than were those living with parents having >12 years. For children in the Eastern Shore Region, there were also no significant differences. In the Southern Region, children who were eligible for free/reduced school meals were significantly more likely to have had an access problem than were ineligible children. Those with no dental insurance were significantly more likely to have experienced a problem than were children with private dental insurance. For children living in the Western Region, those with no dental insurance were significantly more likely to have had a dental access problem than were children with private dental insurance.

Table 15 describes the weighted prevalence of dental insurance coverage for the state. Nearly half of all public school children in kindergarten and third grade had private dental insurance and slightly less than 10 percent were uninsured. The geographic area with the highest prevalence of private dental insurance was the Western Region. The area with the highest prevalence of uninsured children was the Southern Region. Dental

insurance coverage was statistically associated with race/ethnicity, parent's level of education, and eligibility for free/reduced meals at school.

Oral Screening Examination Findings

Tables 16-18 show the unweighted and weighted sample characteristics of school children who participated in the oral health screening examination. A total of 1,486 students received an examination, representing 105,584 kindergarten and third grade children in the state. Regarding the overall unweighted findings (Table 16), the sample was most likely to include non-Hispanic whites, those with private dental insurance, those living with a parent having >12 years of education, and those ineligible for free or reduced school meals. The reader should note that we were unable to categorize race/ethnicity, parents' education level, eligibility for free/reduced school meals, and dental insurance status for 3.0 percent, 2.7 percent, 8.5 percent, and 4.6 percent of sample children who received an oral screening examination, respectively.

Regarding the region-specific unweighted findings and compared with other regions (Table 17), the sample from the Central D.C. Region was less likely to include non-Hispanic whites, and was more likely to include Hispanics and those living with a parent having <12 years of education. In addition, the sample from the Eastern Shore Region was more likely to include children eligible for free/reduced meals.

Dental Caries in the Primary Dentition

Table 19 describes the weighted prevalence of dental caries (representing the lifetime history of dental caries, both active/untreated and restored) solely in the primary dentition. Overall, 31.8 percent of school children had a history of dental caries in the primary dentition while the remaining 68.2 percent had no history of dental caries whatsoever. Third grade children were significantly more likely to have had a history of dental caries than were children in kindergarten. Children eligible for free/reduced school

meals were significantly more likely to have had a history of dental caries than were ineligible children. Uninsured children were significantly more likely to have had a history of dental caries than were children with private dental insurance.

Table 20 provides the region-specific findings for history of dental caries (representing both active/untreated and restored) in the primary dentition. Compared with the region with the lowest prevalence (Central D.C. Region), children in the Eastern Shore Region were significantly more likely to have had a history of dental caries in the primary dentition. In the Central Baltimore Region, those who were eligible for free/reduced meals were significantly more likely to have had a history of dental caries than were those who were not eligible. Those with public dental insurance (Medicaid/MCHP) were significantly more likely to have had a history of disease than were those with private dental insurance. Within the Central D.C. Region, third grade children were significantly more likely to have had a history of dental caries in the primary dentition than were children in kindergarten. In the Eastern Shore Region, third grade children were significantly more likely to have had a history of disease than were children in kindergarten. Hispanic children were significantly more likely to have had a history of dental caries than were non-Hispanic white children. In the Southern Region, third grade children were significantly more likely to have had a history of dental caries in the primary dentition than were children in kindergarten. In the Western Region, Hispanic children were significantly more likely to have had a history of dental caries than were non-Hispanic white children. Those who were eligible for free/reduced meals were significantly more likely to have had a history of dental caries than were those who were not eligible. Children with public dental insurance were significantly more likely to have had a history of disease than were those with private dental insurance.

Table 21 shows the weighted prevalence of untreated dental caries (*i.e.,* active disease only) solely in the primary dentition. Overall, 13.2 percent of the school children had untreated dental caries in their primary dentition. Children with no dental insurance

were significantly more likely to have untreated disease than were children with private dental insurance.

The region-specific estimates of untreated dental caries in the primary dentition are listed in Table 22. Given small, category-specific sample sizes across the sociodemographic variables, no differences in prevalence attained statistical significance.

Table 23 provides the weighted mean number of decayed primary teeth (*dt*), filled primary teeth (ft), and the sum of decayed and filled primary teeth (*dft*) (also referred to as the overall dental caries experience) for the primary dentition. Table 23 also provides an estimate of the proportion of the mean *dft* that consists of decayed teeth (*%dt/dft*) and filled teeth (*%ft/dft*), for the primary dentition only. Overall, the mean number of decayed primary teeth was 0.28 and the mean number of filled primary teeth was 0.65. The sum of the decayed and filled primary teeth was 0.93 and the *%dt/dft* was 30.2 percent. Note that these figures represented the mean values for all children, including those with no history of dental caries. Table 24 also provides the mean values but restricted to those with a history of disease (described later in this report).

According to Table 23, non-Hispanic blacks and non-Hispanic others had a significantly higher mean *dt* than did non-Hispanic whites. Children who were eligible for free/reduced meals had a significantly higher mean *dt* than did those who were ineligible. Those with no dental insurance had a significantly higher mean *dt* than did those with private dental insurance. Non-Hispanic other children had a significantly higher *%dt/dft* than did non-Hispanic white children. In addition, children with no dental insurance had a significantly higher *%d/dft* than did those with private dental insurance.

As mentioned previously, Table 24 also describes the mean *dt*, mean *ft*, and mean *dft* for the primary dentition, restricting the analysis to only those with a history of dental caries. Table 24 also lists the *%dt/dft* and *%ft/dft*. As the table shows, the mean values increased when the analysis was restricted to those with a history of disease. Overall, the

mean *dt* increased to 0.88, the mean *ft* increased to 2.05, and the mean *dft* increased to 2.93. The *%dt/dft,* however, remained unchanged at 30.2 percent.

Dental Caries in Both the Primary and Permanent Dentitions, Combined

Table 25 shows the history of dental caries in both the primary and permanent dentitions, combined. Overall, 33.2 percent of school children had a history of dental caries when considering both dentitions. The remaining 66.8 percent had no history of dental caries in either dentition. Third grade children were significantly more likely to have had a history of dental caries than were children in kindergarten. Non-Hispanic black children were significantly more likely to have had a history of dental caries than were non-Hispanic white children. Children eligible for free/reduced school meals were significantly more likely to have had a history of dental caries than were ineligible children. Children with public dental insurance were significantly more likely to have had a history of dental caries than were children with private dental insurance.

Table 26 lists the weighted prevalence of a history of dental caries in both dentitions, stratified by region. Compared with the Central D.C. Region, which had the lowest prevalence, children from the Eastern Shore Region were significantly more likely to have had a history of dental caries. In the Central Baltimore Region, those who were eligible for free/reduced school meals were significantly more likely to have had a history than were children who were not eligible. Children with public dental insurance were also significantly more likely to have had a history of disease in both dentitions than were children with private dental insurance. In the Central D.C. Region, third grade students were significantly more likely to have had a history of dental caries than were children in kindergarten. In the Eastern Shore Region, third graders were also more likely to have had a history of dental caries than were kindergarten students. In the Southern Region, third graders were significantly more likely to have had a history of dental caries than were their younger peers. In the Western Region, non-Hispanic black and Hispanic children

were both significantly more likely to have had a history of dental caries than were non-Hispanic white students. Children living with parents having <12 years of education were significantly more likely to have had a history of dental caries than were children living with parents having >12 years of education. Those who were eligible for free/reduced meals were significantly more likely to have had a history of disease than were those who were not eligible. Those with public dental insurance were also significantly more likely to have had a history of disease than were those with private dental insurance.

Table 27 lists the weighted prevalence of untreated dental caries (*i.e.,* active disease) in both dentitions, combined. Overall, 13.7 percent of children had some disease in either dentition that required treatment. School children in third grade were significantly more likely to have had untreated disease than were children in kindergarten. Children who were eligible for free/reduced meals were also significantly more likely to have had untreated dental caries than were ineligible children. Uninsured children were significantly more likely to have had untreated disease than were children with private dental insurance.

The region-specific estimates of untreated dental caries in both dentitions are listed in Table 28. There were no statistically significant differences across regions. Within the regions, there were also no statistically significant differences, again likely due to small sample sizes across sociodemographic categories.

Table 29 describes dental caries severity in both the primary and permanent dentitions, combined. Given that both dentitions were included, untreated dental caries was designated as the mean number of teeth with untreated decay in the primary dentition (*dt*) plus the number of teeth in the permanent dentition (*DT*); or *dt*+*DT*. Likewise, treated dental caries was designated as the mean number of filled teeth in the primary dentition (*ft*) plus the mean number of filled teeth in the permanent dentition (*FT*); or *ft*+*FT*.

Unlike the primary dentition, permanent teeth may also be scored as missing due to dental disease. Therefore, the overall dental caries experience for the permanent

dentition also included an assessment of missing teeth (*MT*), in addition to an assessment of decayed teeth (*DT*) and filled teeth (*FT*). Thus, the overall dental caries experience for the permanent dentition was indicated by the sum of all decayed, missing, and filled permanent teeth (*DMFT*). By extension, the overall dental caries history or experience, for both dentitions combined, was represented by overall experience in the primary dentition (*dft*) plus overall experience in the permanent dentition (*DMFT*); or *dft+DMFT*.

According to Table 29, the mean number of decayed primary and permanent teeth was 0.29. The mean number of filled primary and permanent teeth was 0.70. The mean number of teeth with any history of dental caries, either in the primary or permanent dentitions, was 1.00. Of all teeth that had dental caries experience, 29.3 percent of the teeth had untreated (active) disease. Note that these figures represented the mean values for all children in the sample, including those with no history of dental caries. Also note that Table 30 provides the mean values for both dentitions, combined, but restricted to those with a history of disease (described later in this report).

According to Table 29, non-Hispanic blacks and non-Hispanic others had a significantly higher mean *dt+DT* than did non-Hispanic whites. Children who were eligible for free/reduced meals had a significantly higher mean *dt+DT* than did those who were ineligible. Those with no dental insurance had a significantly higher mean *dt+DT* than did those with private dental insurance. In addition, children in the Southern Region had a significantly higher *%dt+DT/dft+DMFT* than did children from the Eastern Shore. Those with no dental insurance had a significantly higher *%dt+DT/dft+DMFT* than did those with private dental insurance.

As mentioned previously, Table 30 also describes the mean *dt+DT*, mean *ft+FT*, and mean *dft+DMFT* for the primary and permanent dentitions, combined, as well as the *%dt+DT/dft+DMFT* and *%ft+FT/dft+DMFT*. However, the analysis is restricted to only those with a history of dental caries. As the table reveals, the mean values increased when the analysis was restricted to those with a history of disease. Overall, the mean

dt+DT increased to 0.88, the mean *ft+FT* increased to 2.10, and the mean *dft+DMFT* increased to 3.00. The *%dt+DT/dft+DMFT* remained unchanged at 29.3 percent.

Dental Sealants on Permanent First Molars

The weighted prevalence of dental sealants on the permanent first molars is depicted in Table 31. These data represent children from both grade levels; kindergarten and third grade. Overall, 32.9 percent of school children in the state had at least one dental sealant on a permanent first molar and 67.1 percent had no dental sealants. Children in kindergarten were significantly less likely to have had at least one sealant than were children in third grade. This finding was expected because permanent first molars are usually not yet fully erupted among kindergarten children. There were no significant regional differences detected.

Table 32 limits the dental sealant analysis to only third grade students. The Eastern Shore Region had the highest prevalence of dental sealants and the Central Baltimore Region had a significantly lower prevalence. Non-Hispanic black third graders were significantly less likely to have had dental sealants than were non-Hispanic white children.

DISCUSSION

The following sections summarize the findings and place them in context, first for the study, overall, and then for the health survey and the oral screening examination, specifically. This section will conclude with a discussion of some challenges faced during the study.

Overall Study

In general, response rates were low for both components of the study. Approximately one out of every five children who were eligible for the study actually participated. In comparing the study sample with sociodemographic characteristics for Maryland (6), we concluded that our study population was similar to the state in most characteristics but dissimilar in a few key factors. The proportion of children from kindergarten (55 percent) in the sample was slightly higher than the proportion in the state (51 percent). Sample weighting eliminated this difference.

For race/ethnicity, the proportion of non-Hispanic white children (53 percent) in the sample was moderately higher than it was in the state (42 percent). Again, sample weighting brought the two closer together (44 percent for the sample compared with 42 percent for the state). The proportion of non-Hispanic black children (17 percent) in the sample was moderately lower than it was in the state (35 percent). Sample weighting helped close the gap but a difference between the two values persisted (28 percent for the sample compared with 35 percent for the state). The proportion of Hispanic children (10 percent) in the sample was slightly lower than it was in the state (12 percent). Sample weighting overcompensated slightly, causing the percentage of Hispanics to be higher in the sample compared to the percentage in Maryland (16 percent compared with 12 percent).

Regarding socioeconomic status (SES), the proportion of children who qualified for free/reduced school meals (36 percent) in the sample was lower than it was in the state

(43 percent); however, sample weighting brought the percentages closer together, producing a slightly higher percentage in the sample (46 percent for the sample compared with 43 percent for the state).

In more general terms, a higher proportion of children participated in the health survey component than in the oral screening examination component. A higher proportion of children in kindergarten participated in either component of the study than did children in third grade. In addition, the Montgomery County School District declined to participate in the study; thus, the findings contained in this report are not representative of this county.

Differences between the study sample and the state were generally minor, with two exceptions. First, the weighted study sample contained a lower percentage of non-Hispanic black children than would be expected in the state. In this and previous statewide reports (2, 3), non-Hispanic black children were less likely to have a usual source of dental care and were more likely to have a history of dental caries than non-Hispanic white children. The under-representation of non-Hispanic blacks in the study sample suggests that statewide estimates for usual source of care and dental caries history might contribute to underestimation. That being said, the weighted study sample contained a higher percentage of children who qualified for free/reduced school meals than would be expected in the state. As a group, children with low SES usually experience greater access to care and disease burden problems than their higher-SES peers. The fact that this demographic group was slightly over-represented in the study sample means that access to care problems and disease burden might contribute to overestimation.

The under-representation of one demographic group and the over-representation of another through sample weighting indicates that there might have been an overall balancing effect on survey estimates. In general, the differences that were noted between

the weighted sample and the state population were likely due to differential response rates, related to the sociodemographic characteristics in individual schools.

Health Survey

In summarizing the health survey component of the study, the following key findings should be highlighted. A high proportion of school children in the state reported visiting a dentist in the last year (83 percent). Although this rate utilization was impressive, it was lower than would be expected from national estimates for children in this age range (approximately 89%) (7).

When analyzing demographic sub-groups, children who were non-Hispanic other or Hispanic were significantly less likely to have had a visit than were non-Hispanic white children. Children with low-SES and those with no dental insurance were also significantly less likely to have had a visit than were children with higher SES and those with private dental insurance. It would appear that health disparities in utilization remain.

The health survey also revealed that a high proportion of school children reported having a usual source of dental care (75 percent). This finding supported the high utilization figure previously mentioned. Unfortunately, disparities in this category also existed. Children who were non-Hispanic black, non-Hispanic other, or Hispanic were significantly less likely to have reported a usual source of dental care than were non-Hispanic white children. And again, children with low-SES and those with no dental insurance were also significantly less likely to have reported a usual source of care than their peers.

According to the health survey, about 9 percent of school children reported having a toothache because of a cavity in the last year. This estimate was consistent with other studies that reported that about 10.7 percent of children in the United States experienced a toothache in the last year (8). It was noteworthy that children who qualified for free/reduced school meals in Maryland were significantly more likely to have reported a

toothache than were children who did not qualify. Similar to the disparities previously highlighted, this health disparity was also associated with SES.

About 10 percent of parents/guardians in the study sample reported putting off dental care for their children in the last year because they couldn't afford it. Children who were Hispanic were significantly more likely to have experienced such access problems than were non-Hispanics. Children with low-SES and those with no dental insurance were also significantly more likely to have had an access problem than were their peers with higher SES and private dental insurance. Unfortunately, Maryland's estimate was higher than would be expected at the national level (7 percent) for children aged 6-17 years (9).

The *Oral Health Survey* also showed that about 49 percent of school children in the state had private dental insurance. National estimates from the 2006 Medical Expenditure Panel Survey (MEPS) (10) showed that about 53 percent of children would be expected to have private coverage, revealing reasonable concordance between Maryland and the country. The study findings also revealed that about 41 percent of children were covered by public dental insurance which was moderately higher than the 2006 MEPS estimates (30 percent). Also reflecting a positive finding, only about 10 percent of the study sample reported being uninsured, compared with 29 percent at the national level.

Oral Screening Examination

In summarizing the oral screening examination component of the study, the following key findings demand additional attention. According to the *Oral Health Survey* and considering both dentitions, about 33 percent of school children experienced dental caries during their lifetime. This estimate was consistent with that reported in the 2000-2001 Maryland oral health assessment (2) (35 percent) and the 2005-2006 assessment (3) (31 percent), suggesting that dental caries experience has remained fairly constant in Maryland during the last decade.

Despite these improvements, the oral screening examination showed that clinical health disparities still exist. Children in third grade were significantly more likely to have experienced tooth decay than were children in kindergarten. Children who were non-Hispanic black were significantly more likely to have experienced dental caries than were non-Hispanic white children. School children with low-SES were significantly more likely to have experienced dental caries than were children with higher SES. Those covered by public dental insurance were significantly more likely to have experienced dental caries than were those with private dental insurance. School children in the Eastern Shore Region had the highest prevalence of dental caries in the state.

Experiencing dental caries during one's lifetime is not necessarily problematic as long as it has been properly treated. The *Oral Health Survey* revealed that the prevalence of untreated dental caries was lower in 2010-2011 (14 percent) than it was in 2000-2001 (2) (23 percent), reflecting improvements in oral health for Maryland. The Pew Report supports these findings, as Maryland was one of only a few states to receive an "A" grade for oral health in 2011 (11). However, despite these improvements, health disparities have, again, remained. Those with low-SES were significantly more likely to have untreated dental caries than were children with higher SES. School children who were uninsured were significantly more likely to have untreated dental caries than were those with private dental insurance.

Notwithstanding the finding that children in the Eastern Shore Region were significantly more likely to have experienced dental caries during their lifetime, this region was no more or less likely to have had untreated dental caries than any other. It would appear that public health efforts aimed at eliminating regional disparities in Maryland have been successful.

The *Oral Health Survey* also revealed that 40 percent of third grade school children in Maryland had at least one dental sealant on their permanent first molars. This prevalence of sealants for children in third grade was notably higher than that reported for

the nation during the Healthy People 2010 final review (32 percent) (12), and for Maryland in 2000-2001 (2) (24 percent). It was also consistent with the prevalence reported for Maryland in 2005-2006 (3) (42 percent). Again, it would appear that Maryland has made important strides forward during the last decade.

Challenges to the Study

The *Oral Health Survey* encountered a number of challenges that should be taken into account when interpreting this report and should be considered when subsequent surveillance projects are planned in the future.

Participation of Individual School Districts

In 2000-2001, two school districts (Carroll County and Worcester County) elected not to participate. In 2005-2006, three school districts (Baltimore County, Montgomery County, and Talbot County) did not participate. In the present assessment, one school district, Montgomery County, elected not to take part. School districts (counties) choose to excuse themselves for a number of reasons. Primary among them is the desire to maximize student learning by minimizing extra-curricular commitments. Although this is an admirable and understandable position to take, it simultaneously does compromise the validity of important public health efforts such as the *Oral Health Survey*.

Maryland policymakers use these data to determine the effectiveness of its dental public health initiatives and to identify geographic regions and/or population groups that require special attention. In order for the Department of Health and Mental Hygiene to develop sound, data-driven policy decisions and programmatic priorities meant to benefit all regions and groups, representative information is needed from all Maryland jurisdictions. One challenge faced by the study team was the requirement posed by three of the school districts (Anne Arundel County, Baltimore City, and Montgomery County) for additional documentation. Although the additional effort was met favorably by Anne Arundel and Baltimore City, it cost the study team significant additional time and effort.

The ASTDD, which strictly embraces evidence-based, core public health functions, views such oral health surveys as surveillance and not research because the tools employed for the assessment are not capable of measuring small changes in oral

disease over time (13). Effectively communicating the importance of oral health surveillance remains a critical issue and must be taken into consideration in preparations for future oral health assessments. One solution to this challenge is having the oral health assessment treated like other health-related assessments, particularly screenings for vision and hearing.

Consent Process

In order to protect the safety of research participants (and indirectly protect the liability of the sponsoring agencies) universities and health departments are appropriately turning to the informed consent process as a means of disclosing all possible risks and benefits and explaining every important detail of the project. The unintended consequence of this attention to detail is an increasingly lengthy consent document (Appendix B, p. 115). It is possible that a lengthy consent form may have either confused or troubled some parents/guardians, preventing them from reading it and/or granting permission for their child to participate. The fact that the response rate for this project was less than 20 percent speaks to this possibility, especially since the consent form was considerably shorter in previous assessments. In addition, parents/guardians receive numerous mailings from their children's schools requesting permission for a variety of activities and projects.

ASTDD is calling for statewide oral health assessments to be treated like other health-related screening activities (like hearing and vision) in the future. They are also calling for passive consent processes – that is, a child is to be screened unless the parent/guardian explicitly states that he or she does not wish the child to participate. This approach has gained some traction in numerous states throughout the nation and hopefully it can be incorporated as a norm in Maryland. It is possible that an ASTDD led initiative to confer with federal regulatory agencies overseeing IRBs to create a

standardized and streamlined approach that might elicit increased response rates while continuing to protect the public.

Participation of Individual Families

It may be that parents/guardians chose not to participate because they did not fully appreciate the purpose of the project. Despite a clear and thorough explanation of the purpose in the letter of introduction, the consent form, and the *Frequently Asked Questions* flyer (all contained in the Information Packet; Appendix H, p. 141), some parents/guardians who chose not to participate wrote "my child already has a dentist" on the consent form and/or health survey. These parents/guardians were not likely thinking of the assessment in terms of statewide policy, rather of the direct benefits to their individual child. It is conceivable that use of passive consent might lessen this problem, as parents would have to expend additional effort to "not participate". The experiences of other state assessments could serve as a guide.

Some school officials indicated that, at times, there were too many documents being shuttled back-and-forth between school and student. The officials expressed concern that some of the parents/guardians were overloaded with information and decisions. Placing our study's relatively large Information Packet into this mix might have been particularly burdensome for some parents/guardians. Consistent with this presumption, the Project Coordinator learned from some of the school nurses that participation in health-related projects seems to be declining across schools, in general.

Hiring Personnel

Dentist examiners and data collection assistants for the project were hired through the University of Maryland School of Dentistry. During the last few years, the hiring process has become rather burdensome and several potential examiners and assistants ended their application process mid-course because of this. Delays in hiring diverted

some attention away from project preparation. Accordingly, additional time and effort for hiring should be built into future surveillance efforts.

Competing Projects

In several school districts, the *Oral Health Survey* was in direct competition with other oral health-related initiatives. On the one hand, these initiatives were a positive development, reflecting the numerous dental public health programs that have benefitted the children of Maryland during the last five to ten years. On the other hand, at least in terms of this project, these initiatives likely adversely affected the response rate of the study. For example, some schools were in partnership with mobile dental van programs that provided dental screenings, and limited treatment and follow-up. Other schools were in partnership with local federally-qualified health centers or public health dental clinics that provided dental screenings and treatment services at reduced fees. If parents/guardians saw these initiatives as already providing a dental screening examination, they might have believed that their child's participation in this project was unnecessary.

In other school districts, the *Oral Health Survey* competed with influenza vaccination programs or other vaccination initiatives. Given that some schools administered these vaccinations on multiple occasions, participation in the oral health assessment might not have received the attention it would have otherwise.

Finally, some schools mistakenly scheduled the dental screening visits on field trip dates or days when assemblies or school parties were taking place. Parents/guardians might have elected not to participate so their child would be able to participate in the "more fun" activities.

Assistance in Conducting the Survey

The cooperation of the Maryland State Department of Education was extremely important to the study team. The support of then State Superintendent Dr. Grasmick and MSDE staff helped the team gain access to the school superintendents and principals. They also provided data necessary for creation of the sampling frame at the regional and statewide levels.

At the school level, assistance from administrative staff members, school nurses, volunteers, and others was also invaluable. Their help was greatly appreciated. The volunteers went to the various classrooms and brought children to and from the screening area and maintained order while the children were waiting to be screened. The administrative staff handled telephone calls to confirm deliveries, schedules, room arrangements and many other details. School nurses coordinated the distribution and collection of the Information Packets and assisted with organizing the packets, once returned. In general, response rates were highest in schools that exhibited commitment to the project – both numbers of students who were screened and the number of health surveys that were returned.

Involvement of the school parent-teacher association (PTA) was also helpful in many schools. In general, when there was minimal PTA involvement, response rates were lower. Active promotion of the project in school newsletters, additional notices sent home to the family from the principal, and “friendly competitions” between classrooms were also very supportive.

Recommendations for Future Oral Health Assessments

The goal of every statewide oral health assessment is to yield an accurate snapshot of access to dental care and oral health status that is representative of the state's public school children in kindergarten and third grade. Although the process of collecting and analyzing the oral health data has remained robust, response rates have progressively declined across the last three statewide assessments, jeopardizing the external validity of the findings. The following recommendations are offered for future oral health assessments in order to improve participation rates and maintain a high level of scientific integrity.

Problem 1: A consenting process for the oral health assessment that is unique

- It is suggested that the consenting process for the oral health assessments be made consistent with the process used for vision and hearing screenings
    - A consistent process is likely to reduce confusion among parents/guardians
    - A consistent process is likely to increase response rates, as a single consent document (referring to all three screenings, together) could be used
- A consenting process that is consistent with existing processes (that is, ones routinely used for vision and hearing screenings) would require less scrutiny by school administrators and IRBs

Problem 2: Selection of a new sample every 5 years

- It is recommended that sentinel surveillance sites be established in Maryland in order to reduce the burden of selecting a new probability sample every time a statewide assessment is conducted
    - School administrators, classroom teachers, school nurses, and parents/guardians at the sentinel sites would become familiar with the processes so less detailed explanation would be required

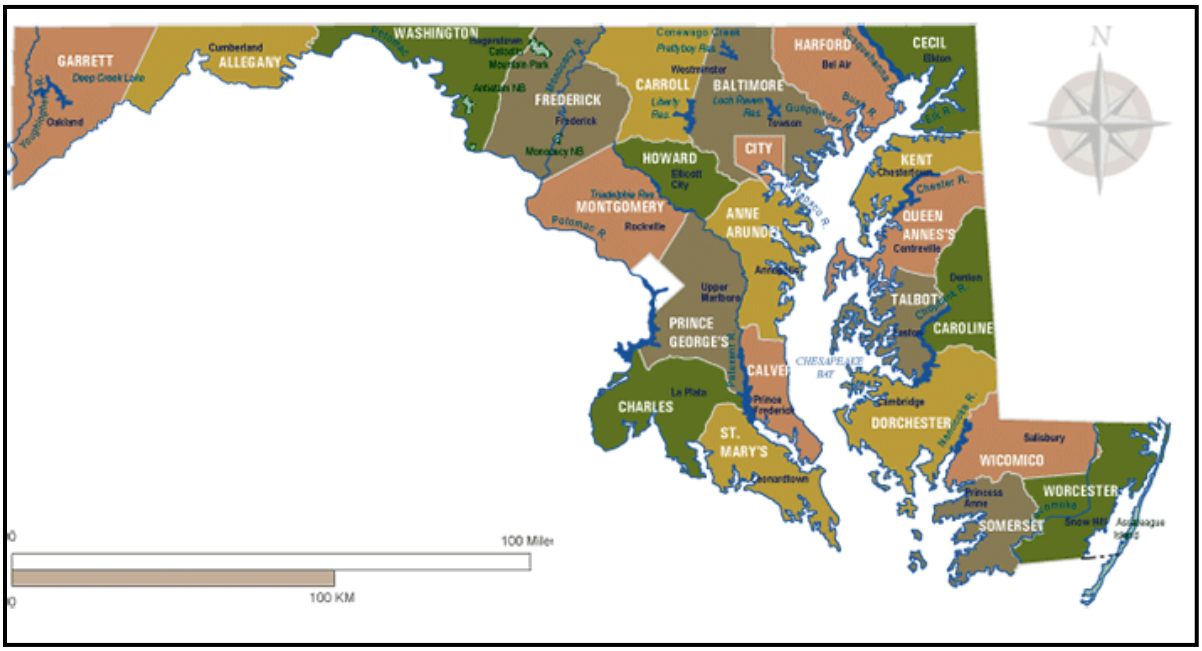
    - Sentinel sites would provide the opportunity to follow cohorts of children over time (*e.g.,* as kindergarten students advance to third grade)
- The sentinel sites could be used to supplement some of the statewide probability sample school assessments

Problem 3: Competing screening activities (i.e., by mobile dental vans and public health clinics)

- It is recommended that standardized screening criteria be used by all programs involved with screening school children in the state so that children who are screened outside of the parameters of a statewide assessment might also be included in surveillance
    - Standardized screening criteria would require training and oversight by the Department of Health and Mental Hygiene
    - Standardized screening criteria could be designed so that the needs of the competing screening activities are still met

FIGURES AND TABLES

Figure 1: Map of Maryland counties and school districts*



*There are 24 school districts in Maryland. Twenty-three (23) of the school districts correspond to the 23 counties of the state. The 24th school district is Baltimore City.

Table 1: Regional identifiers and constituent counties/school districts, Maryland 2011-2012

Number	Name	Constituent counties/school districts
I	Central Baltimore	Anne Arundel, Baltimore City, Baltimore County, Harford
II	Central D.C.	Howard, Montgomery (did not participate), Prince George's
III	Eastern Shore	Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, Worcester
IV	Southern	Calvert, Charles, St. Mary's
V	Western	Allegany, Carroll, Frederick, Garrett, Washington

Table 2: Frequencies and response rates for health surveys, by region and grade level

Region	Kindergarten		Third grade		Both grades	
	n	%	n	%	n	%
Overall: All regions	1,014	23.7	712	16.9	1,726	20.3
Region 1: Central Baltimore	352	22.9	274	18.2	626	20.6
Region 2: Central D.C.*	192	19.9	120	13.2	312	16.6
Region 3: Eastern Shore	103	23.3	65	15.5	168	19.5
Region 4: Southern	119	26.6	78	15.5	197	20.7
Region 5: Western	248	27.9	175	20.0	423	24.0

*Excluding Montgomery County

Table 3: Frequencies and response rates for oral screening examinations, by region and grade level

Region	Kindergarten		Third grade		Both grades	
	n	%	n	%	n	%
Overall: All regions	865	20.2	621	14.7	1,486	17.5
Region 1: Central Baltimore	294	19.2	232	15.4	526	17.3
Region 2: Central D.C.*	170	17.6	117	12.9	287	15.3
Region 3: Eastern Shore	95	21.5	60	14.3	155	18.0
Region 4: Southern	105	23.4	69	13.7	174	18.3
Region 5: Western	201	22.6	143	16.3	344	19.5

*Excluding Montgomery County

FINDINGS FROM THE HEALTH SURVEYS

Table 4: Unweighted and weighted sample characteristics, Maryland*, 2011-2012 (n=1,723)

Sample characteristics	Unweighted	Weighted
	n (%)	
Total	1,723 (100)	105,509 (100)
Grade level		
Kindergarten	1,011 (58.7)	53,318 (50.5)
Third grade	712 (41.3)	52,191 (49.5)
Sex		
Male	857 (49.7)	51,460 (48.8)
Female	866 (50.3)	54,049 (51.2)
Race/ethnicity		
Non-Hispanic white	988 (57.3)	45,897 (43.5)
Non-Hispanic black	307 (17.8)	29,354 (27.8)
Non-Hispanic other	225 (13.1)	12,113 (11.5)
Hispanic	177 (10.3)	16,400 (15.5)
Undetermined	26 (1.5)	1,745 (1.7)
Parents' education level		
<12 years	115 (6.7)	10,574 (10.0)
12 years or GED	295 (17.1)	21,005 (19.9)
>12 years	1,296 (75.2)	72,888 (69.1)
Undetermined	17 (1.0)	1,042 (1.0)
Eligibility for free/reduced school meals		
Yes	621 (36.0)	48,972 (46.4)
No	979 (56.8)	50,166 (47.6)
Undetermined	123 (7.2)	6,371 (6.0)
Dental insurance status		
Private insurance	957 (55.5)	50,530 (47.9)
Public insurance	558 (32.4)	41,814 (39.6)
No insurance	163 (9.5)	9,990 (9.5)
Undetermined	45 (2.6)	3,175 (3.0)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 5: Unweighted sample characteristics, by region, Maryland*, 2011-2012 (n=1,723)

Sample characteristics	Region				
	Central Baltimore	Central D.C.*	Eastern Shore	Southern	Western
	n (%)				
Total	625 (100)	311 (100)	168 (100)	197 (100)	422 (100)
Grade level					
Kindergarten	351 (56.2)	191 (61.4)	103 (61.3)	119 (62.2)	247 (57.0)
Third grade	274 (43.8)	120 (38.6)	65 (38.7)	78 (37.8)	175 (43.0)
Sex					
Male	323 (51.7)	158 (50.8)	72 (42.9)	95 (48.2)	209 (49.5)
Female	302 (48.3)	153 (49.2)	96 (57.1)	102 (51.8)	213 (50.5)
Race/ethnicity					
Non-Hispanic white	380 (60.8)	80 (25.7)	115 (68.4)	107 (54.3)	306 (72.5)
Non-Hispanic black	104 (16.6)	82 (26.4)	32 (19.0)	52 (26.4)	37 (8.8)
Non-Hispanic other	76 (12.2)	74 (23.8)	7 (4.2)	28 (14.2)	40 (9.5)
Hispanic	55 (8.8)	70 (22.5)	10 (6.0)	10 (5.1)	32 (7.6)
Undetermined	10 (1.6)	5 (1.6)	4 (2.4)	0 (0.0)	7 (1.6)
Parents' education level					
<12 years	36 (5.8)	36 (11.6)	13 (7.7)	7 (3.6)	23 (5.5)
12 years or GED	98 (15.7)	43 (13.8)	51 (30.4)	29 (14.7)	74 (17.5)
>12 years	482 (77.1)	228 (73.3)	103 (61.3)	161 (81.7)	322 (76.3)
Undetermined	9 (1.4)	4 (1.3)	1 (0.6)	0 (0.0)	3 (0.7)
Eligibility for free/reduced school meals	219 (34.7)	98 (31.5)	86 (51.2)	59 (30.0)	161 (38.2)
Yes	369 (59.0)	183 (58.8)	72 (42.9)	124 (62.9)	231 (54.7)
No	39 (6.3)	30 (9.7)	10 (5.9)	14 (7.1)	30 (7.1)
Undetermined					
Dental insurance status					
Private insurance	367 (58.7)	173 (55.6)	77 (45.8)	115 (58.4)	225 (53.3)
Public insurance	188 (30.1)	89 (28.6)	78 (46.4)	52 (26.4)	151 (35.8)
No insurance	58 (9.3)	37 (11.9)	10 (6.0)	23 (11.7)	35 (8.3)
Undetermined	12 (1.9)	12 (3.9)	3 (1.8)	7 (3.5)	11 (2.6)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 6: Weighted sample characteristics, by region, Maryland*, 2011-2012 (n=1,723)

Sample characteristics	Region				
	Central Baltimore	Central D.C.*	Eastern Shore	Southern	Western
	n (%)				
Total	45,930 (100)	26,707 (100)	9,677 (100)	8,410 (100)	14,786 (100)
Grade level					
Kindergarten	23,189 (50.5)	13,938 (52.2)	4,883 (50.5)	4,055 (48.2)	7,254 (49.1)
Third grade	22,741 (49.5)	12,769 (47.8)	4,794 (49.5)	4,355 (51.8)	7,532 (50.9)
Sex					
Male	22,510 (49.0)	13,452 (50.4)	4,024 (41.6)	4,080 (48.5)	7,394 (50.0)
Female	23,420 (51.0)	13,255 (49.6)	5,653 (58.4)	4,330 (51.5)	7,392 (50.0)
Race/ethnicity					
Non-Hispanic white	20,032 (43.6)	4,456 (16.7)	6,617 (68.4)	4,177 (49.6)	10,615 (71.8)
Non-Hispanic black	14,390 (31.3)	9,335 (35.0)	1,684 (17.4)	2,503 (29.8)	1,442 (9.7)
Non-Hispanic other	5,182 (11.3)	4,177 (15.6)	297 (3.1)	1,294 (15.4)	1,163 (7.9)
Hispanic	5,558 (12.1)	8,356 (31.3)	764 (7.9)	436 (5.2)	1,286 (8.7)
Undetermined	768 (1.7)	383 (1.4)	315 (3.2)	0 (0.0)	280 (1.9)
Parent's education level					
<12 years	4,073 (8.9)	4,241 (15.9)	915 (9.5)	420 (5.0)	925 (6.3)
12 years or GED	10,332 (22.5)	4,493 (16.8)	2,625 (27.1)	1,283 (15.2)	2,272 (15.3)
>12 years	30,934 (67.3)	17,648 (66.1)	6,082 (62.8)	6,707 (79.8)	11,516 (77.9)
Undetermined	591 (1.3)	325 (1.2)	55 (0.6)	0 (0.0)	72 (0.5)
Eligibility for free/reduced school meals	23,772 (51.8)	12,413 (46.5)	4,982 (51.5)	2,649 (31.5)	5,157 (34.9)
Yes	19,889 (43.3)	12,252 (45.9)	4,206 (43.5)	5,126 (60.9)	8,693 (58.8)
No	2,269 (4.9)	2,042 (7.6)	489 (5.0)	635 (7.6)	936 (6.3)
Undetermined					
Dental insurance status					
Private insurance	21,420 (46.6)	11,654 (43.6)	4,485 (46.4)	4,608 (54.8)	8,362 (56.6)
Public insurance	19,091 (41.6)	10,876 (40.7)	4,417 (45.6)	2,379 (28.3)	5,052 (34.2)
No insurance	4,405 (9.6)	2,986 (11.2)	449 (4.6)	1,081 (12.8)	1,069 (7.2)
Undetermined	1,014 (2.2)	1,191 (4.5)	325 (3.4)	342 (4.1)	303 (2.0)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 7: Weighted prevalence of having had a dental visit in the last 12 months (self-reported) among public school children in kindergarten and third grade, Maryland*, 2011-2012 (n=1,723)

Sample characteristics	Had a dental visit in the last 12 months	Did not have a dental visit in the last 12 months
	n (%)	
Total	82.8 (1.7)	17.2 (1.7)
Grade level		
Kindergarten	80.7 (2.0)	19.3 (2.0)
Third grade	84.9 (2.7)	15.1 (2.7)
Sex		
Male	82.3 (2.5)	17.7 (2.5)
Female	83.2 (2.0)	16.8 (2.0)
Race/ethnicity		
Non-Hispanic white	87.8 (1.5)	12.2 (1.5)
Non-Hispanic black	80.9 (4.8)	19.1 (4.8)
Non-Hispanic other	77.0 (4.3)	23.0 (4.3)
Hispanic	76.4 (3.5)	23.6 (3.5)
Parents' education level		
<12 years	76.0 (5.2)	24.0 (5.2)
12 years or GED	75.7 (3.3)	24.3 (3.3)
>12 years	85.8 (2.0)	14.2 (2.0)
Eligibility for free/reduced school meals		
Yes	78.8 (2.5)	21.2 (2.5)
No	87.7 (1.9)	12.3 (1.9)
Dental insurance status		
Private insurance	87.9 (2.9)	12.1 (2.9)
Public insurance	84.8 (2.2)	15.2 (2.2)
No insurance	55.3 (5.2)	44.7 (5.2)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 8: Weighted prevalence of having had a dental visit in the last 12 months (self-reported) among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,723)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	83.4 (3.0)	73.1 (4.8)	82.5 (3.8)	83.1 (4.2)	85.1 (1.9)
Grade level					
Kindergarten	80.9 (3.5)	71.6 (6.0)	78.5 (3.1)	79.0 (6.1)	88.2 (1.8)
Third grade	86.0 (4.1)	74.7 (8.9)	86.6 (5.6)	87.0 (3.1)	82.2 (2.5)
Sex					
Male	82.1 (3.7)	72.2 (8.1)	78.6 (8.2)	87.0 (2.5)	85.8 (2.7)
Female	84.7 (3.6)	74.0 (3.9)	85.3 (3.1)	79.5 (9.6)	84.5 (3.3)
Race/ethnicity					
Non-Hispanic white	88.9 (2.6)	92.0 (2.8)	84.2 (4.6)	80.4 (6.6)	86.8 (2.0)
Non-Hispanic black	77.8 (8.1)	74.8 (8.9)	72.0 (5.3)	89.5 (4.8)	82.2 (9.1)
Non-Hispanic other	83.4 (4.7)	68.4 (10.8)	81.5 (18.9)	79.7 (6.2)	70.6 (9.9)
Hispanic	82.5 (3.9)	63.7 (5.4)	83.9 (12.6)	82.4 (13.8)	86.3 (7.0)
Parent's education level					
<12 years	85.9 (8.4)	60.0 (6.8)	74.8 (15.0)	47.9* (16.9)	84.4 (8.7)
12 years or GED	72.0 (3.7)	71.3 (6.8)	70.2 (5.3)	71.1 (5.1)	66.9 (8.5)
>12 years	87.0 (3.0)	77.7 (6.0)	88.8 (2.5)	87.6 (3.6)	88.9 (1.7)
Eligibility for free/reduced school meals	79.9 (4.6)	66.9 (3.3)	73.2 (5.8)	82.0 (7.2)	80.4 (4.3)
Yes	88.3 (3.3)	82.2 (5.2)	92.2 (4.2)	86.3 (5.0)	87.9 (1.7)
No					
Dental insurance status					
Private insurance	87.3 (4.4)	81.1 (9.0)	91.7 (4.6)	91.3 (2.1)	89.7 (2.3)
Public insurance	84.0 (4.3)	79.8 (4.7)	78.1 (5.8)	81.7 (6.0)	84.8 (3.4)
No insurance	66.3 (5.5)	41.6 (10.0)	51.0* (25.0)	46.0* (16.2)	56.6 (7.4)

Source: Oral Health Survey of Maryland School Children, 2011-2012

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 9: Weighted prevalence of having a usual source of dental care (self-reported) among public school children in kindergarten and third grade, Maryland*, 2011-2012 (n=1,723)

Sample characteristics	Have a usual source of dental care	Do not have a usual source of dental care
	n (%)	
Total	75.0 (2.2)	25.0 (2.2)
Grade level		
Kindergarten	73.7 (2.4)	26.3 (2.4)
Third grade	76.2 (3.3)	23.8 (3.3)
Sex		
Male	72.9 (3.7)	27.1 (3.7)
Female	76.9 (2.5)	23.1 (2.5)
Race/ethnicity		
Non-Hispanic white	83.4 (1.7)	16.6 (1.7)
Non-Hispanic black	70.0 (4.6)	30.0 (4.6)
Non-Hispanic other	70.0 (4.9)	30.0 (4.9)
Hispanic	65.5 (5.3)	34.5 (5.3)
Parents' education level		
<12 years	62.3 (6.0)	37.7 (6.0)
12 years or GED	61.8 (4.0)	38.2 (4.0)
>12 years	81.0 (2.2)	19.0 (2.2)
Eligibility for free/reduced school meals		
Yes	68.1 (2.9)	31.9 (2.9)
No	82.9 (2.2)	17.1 (2.2)
Dental insurance status		
Private insurance	82.5 (3.2)	17.5 (3.2)
Public insurance	76.9 (2.3)	23.1 (2.3)
No insurance	39.3 (6.3)	60.7 (6.3)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 10: Weighted prevalence of having a usual source of dental care (self-reported) among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,723)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	76.4 (3.7)	66.7 (5.4)	78.9 (4.6)	77.4 (4.9)	81.4 (1.9)
Grade level					
Kindergarten	75.5 (3.4)	65.0 (6.0)	75.1 (4.1)	73.3 (6.7)	84.2 (1.8)
Third grade	77.3 (5.9)	68.6 (8.3)	82.9 (5.9)	81.2 (4.7)	78.7 (2.5)
Sex					
Male	73.0 (6.4)	65.0 (8.4)	75.0 (9.1)	79.3 (3.2)	82.3 (2.8)
Female	79.6 (3.7)	68.5 (6.2)	81.7 (3.5)	75.6 (10.2)	80.5 (3.5)
Race/ethnicity					
Non-Hispanic white	85.1 (2.8)	86.7 (3.6)	81.6 (4.3)	75.5 (6.4)	83.2 (2.6)
Non-Hispanic black	69.5 (6.9)	66.7 (9.2)	66.1 (7.2)	81.2 (8.9)	80.3 (10.2)
Non-Hispanic other	79.1 (5.5)	60.0 (11.7)	57.7* (26.6)	74.3 (5.5)	62.6 (10.2)
Hispanic	66.0 (10.3)	59.4 (7.5)	83.9 (12.6)	82.4 (13.8)	86.3 (7.0)
Parents' education level					
<12 years	61.1 (12.8)	59.0 (6.9)	74.8 (15.0)	47.9* (16.9)	76.6 (10.6)
12 years or GED	61.8 (7.2)	63.1 (5.7)	64.9 (4.6)	50.2 (10.6)	62.2 (8.8)
>12 years	83.7 (3.3)	70.4 (7.0)	85.4 (3.6)	84.4 (3.2)	85.7 (2.2)
Eligibility for free/reduced school meals	69.9 (5.3)	60.6 (4.3)	67.0 (6.1)	70.4 (10.5)	77.2 (4.5)
Yes	84.7 (3.8)	75.8 (6.4)	91.3 (4.2)	84.5 (4.7)	83.9 (2.0)
No					
Dental insurance status					
Private insurance	82.5 (5.0)	73.9 (10.3)	91.7 (4.6)	89.3 (2.3)	85.7 (2.1)
Public insurance	79.5 (3.3)	73.9 (5.7)	72.9 (6.1)	68.1 (7.9)	81.2 (4.1)
No insurance	39.0 (11.3)	34.2* (10.4)	25.3* (12.0)	46.0* (16.2)	53.2 (7.1)

Source: Oral Health Survey of Maryland School Children, 2011-2012

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 11: Weighted prevalence of having had a toothache because of a cavity in the last 12 months (self-reported) among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=1,723)

Sample characteristics	Had a toothache because of a cavity in the last 12 months	Did not have a toothache because of a cavity in the last 12 months
	n (%)	
Total	9.1 (1.5)	90.9 (1.5)
Grade level		
Kindergarten	8.0 (1.3)	92.0 (1.3)
Third grade	10.2 (2.3)	89.8 (2.3)
Sex		
Male	8.7 (1.6)	91.3 (1.6)
Female	9.4 (1.9)	90.6 (1.9)
Race/ethnicity		
Non-Hispanic white	6.7 (1.1)	93.3 (1.1)
Non-Hispanic black	11.8* (3.7)	88.2 (3.7)
Non-Hispanic other	12.3 (3.0)	87.7 (2.0)
Hispanic	8.3* (2.7)	91.7 (2.7)
Parents' education level		
<12 years	14.5 (3.8)	85.5 (3.8)
12 years or GED	7.9 (2.3)	92.1 (2.3)
>12 years	8.8 (1.5)	91.2 (1.5)
Eligibility for free/reduced school meals		
Yes	13.2 (2.9)	86.8 (2.9)
No	5.5 (0.9)	94.5 (0.9)
Dental insurance status		
Private insurance	5.2 (0.8)	94.8 (0.8)
Public insurance	13.5 (3.2)	86.5 (3.2)
No insurance	8.2* (4.0)	91.8 (4.0)

Source: Oral Health Survey of Maryland School Children, 2011-2012

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 12: Weighted prevalence of having had a toothache because of a cavity in the last 12 months (self-reported) among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,723)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	11.9 (3.3)	5.0 (1.4)	5.5* (2.1)	11.5 (2.2)	8.6 (1.4)
Grade level					
Kindergarten	9.7 (2.8)	5.9* (1.8)	6.2* (2.1)	8.7 (2.5)	7.8 (1.6)
Third grade	14.2* (4.8)	4.1* (2.3)	4.8* (3.6)	14.1* (4.4)	9.3 (1.5)
Sex					
Male	11.4* (3.5)	2.0* (1.0)	9.9* (3.5)	13.6 (2.9)	9.3 (2.3)
Female	12.4* (3.9)	8.1* (2.6)	2.3* (1.5)	9.5 (2.3)	7.8 (1.7)
Race/ethnicity					
Non-Hispanic white	9.0 (2.2)	4.6* (3.5)	2.6* (1.5)	9.1 (1.7)	5.0 (1.0)
Non-Hispanic black	15.1* (6.4)	6.8* (3.9)	10.4* (8.2)	11.3* (7.2)	12.6* (5.1)
Non-Hispanic other	14.9* (6.0)	5.4* (2.3)	16.3* (13.7)	21.2* (7.4)	14.5* (9.9)
Hispanic	12.1* (6.8)	3.3* (1.1)	17.7* (10.2)	7.0* (7.4)	18.8* (9.0)
Parents' education level					
<12 years	20.6* (6.6)	10.7* (6.8)	14.8* (10.9)	0.0 (0.0)	10.8* (7.4)
12 years or GED	9.9* (4.6)	0.0 (0.0)	6.8* (2.5)	15.6* (5.0)	11.4* (4.8)
>12 years	11.7 (3.2)	5.0* (2.2)	3.5* (2.8)	11.5 (2.3)	7.9 (1.6)
Eligibility for free/reduced school meals	17.5* (5.7)	6.2* (1.9)	9.1* (3.5)	11.6* (3.8)	14.7 (2.5)
Yes	5.8 (1.4)	4.3* (1.9)	1.9* (2.0)	12.3 (2.6)	4.3* (1.4)
No					
Dental insurance status					
Private insurance	5.6 (1.2)	3.5* (2.1)	1.7* (2.0)	10.0 (1.3)	5.5* (1.8)
Public insurance	17.9* (6.5)	7.7* (2.8)	7.2* (4.2)	14.3* (5.0)	14.3 (2.8)
No insurance	11.4* (8.5)	3.1* (2.1)	0.0 (0.0)	12.9* (6.9)	8.0* (5.6)

Source: Oral Health Survey of Maryland School Children, 2011-2012

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 13: Weighted prevalence of having put off dental care in the last 12 months because of cost (self-reported) among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=1,723)

Sample characteristics	Put off dental care in the last 12 months because of cost	Did not put off dental care in the last 12 months because of cost
	n (%)	
Total	10.4 (1.4)	89.6 (1.4)
Grade level		
Kindergarten	8.7 (1.4)	91.3 (1.4)
Third grade	12.2 (1.9)	87.8 (1.9)
Sex		
Male	11.9 (2.4)	88.1 (2.4)
Female	9.0 (1.3)	91.0 (1.3)
Race/ethnicity		
Non-Hispanic white	7.6 (1.1)	92.4 (1.1)
Non-Hispanic black	8.5 (1.9)	91.5 (1.9)
Non-Hispanic other	11.7* (3.9)	88.3 (3.9)
Hispanic	20.7 (6.1)	79.3 (6.1)
Parents' education level		
<12 years	16.1 (4.8)	83.9 (4.8)
12 years or GED	16.4 (4.0)	83.6 (4.0)
>12 years	8.0 (1.2)	92.0 (1.2)
Eligibility for free/reduced school meals		
Yes	11.5 (2.4)	88.5 (2.4)
No	8.0 (1.3)	92.0 (1.3)
Dental insurance status		
Private insurance	5.7 (1.2)	94.3 (1.2)
Public insurance	5.0 (1.2)	95.0 (1.2)
No insurance	54.4 (7.1)	45.6 (7.1)

Source: Oral Health Survey of Maryland School Children, 2011-2012

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 14: Weighted prevalence of having put off dental care in the last 12 months because of cost (self-reported) among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,723)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	10.3 (2.6)	11.1 (3.3)	5.4 (1.4)	13.7 (3.1)	11.0 (1.8)
Grade level					
Kindergarten	9.4 (2.6)	9.1* (2.8)	5.1* (2.4)	12.8 (2.9)	5.4* (1.9)
Third grade	11.1* (3.4)	13.3* (4.5)	5.7* (2.9)	14.6 (3.8)	16.3 (1.9)
Sex					
Male	13.1* (4.8)	9.2* (3.6)	10.4* (3.8)	12.5* (4.4)	13.8 (3.6)
Female	7.6 (1.5)	13.2* (4.0)	1.8* (1.1)	14.9 (3.2)	8.1 (2.3)
Race/ethnicity					
Non-Hispanic white	7.2 (1.6)	3.0* (1.8)	3.8* (2.1)	15.7* (5.3)	9.5 (2.1)
Non-Hispanic black	8.1* (3.3)	7.0* (1.8)	2.9* (3.4)	15.3 (4.0)	16.8* (12.4)
Non-Hispanic other	7.7* (4.5)	20.4* (10.7)	0.0 (0.0)	3.1* (2.6)	10.6* (6.2)
Hispanic	28.7* (14.7)	15.9* (3.6)	17.7* (10.2)	17.7* (13.8)	19.4* (8.9)
Parents' education level					
<12 years	4.3* (2.9)	29.7 (3.6)	14.8* (10.9)	24.4* (18.8)	2.7* (3.0)
12 years or GED	18.8* (7.2)	8.0* (3.7)	6.2* (3.3)	32.3* (10.3)	24.9 (5.0)
>12 years	8.2 (2.4)	7.7 (2.1)	3.7* (2.4)	9.5 (2.2)	8.9 (2.6)
Eligibility for free/reduced school meals	11.8* (4.4)	12.9 (3.6)	4.8* (2.5)	18.9 (1.6)	9.3* (2.8)
Yes	7.6* (2.3)	6.8* (3.2)	4.7* (3.1)	9.1 (1.8)	11.8 (2.3)
No					
Dental insurance status					
Private insurance	6.2* (2.5)	3.5* (1.9)	3.0* (2.2)	5.6 (0.9)	8.8 (2.1)
Public insurance	3.9* (1.2)	7.1* (3.6)	3.2* (1.9)	7.9* (2.7)	5.4 (1.3)
No insurance	59.3 (12.7)	53.2 (11.9)	25.0* (13.9)	53.6 (13.2)	51.1 (9.1)

Source: Oral Health Survey of Maryland School Children, 2011-2012

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 15: Weighted prevalence of dental insurance status among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=1,723)

Sample characteristics	Dental insurance status		
	Private	Public	No insurance
	Percentage (standard error)		
Overall	49.4 (4.2)	40.8 (3.9)	9.8 (1.2)
Region			
Central Baltimore	47.7 (6.8)	42.5 (6.6)	9.8 (2.2)
Central D.C.†	45.7 (10.8)	42.6 (9.5)	11.7 (2.4)
Eastern Shore	48.0 (9.0)	47.2 (8.8)	4.8* (1.6)
Southern	57.1 (5.7)	29.5 (5.0)	13.4 (2.2)
Western	57.7 (5.7)	34.9 (5.7)	7.4 (2.0)
Grade level			
Kindergarten	50.3 (4.2)	40.9 (4.2)	8.7 (1.1)
Third grade	48.4 (4.9)	40.8 (4.5)	10.8 (1.8)
Sex			
Male	49.8 (5.0)	39.1 (4.2)	11.1 (2.1)
Female	49.0 (4.2)	42.5 (4.4)	8.5 (1.1)
Race/ethnicity			
Non-Hispanic white	66.1 (3.3)	25.0 (3.2)	8.9 (1.2)
Non-Hispanic black	38.7 (5.4)	56.5 (5.8)	4.8 (1.4)
Non-Hispanic other	51.1 (6.4)	32.3 (6.5)	16.6 (3.5)
Hispanic	18.3* (5.5)	65.5 (7.0)	16.2* (5.4)
Parents' education level			
<12 years	9.0* (4.2)	77.2 (3.8)	13.8 (3.4)
12 years or GED	27.5 (4.8)	58.6 (3.5)	13.9 (3.2)
>12 years	60.9 (4.0)	31.1 (4.1)	8.0 (1.2)
Eligibility for free/reduced school meals			
Yes	14.5 (2.5)	76.8 (1.2)	8.7 (1.1)
No	82.7 (1.7)	7.8 (1.2)	9.5 (1.1)

Source: Oral Health Survey of Maryland School Children, 2011-2012

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

FINDINGS FROM THE ORAL EXAMINATION SCREENINGS

Table 16: Unweighted and weighted sample characteristics, Maryland*, 2011-2012 (n=1,486)

Sample characteristics	Unweighted	Weighted
	n (%)	
Total	1,486 (100)	105,584 (100)
Grade level		
Kindergarten	865 (58.2)	53,393 (50.6)
Third grade	621 (41.8)	52,191 (49.4)
Sex		
Male	744 (50.1)	51,889 (49.1)
Female	742 (49.9)	53,695 (50.9)
Race/ethnicity		
Non-Hispanic white	835 (56.2)	44,828 (42.5)
Non-Hispanic black	259 (17.4)	29,410 (27.8)
Non-Hispanic other	203 (13.7)	12,478 (11.8)
Hispanic	144 (9.7)	15,446 (14.6)
Undetermined	45 (3.0)	3,422 (3.2)
Parents' education level		
<12 years	94 (6.3)	10,627 (10.1)
12 years or GED	248 (16.7)	20,225 (19.1)
>12 years	1,104 (74.3)	71,706 (67.9)
Undetermined	40 (2.7)	3,026 (2.9)
Eligibility for free/reduced school meals		
Yes	531 (35.7)	48,356 (45.8)
No	829 (55.8)	49,424 (46.8)
Undetermined	126 (8.5)	7,804 (7.4)
Dental insurance status		
Private insurance	794 (53.4)	48,556 (46.0)
Public insurance	476 (32.1)	40,469 (38.3)
No insurance	147 (9.9)	10,756 (10.2)
Undetermined	69 (4.6)	5,803 (5.5)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 17: Unweighted sample characteristics, by region, Maryland*, 2011-2012 (n=1,486)

Sample characteristics	Region				
	Central Baltimore	Central D.C.*	Eastern Shore	Southern	Western
	n (%)				
Total	526 (100)	287 (100)	155 (100)	174 (100)	344 (100)
Grade level					
Kindergarten	294 (55.9)	170 (59.2)	95 (61.3)	105 (60.3)	201 (58.4)
Third grade	232 (44.1)	117 (40.8)	60 (38.7)	69 (39.7)	143 (41.6)
Sex					
Male	273 (51.9)	149 (51.9)	66 (42.6)	84 (48.3)	172 (50.0)
Female	253 (48.1)	138 (48.1)	89 (57.4)	90 (51.7)	172 (50.0)
Race/ethnicity					
Non-Hispanic white	315 (59.9)	69 (24.0)	108 (69.7)	97 (55.7)	246 (71.5)
Non-Hispanic black	86 (16.3)	69 (24.0)	30 (19.3)	42 (24.1)	32 (9.3)
Non-Hispanic other	66 (12.5)	69 (24.0)	7 (4.5)	26 (14.9)	35 (10.2)
Hispanic	44 (8.4)	58 (20.2)	8 (5.2)	9 (5.2)	25 (7.3)
Undetermined	15 (2.9)	22 (7.8)	2 (1.3)	0 (0.0)	6 (1.7)
Parents' education level					
<12 years	30 (5.8)	30 (10.5)	13 (8.4)	4 (2.3)	17 (4.9)
12 years or GED	82 (15.8)	35 (12.2)	46 (29.7)	25 (14.4)	60 (17.5)
>12 years	400 (77.1)	199 (69.3)	95 (61.3)	145 (83.3)	265 (77.0)
Undetermined	7 (1.3)	23 (8.0)	1 (0.6)	0 (0.0)	2 (0.6)
Eligibility for free/reduced school meals	184 (35.0)	84 (29.3)	80 (51.6)	51 (29.3)	132 (38.4)
Yes	306 (58.2)	161 (56.1)	66 (42.6)	110 (63.2)	186 (54.1)
No	36 (6.8)	42 (14.6)	9 (5.8)	13 (7.5)	26 (7.5)
Undetermined					
Dental insurance status					
Private insurance	293 (55.7)	149 (51.9)	70 (45.2)	104 (59.8)	178 (51.7)
Public insurance	162 (30.8)	70 (24.4)	71 (45.8)	46 (26.4)	127 (36.9)
No insurance	53 (10.1)	36 (12.5)	10 (6.4)	20 (11.5)	28 (8.2)
Undetermined	18 (3.4)	32 (11.2)	4 (2.6)	4 (2.3)	11 (3.2)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 18: Weighted sample characteristics, by region, Maryland*, 2011-2012 (n=1,486)

Sample characteristics	Region				
	Central Baltimore	Central D.C.*	Eastern Shore	Southern	Western
	n (%)				
Total	45,985 (100)	26,707 (100)	9,677 (100)	8,410 (100)	14,805 (100)
Grade level					
Kindergarten	23,244 (50.5)	13,938 (52.2)	4,883 (50.5)	4.055 (48.2)	7,273 (49.1)
Third grade	22,741 (49.5)	12,769 (47.8)	4,794 (49.5)	4,355 (51.8)	7,532 (50.9)
Sex					
Male	22,833 (49.6)	13,626 (51.0)	3,764 (38.9)	4,052 (48.2)	7,615 (51.4)
Female	23,152 (50.4)	13,081 (49.0)	5,913 (61.1)	4,358 (51.8)	7,190 (48.6)
Race/ethnicity					
Non-Hispanic white	19,818 (43.1)	3,952 (14.8)	6,400 (66.1)	4,283 (50.9)	10,375 (70.1)
Non-Hispanic black	14,348 (31.2)	9,357 (35.0)	1,823 (18.8)	2,288 (27.2)	1,594 (10.8)
Non-Hispanic other	5,451 (11.9)	4,048 (15.2)	318 (3.3)	1,401 (16.7)	1,260 (8.5)
Hispanic	5,066 (11.0)	7,650 (28.6)	994 (10.3)	439 (5.2)	1,298 (8.8)
Undetermined	1,302 (2.8)	1,700 (6.4)	142 (1.5)	0 (0.0)	278 (1.9)
Parents' education level					
<12 years	4,602 (10.0)	3,568 (13.4)	1,234 (12.8)	342 (4.0)	882 (6.0)
12 years or GED	9,903 (21.5)	4,078 (15.3)	2,621 (27.1)	1,301 (15.5)	2,322 (15.7)
>12 years	30,410 (66.2)	17,265 (64.6)	5,727 (59.2)	6,767 (80.5)	11,537 (77.9)
Undetermined	1,070 (2.3)	1,796 (6.7)	95 (0.9)	0 (0.0)	64 (0.4)
Eligibility for free/reduced school meals	23,604 (51.3)	11,529 (43.2)	5,187 (53.6)	2,635 (31.3)	5,401 (36.5)
Yes	19,807 (43.1)	11,945 (44.7)	4,039 (41.7)	5,102 (60.7)	8,530 (57.6)
No	2,574 (5.6)	3,233 (12.1)	451 (4.7)	673 (8.0)	874 (5.9)
Undetermined					
Dental insurance status					
Private insurance	20,210 (43.9)	11,342 (42.5)	4,307 (44.5)	4,724 (56.2)	7,973 (53.8)
Public insurance	18,905 (41.1)	9,322 (34.9)	4,438 (45.9)	2,376 (28.3)	5,383 (36.4)
No insurance	4,958 (10.8)	3,207 (12.0)	470 (4.8)	1,059 (12.6)	1,062 (7.2)
Undetermined	1,912 (4.2)	2,836 (10.6)	462 (4.8)	249 (2.9)	387 (2.6)

Source: Oral Health Survey of Maryland School Children, 2011-2012

*Excluding Montgomery County

Table 19: Weighted prevalence of dental caries (history of dental caries) in the primary dentition, by selected characteristics among public school children in kindergarten and third grade, Maryland*, 2011-2012 (n=1,486)

Sample characteristics	History of dental caries	No history of dental caries (caries free)
	Percentage (standard error)	
Total	31.8 (2.2)	68.2 (2.2)
Grade level		
Kindergarten	24.5 (2.3)	75.5 (2.3)
Third grade	39.6 (3.5)	60.4 (3.5)
Sex		
Male	32.3 (3.1)	67.7 (3.1)
Female	31.3 (3.0)	68.7 (3.0)
Race/ethnicity		
Non-Hispanic white	28.3 (3.0)	71.7 (3.0)
Non-Hispanic black	36.1 (4.3)	63.9 (4.3)
Non-Hispanic other	30.9 (4.2)	69.1 (4.2)
Hispanic	30.0 (5.8)	70.0 (5.8)
Parents' education level		
<12 years	39.3 (6.6)	60.7 (6.6)
12 years or GED	34.0 (3.0)	66.0 (3.0)
>12 years	29.8 (2.7)	70.2 (2.7)
Eligibility for free/reduced school meals		
Yes	39.2 (2.6)	60.8 (2.6)
No	25.5 (2.7)	74.5 (2.7)
Dental insurance status		
Private insurance	25.1 (2.7)	74.9 (2.7)
Public insurance	39.1 (3.6)	60.9 (3.6)
No insurance	32.5 (5.7)	67.5 (5.7)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one primary tooth eligible for scoring. "History of dental caries" refers to the existence of either active or treated disease.

*Excluding Montgomery County

Table 20: Weighted prevalence of having a history of dental caries in the primary dentition, by selected characteristics among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,486)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	33.0 (4.1)	28.2 (4.7)	40.8 (3.7)	32.5 (4.4)	28.3 (3.1)
Grade level					
Kindergarten	29.2 (4.6)	16.6 (3.5)	22.5 (4.6)	21.8 (3.2)	27.6 (1.8)
Third grade	37.3 (4.9)	41.1 (10.3)	59.6 (4.7)	42.5 (6.6)	29.0 (2.5)
Sex					
Male	35.6 (5.5)	26.9 (5.9)	44.1 (7.3)	28.6 (6.2)	28.4 (7.0)
Female	30.3 (5.3)	29.5 (7.7)	38.7 (3.8)	36.1 (7.3)	28.3 (2.4)
Race/ethnicity					
Non-Hispanic white	28.7 (5.4)	22.8* (7.7)	35.2 (9.8)	31.5 (5.3)	23.9 (2.1)
Non-Hispanic black	37.4 (6.9)	32.6 (7.5)	44.7 (9.4)	39.2 (7.9)	31.1* (13.0)
Non-Hispanic other	29.9 (6.3)	31.0 (8.4)	32.8* (19.5)	32.4 (7.1)	32.7* (11.2)
Hispanic	34.1* (10.6)	18.2* (5.7)	79.9 (18.2)	7.5* (8.0)	52.9 (6.7)
Parent's education level					
<12 years	35.0 (10.0)	38.9 (6.3)	74.6 (20.0)	0.0 (0.0)	28.7* (13.1)
12 years or GED	31.8 (5.1)	29.8 (3.6)	39.5 (8.2)	40.8 (8.4)	40.0 (6.8)
>12 years	32.9 (5.3)	24.7 (5.6)	34.7 (9.8)	32.5 (4.9)	25.6 (3.1)
Eligibility for free/reduced school meals	42.1 (4.1)	29.2 (7.4)	52.1 (4.0)	30.9 (8.7)	40.5 (2.2)
Yes	24.2 (4.5)	27.1 (7.0)	30.9* (10.7)	33.7 (5.0)	19.1 (2.7)
No					
Dental insurance status					
Private insurance	23.3 (3.7)	27.3 (7.8)	26.3* (9.7)	36.0 (6.0)	19.6 (3.3)
Public insurance	40.8 (6.7)	30.0 (8.2)	55.9 (5.3)	30.7 (4.3)	38.9 (2.1)
No insurance	37.0 (10.2)	26.3 (6.8)	38.9* (18.2)	25.4* (15.0)	35.2 (9.5)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one primary tooth eligible for scoring. "History of dental caries" refers to the existence of either active or treated disease.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 21: Weighted prevalence of untreated dental caries in the primary dentition, by selected characteristics among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=1,486)

Sample characteristics	Untreated dental caries
	Percentage (standard error)
Total	13.2 (1.9)
Grade level	
Kindergarten	10.1 (1.8)
Third grade	16.6 (3.1)
Sex	
Male	14.8 (2.9)
Female	11.6 (2.0)
Race/ethnicity	
Non-Hispanic white	9.7 (1.5)
Non-Hispanic black	16.6 (4.5)
Non-Hispanic other	13.3 (3.1)
Hispanic	15.2 (4.1)
Parent's education level	
<12 years	17.9* (6.0)
12 years or GED	16.1 (3.1)
>12 years	11.9 (1.9)
Eligibility for free/reduced school meals	
Yes	17.0 (2.7)
No	10.0 (2.4)
Dental insurance status	
Private insurance	10.6 (2.4)
Public insurance	13.2 (2.6)
No insurance	26.1 (5.8)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one primary tooth eligible for scoring.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 22: Weighted prevalence of untreated dental caries in the primary dentition, by selected characteristics among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,486)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	12.8 (2.7)	16.6* (5.1)	11.6* (4.1)	13.3* (4.8)	9.5 (1.6)
Grade level					
Kindergarten	10.9* (3.6)	10.2* (3.1)	6.9* (3.4)	9.6 (2.5)	9.4 (2.7)
Third grade	15.0 (3.8)	23.7* (9.8)	16.4* (5.6)	16.8* (8.0)	9.5 (2.4)
Sex					
Male	14.0* (4.8)	19.1* (7.1)	15.3 (4.4)	10.9* (4.5)	11.6* (3.6)
Female	11.5 (2.3)	13.9* (5.7)	9.2* (4.5)	15.6* (7.2)	7.2* (3.1)
Race/ethnicity					
Non-Hispanic white	9.5 (2.2)	11.6* (8.8)	12.9* (3.9)	11.7* (5.8)	6.8 (1.5)
Non-Hispanic black	15.1* (7.0)	20.5* (8.7)	12.7* (6.4)	16.4* (6.2)	10.6* (6.4)
Non-Hispanic other	10.2* (4.2)	15.0* (6.8)	18.1* (18.5)	15.3* (3.1)	18.3* (9.2)
Hispanic	21.7* (8.3)	11.9* (4.9)	0.0 (0.0)	7.5* (8.0)	22.9* (8.2)
Parent's education level					
<12 years	11.7* (5.2)	33.6 (9.6)	8.7* (6.6)	0.0 (0.0)	8.5* (5.7)
12 years or GED	17.6* (5.3)	7.2* (2.8)	16.1* (8.2)	24.3* (10.0)	20.1 (5.2)
>12 years	11.9 (2.6)	15.3* (5.9)	10.3* (3.5)	11.9* (4.6)	7.5* (2.4)
Eligibility for free/reduced school meals	17.3 (3.8)	19.4* (6.7)	14.0* (6.1)	15.6* (5.9)	13.9 (3.1)
Yes	9.0* (2.8)	14.1* (8.1)	9.9* (3.3)	11.3* (4.3)	5.9* (3.1)
No					
Dental insurance status					
Private insurance	9.5 (2.8)	17.3* (8.9)	7.1* (3.5)	9.9* (4.2)	6.2* (2.7)
Public insurance	11.9* (4.0)	14.2* (7.1)	15.4* (5.4)	18.1* (6.2)	11.5 (3.0)
No insurance	30.8* (10.4)	22.7* (7.8)	28.6* (17.5)	18.1* (10.0)	21.7* (10.3)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one primary tooth eligible for scoring. "History of dental caries" refers to the existence of either active or treated disease.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 23: Weighted mean dt, ft, dft %dt/dft, and %ft/dft in the primary dentition, by selected characteristics among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=1,480)

Characteristic	dt	ft	dft	%dt/dft	%ft/dft
	Mean (standard error)			*Percentage (standard error)*	
Total	0.28 (0.05)	0.65 (0.06)	0.93 (0.08)	30.2 (3.7)	69.8 (3.7)
Region					
Ctrl Baltimore	0.26 (0.06)	0.74 (0.12)	1.00 (0.15)	26.0 (3.8)	74.0 (3.8)
Central D.C.†	0.36* (0.14)	0.44 (0.09)	0.80 (0.17)	44.7 (11.2)	55.3 (11.2)
Eastern Shore	0.26* (0.11)	0.97 (0.07)	1.23 (0.10)	20.9* (7.7)	79.1 (7.7)
Southern	0.32 (0.09)	0.47 (0.08)	0.78 (0.11)	40.4 (7.7)	59.6 (7.7)
Western	0.21 (0.06)	0.66 (0.12)	0.87 (0.15)	23.8 (4.6)	76.2 (4.6)
Grade					
Kindergarten	0.22 (0.04)	0.56 (0.08)	0.78 (0.09)	28.6 (4.1)	71.4 (4.1)
Third grade	0.34 (0.07)	0.75 (0.09)	1.09 (0.11)	31.3 (5.4)	68.7 (5.4)
Sex					
Male	0.31 (0.06)	0.63 (0.07)	0.94 (0.10)	32.9 (4.4)	67.1 (4.4)
Female	0.25 (0.05)	0.67 (0.09)	0.92 (0.12)	27.3 (4.3)	72.7 (4.3)
Race/ethnicity					
Non-Hisp white	0.16 (0.03)	0.57 (0.07)	0.74 (0.09)	22.1 (2.7)	77.9 (2.7)
Non-Hisp black	0.33 (0.07)	0.72 (0.17)	1.05 (0.17)	31.3 (7.2)	68.7 (7.2)
Non-Hisp other	0.44 (0.13)	0.66 (0.14)	1.09 (0.20)	40.0 (8.3)	60.0 (8.3)
Hispanic	0.37 (0.11)	0.58 (0.17)	0.95 (0.21)	38.8 (9.6)	61.2 (9.6)
Parent's education level					
<12 years	0.48* (0.23)	0.84 (0.25)	1.32 (0.27)	36.4* (15.1)	63.6 (15.1)
12 years/GED	0.32 (0.07)	0.71 (0.13)	1.03 (0.13)	31.3 (6.4)	68.7 (6.4)
>12 years	0.24 (0.04)	0.59 (0.07)	0.83 (0.10)	28.6 (3.6)	71.4 (3.6)
Eligibility for free/reduced school meals					
Yes	0.37 (0.07)	0.86 (0.11)	1.22 (0.11)	30.1 (5.4)	69.9 (5.4)
No	0.19 (0.04)	0.47 (0.05)	0.66 (0.07)	28.8 (4.5)	71.2 (4.5)
Dental insurance status					
Private ins.	0.19 (0.04)	0.42 (0.04)	0.61 (0.06)	30.8 (4.6)	69.2 (4.6)
Public ins.	0.31 (0.07)	1.01 (0.12)	1.32 (0.14)	23.4 (4.6)	76.6 (4.6)
No insurance	0.61 (0.16)	0.25* (0.08)	0.87 (0.16)	70.6 (9.2)	29.4* (9.2)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one primary tooth eligible for scoring.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 24: Weighted mean dt, ft, dft %dt/dft, and %ft/dft in the primary dentition, by selected characteristics among public school children in kindergarten and third grade with a history of dental caries, Maryland†, 2011-2012 (n=418)

Characteristic	dt	ft	dft	%dt/dft	%ft/dft
	Mean (standard error)			*Percentage (standard error)*	
Total	0.88 (0.11)	2.05 (0.15)	2.93 (0.13)	30.2 (3.7)	69.8 (3.7)
Region					
Ctrl Baltimore	0.78 (0.11)	2.24 (0.22)	3.02 (0.21)	26.0 (3.8)	74.0 (3.8)
Central D.C.†	1.27 (0.34)	1.57 (0.39)	2.84 (0.36)	44.7 (11.2)	55.3 (11.2)
Eastern Shore	0.63* (0.22)	2.38 (0.28)	3.01 (0.08)	20.9* (7.7)	79.1 (7.7)
Southern	0.97 (0.25)	1.43 (0.13)	2.40 (0.21)	40.4 (7.7)	59.6 (7.7)
Western	0.73 (0.16)	2.33 (0.26)	3.05 (0.29)	23.8 (4.6)	76.2 (4.6)
Grade					
Kindergarten	0.91 (0.12)	2.28 (0.23)	3.19 (0.20)	28.6 (4.1)	71.4 (4.1)
Third grade	0.86 (0.14)	1.89 (0.21)	2.76 (0.17)	31.3 (5.4)	68.7 (5.4)
Sex					
Male	0.96 (0.14)	1.96 (0.19)	2.92 (0.19)	32.9 (4.4)	67.1 (4.4)
Female	0.80 (0.11)	2.14 (0.21)	2.94 (0.17)	27.3 (4.3)	72.7 (4.3)
Race/ethnicity					
Non-Hisp white	0.58 (0.07)	2.03 (0.13)	2.61 (0.13)	22.1 (2.7)	77.9 (2.7)
Non-Hisp black	0.91 (0.15)	2.00 (0.43)	2.91 (0.37)	31.3 (7.2)	68.7 (7.2)
Non-Hisp other	1.42 (0.33)	2.12 (0.34)	3.54 (0.32)	40.0 (8.3)	60.0 (8.3)
Hispanic	1.22 (0.33)	1.93 (0.30)	3.15 (0.68)	38.8 (9.6)	61.2 (9.6)
Parent's education level					
<12 years	1.22* (0.54)	2.13 (0.52)	3.35 (0.34)	36.4* (15.1)	63.6 (15.1)
12 years/GED	0.95 (0.16)	2.08 (0.33)	3.03 (0.25)	31.3 (6.4)	68.7 (6.4)
>12 years	0.79 (0.10)	1.98 (0.19)	2.77 (0.19)	28.6 (3.6)	71.4 (3.6)
Eligibility for free/reduced school meals					
Yes	0.94 (0.16)	2.18 (0.25)	3.12 (0.18)	30.1 (5.4)	69.9 (5.4)
No	0.74 (0.11)	1.84 (0.20)	2.58 (0.19)	28.8 (4.5)	71.2 (4.5)
Dental insurance status					
Private ins.	0.75 (0.11)	1.68 (0.20)	2.43 (0.19)	30.8 (4.6)	69.2 (4.6)
Public ins.	0.79 (0.14)	2.58 (0.26)	3.37 (0.21)	23.4 (4.6)	76.6 (4.6)
No insurance	1.88 (0.29)	0.78* (0.27)	2.67 (0.28)	70.6 (9.2)	29.4* (9.2)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one primary tooth eligible for scoring and dft > 0.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 25: Weighted prevalence of dental caries (history of dental caries) in both the primary and permanent dentitions combined, by selected characteristics among public school children in kindergarten and third grade, Maryland*, 2011-2012 (n=1,486)

Sample characteristics	History of dental caries	No history of dental caries (caries free)
	Percentage (standard error)	
Total	33.2 (2.4)	66.8 (2.4)
Grade level		
Kindergarten	24.7 (2.2)	75.3 (2.2)
Third grade	41.9 (3.9)	58.0 (3.9)
Sex		
Male	32.8 (3.0)	67.2 (3.1)
Female	33.7 (3.3)	66.3 (3.0)
Race/ethnicity		
Non-Hispanic white	28.5 (3.0)	71.5 (3.0)
Non-Hispanic black	40.6 (5.0)	59.4 (5.0)
Non-Hispanic other	32.2 (4.1)	67.8 (4.1)
Hispanic	29.0 (5.8)	71.0 (5.8)
Parent's education level		
<12 years	40.3 (6.4)	59.7 (6.4)
12 years or GED	33.9 (2.9)	66.1 (2.9)
>12 years	31.7 (3.3)	68.3 (3.3)
Eligibility for free/reduced school meals		
Yes	41.8 (3.1)	58.2 (3.1)
No	25.9 (2.7)	74.1 (2.7)
Dental insurance status		
Private insurance	25.3 (2.6)	74.6 (2.7)
Public insurance	42.3 (4.3)	57.7 (4.3)
No insurance	32.2 (5.7)	67.8 (5.7)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one tooth eligible for scoring. "History of dental caries" refers to the existence of either active or treated disease.

*Excluding Montgomery County

Table 26: Weighted prevalence of having a history of dental caries in both the primary and permanent dentitions combined, by selected characteristics among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,486)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	35.7 (4.6)	28.5 (4.7)	41.1 (3.5)	32.5 (4.4)	29.3 (2.7)
Grade level					
Kindergarten	29.4 (4.5)	16.6 (3.5)	23.5 (4.5)	21.8 (3.2)	27.6 (3.2)
Third grade	42.1 (6.5)	41.5 (9.9)	59.0 (4.5)	42.5 (6.6)	31.0 (3.4)
Sex					
Male	35.6 (5.5)	27.1 (5.8)	45.3 (7.2)	28.6 (6.2)	30.4 (6.0)
Female	35.8 (6.2)	29.9 (7.6)	38.3 (3.8)	36.1 (7.3)	28.3 (2.4)
Race/ethnicity					
Non-Hispanic white	29.3 (5.4)	22.8* (7.7)	35.2 (9.8)	31.5 (5.3)	23.9 (2.1)
Non-Hispanic black	44.8 (8.6)	33.6 (7.1)	44.7 (9.4)	39.2 (7.9)	40.5 (6.6)
Non-Hispanic other	30.9 (6.4)	32.6 (8.1)	48.0* (15.4)	32.4 (7.1)	32.7* (11.2)
Hispanic	32.8* (10.9)	17.5* (5.8)	75.9 (21.1)	7.5* (8.0)	52.9 (6.7)
Parent's education level					
<12 years	35.0 (10.0)	37.7 (6.9)	74.6 (20.0)	0.0 (0.0)	45.8 (6.5)
12 years or GED	31.9 (5.2)	28.3 (2.9)	41.4 (7.3)	40.8 (8.4)	40.0 (6.8)
>12 years	36.8 (6.8)	25.7 (5.5)	34.4 (9.6)	32.5 (4.9)	25.6 (3.1)
Eligibility for free/reduced school meals	46.8 (5.2)	28.4 (7.6)	52.5 (3.6)	30.9 (8.7)	43.3 (2.5)
Yes	24.2 (4.5)	28.5 (6.7)	30.9* (10.7)	33.7 (5.0)	19.1 (2.7)
No					
Dental insurance status					
Private insurance	23.3 (3.7)	28.3 (7.7)	26.3* (9.7)	36.0 (6.0)	19.6 (3.3)
Public insurance	46.9 (8.0)	29.7 (8.5)	56.4 (5.1)	30.7 (4.3)	41.7 (2.3)
No insurance	36.1 (10.4)	26.3 (6.8)	38.9* (18.2)	25.4* (15.0)	35.2 (9.5)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one tooth eligible for scoring. "History of dental caries" refers to the existence of either active or treated disease.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 27: Weighted prevalence of untreated dental caries in both the primary and permanent dentitions combined, by selected characteristics among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=1,486)

Sample characteristics	Untreated dental caries
	Percentage (standard error)
Total	13.7 (1.8)
Grade level	
Kindergarten	10.2 (1.8)
Third grade	17.1 (2.9)
Sex	
Male	15.0 (2.9)
Female	12.3 (2.1)
Race/ethnicity	
Non-Hispanic white	10.0 (1.5)
Non-Hispanic black	17.5 (4.4)
Non-Hispanic other	13.3 (3.1)
Hispanic	14.6 (4.1)
Parent's education level	
<12 years	17.7* (6.0)
12 years or GED	16.7 (2.9)
>12 years	12.3 (2.0)
Eligibility for free/reduced school meals	
Yes	17.6 (2.7)
No	10.2 (2.4)
Dental insurance status	
Private insurance	10.6 (2.4)
Public insurance	14.1 (2.8)
No insurance	27.0 (5.8)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one tooth eligible for scoring.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 28: Weighted prevalence of untreated dental caries in both the primary and permanent dentitions combined, by selected characteristics among public school children in kindergarten and third grade, by region, Maryland†, 2011-2012 (n=1,486)

Sample characteristics	Region				
	Central Baltimore	Central D.C.†	Eastern Shore	Southern	Western
	Percentage (standard error)				
Total	13.7 (2.7)	16.4* (5.1)	12.5* (4.1)	13.3* (4.8)	9.5 (1.6)
Grade level					
Kindergarten	11.1* (3.5)	10.2* (3.1)	7.9* (3.2)	9.6 (2.5)	9.4 (2.7)
Third grade	16.4 (3.3)	23.1* (9.6)	17.3* (5.6)	16.8* (8.0)	9.5 (2.4)
Sex					
Male	14.5* (4.8)	18.9* (7.0)	15.3 (4.4)	10.9* (4.5)	11.6* (3.6)
Female	12.9 (3.0)	13.7* (5.7)	10.8* (4.3)	15.6* (7.2)	7.2* (3.1)
Race/ethnicity					
Non-Hispanic white	10.1(2.3)	11.6* (8.8)	12.9* (3.9)	11.7* (5.8)	6.8 (1.5)
Non-Hispanic black	16.4* (6.6)	20.5* (8.7)	18.1* (8.3)	16.4* (6.2)	10.6* (6.4)
Non-Hispanic other	10.2* (4.2)	15.0* (6.8)	18.1* (18.5)	15.3* (3.1)	18.3* (9.2)
Hispanic	20.9* (8.3)	11.4* (4.9)	0.0 (0.0)	7.5* (8.0)	22.9* (8.2)
Parent's education level					
<12 years	11.7* (5.2)	32.5* (9.8)	8.7* (6.6)	0.0 (0.0)	8.5* (5.7)
12 years or GED	18.0 (4.9)	6.9* (2.8)	19.9* (7.6)	24.3* (10.0)	20.1 (5.2)
>12 years	12.9 (2.9)	15.3* (5.9)	10.2* (3.4)	11.9* (4.6)	7.5* (2.4)
Eligibility for free/reduced school meals					
Yes	18.5 (3.9)	18.9* (6.8)	15.6* (6.1)	15.6* (5.9)	13.9 (3.1)
No	9.4* (2.8)	14.1* (8.1)	9.9* (3.3)	11.3* (4.3)	5.9* (3.1)
Dental insurance status					
Private insurance	9.5 (2.8)	17.1* (8.8)	7.1* (3.5)	9.9* (4.2)	6.2* (2.7)
Public insurance	13.8* (4.5)	13.9* (7.1)	16.3* (5.5)	18.1* (6.2)	11.5 (3.0)
No insurance	31.6* (10.3)	22.7* (7.8)	38.9* (18.2)	18.1* (10.0)	21.7* (10.3)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one tooth eligible for scoring.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 29: Weighted mean dt+DT, ft+FT, dft+DMFT %dt+DT/dft+DMFT, and %ft+FT/dft+DMFT in both the primary and permanent dentitions combined, by selected characteristics among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=1,486)

Characteristic	dt+DT	ft+FT	dft+DMFT	%dt+DT/dft+DMFT	%ft+FT/dft+DMFT
	Mean (standard error)			*Percentage (standard error)*	
Total	0.29 (0.05)	0.70 (0.06)	1.00 (0.09)	29.3 (3.7)	70.1 (3.7)
Region					
Ctrl Baltimore	0.26 (0.05)	0.80 (0.13)	1.06 (0.16)	24.8 (3.9)	75.2 (3.9)
Central D.C.†	0.38* (0.16)	0.49 (0.08)	0.87 (0.19)	43.6 (10.7)	56.4 (10.7)
Eastern Shore	0.29* (0.11)	0.99 (0.06)	1.32 (0.10)	21.8* (7.3)	75.1 (6.1)
Southern	0.32 (0.09)	0.47 (0.08)	0.79 (0.12)	40.7 (7.8)	59.3 (7.8)
Western	0.21 (0.06)	0.70 (0.12)	0.93 (0.15)	22.5 (4.2)	75.7 (4.4)
Grade					
Kindergarten	0.23 (0.04)	0.57 (0.08)	0.80 (0.09)	28.3 (4.0)	70.9 (4.0)
Third grade	0.36 (0.08)	0.83 (0.09)	1.19 (0.13)	29.9 (5.0)	69.6 (5.0)
Sex					
Male	0.32 (0.06)	0.66 (0.07)	0.98 (0.09)	32.3 (4.3)	66.9 (4.3)
Female	0.27 (0.06)	0.74 (0.09)	1.01 (0.13)	26.3 (4.2)	73.2 (4.2)
Race/ethnicity					
Non-Hisp white	0.17 (0.03)	0.60 (0.08)	0.77 (0.09)	22.3 (2.5)	77.3 (2.5)
Non-Hisp black	0.33 (0.07)	0.85 (0.18)	1.19 (0.18)	28.0 (6.5)	71.7 (6.5)
Non-Hisp other	0.46 (0.14)	0.69 (0.14)	1.15 (0.21)	40.2 (8.7)	59.5 (8.7)
Hispanic	0.37* (0.12)	0.56 (0.16)	0.96 (0.21)	38.8 (10.1)	58.8 (9.6)
Parent's education level					
<12 years	0.54* (0.27)	0.87 (0.25)	1.42 (0.29)	37.9* (15.8)	61.0 (15.1)
12 years/GED	0.33 (0.06)	0.71 (0.13)	1.05 (0.13)	31.2 (6.1)	67.4 (6.2)
>12 years	0.24 (0.04)	0.66 (0.09)	0.90 (0.11)	26.8 (3.5)	72.9 (3.5)
Eligibility for free/reduced school meals					
Yes	0.38 (0.08)	0.93 (0.11)	1.33 (0.12)	29.0 (5.3)	70.1 (5.3)
No	0.19 (0.04)	0.49 (0.05)	0.68 (0.07)	28.2 (4.4)	71.5 (4.4)
Dental insurance status					
Private ins.	0.19 (0.04)	0.44 (0.04)	0.63 (0.06)	30.1 (4.6)	69.9 (4.6)
Public ins.	0.32 (0.07)	1.10 (0.13)	1.43 (0.15)	22.6 (4.4)	76.7 (4.5)
No insurance	0.64 (0.17)	0.26* (0.08)	0.91 (0.17)	70.7 (9.3)	28.3* (8.9)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one tooth eligible for scoring.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 30: Weighted mean dt+DT, ft+FT, dft+DMFT %dt+DT/dft+DMFT, and %ft+FT/dft+DMFT in both the primary and permanent dentitions combined , by selected characteristics among public school children in kindergarten and third grade with a history of dental caries, Maryland†, 2011-2012 (n=427)

Characteristic	dt+DT	ft+FT	dft+DMFT	%dt+DT/dft+DMFT	%ft+FT/dft+DMFT
	Mean (standard error)			*Percentage (standard error)*	
Total	0.88 (0.13)	2.10 (0.14)	3.00 (0.14)	29.3 (3.7)	70.1 (3.7)
Region					
Ctrl Baltimore	0.74 (0.13)	2.24 (0.20)	2.98 (0.22)	24.8 (3.9)	75.2 (3.9)
Central D.C.†	1.32 (0.39)	1.71 (0.37)	3.04 (0.41)	43.6 (10.7)	56.4 (10.7)
Eastern Shore	0.70* (0.22)	2.41 (0.24)	3.21 (0.10)	21.8* (7.3)	75.1 (6.1)
Southern	0.98 (0.26)	1.43 (0.13)	2.42 (0.21)	40.7 (7.8)	59.3 (7.8)
Western	0.71 (0.15)	2.40 (0.25)	3.17 (0.30)	22.5 (4.2)	75.7 (4.4)
Grade					
Kindergarten	0.92 (0.12)	2.31 (0.24)	3.26 (0.20)	28.3 (4.0)	70.9 (4.0)
Third grade	0.85 (0.16)	1.98 (0.19)	2.84 (0.19)	29.9 (5.0)	69.6 (5.0)
Sex					
Male	0.97 (0.14)	2.00 (0.20)	3.00 (0.20)	32.3 (4.3)	66.9 (4.3)
Female	0.79 (0.15)	2.19 (0.18)	3.00 (0.21)	26.3 (4.2)	73.2 (4.2)
Race/ethnicity					
Non-Hisp white	0.60 (0.07)	2.09 (0.14)	2.70 (0.14)	22.3 (2.5)	77.3 (2.5)
Non-Hisp black	0.82 (0.18)	2.10 (0.36)	2.93 (0.35)	28.0 (6.5)	71.7 (6.5)
Non-Hisp other	1.44 (0.37)	2.13 (0.33)	3.58 (0.33)	40.2 (8.7)	59.5 (8.7)
Hispanic	1.28 (0.37)	1.94 (0.30)	3.30 (0.21)	38.8 (10.1)	58.8 (9.6)
Parent's education level					
<12 years	1.34* (0.62)	2.15 (0.50)	3.52 (0.37)	37.9* (15.8)	61.0 (15.1)
12 years/GED	0.97 (0.16)	2.09 (0.32)	3.10 (0.26)	31.2 (6.1)	67.4 (6.2)
>12 years	0.76 (0.11)	2.07 (0.17)	2.83 (0.19)	26.8 (3.5)	72.9 (3.5)
Eligibility for free/reduced school meals					
Yes	0.92 (0.18)	2.23 (0.21)	3.17 (0.19)	29.0 (5.3)	70.1 (5.3)
No	0.75 (0.11)	1.89 (0.21)	2.65 (0.20)	28.2 (4.4)	71.5 (4.4)
Dental insurance status					
Private ins.	0.75 (0.11)	1.74 (0.21)	2.49 (0.20)	30.1 (4.6)	69.9 (4.6)
Public ins.	0.76 (0.16)	2.59 (0.21)	3.37 (0.23)	22.6 (4.4)	76.7 (4.5)
No insurance	2.00 (0.33)	0.80* (0.28)	2.83 (0.33)	70.7 (9.3)	28.3* (8.9)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one tooth eligible for scoring and dft+DMFT>0.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 31: Weighted prevalence of dental sealants on the permanent first molars, by selected characteristics among public school children in kindergarten and third grade, Maryland†, 2011-2012 (n=880)

Sample characteristics	Has ≥1 dental sealant	Has no dental sealants
	Percentage (standard error)	
Total	32.9 (2.2)	67.1 (2.2)
Region		
Central Baltimore	28.2 (3.7)	71.8 (3.7)
Central D.C.†	32.9 (4.8)	67.1 (4.8)
Eastern Shore	40.3 (4.8)	59.7 (4.8)
Southern	40.4 (4.7)	59.6 (4.7)
Western	37.3 (4.9)	62.7 (4.9)
Grade		
Kindergarten	11.3 (2.8)	88.7 (2.8)
Third grade	40.4 (3.2)	59.6 (3.2)
Sex		
Male	30.3 (3.2)	69.7 (3.2)
Female	35.0 (2.9)	65.0 (2.9)
Race/ethnicity		
Non-Hispanic white	39.5 (2.6)	60.5 (2.6)
Non-Hispanic black	25.1 (5.0)	74.9 (5.0)
Non-Hispanic other	29.2 (7.9)	70.8 (7.9)
Hispanic	30.1 (6.0)	69.9 (6.0)
Parent's education level		
<12 years	12.8* (5.0)	87.2 (5.0)
12 years or GED	39.4 (4.9)	60.6 (4.9)
>12 years	33.9 (2.5)	66.1 (2.5)
Eligibility for free/reduced school meals		
Yes	33.0 (3.5)	67.0 (3.5)
No	33.0 (2.6)	67.0 (2.6)
Dental insurance status		
Private insurance	31.9 (3.2)	68.1 (3.2)
Public insurance	39.7 (4.0)	60.3 (4.0)
No insurance	8.3* (2.8)	91.7 (2.8)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one permanent molar eligible for scoring.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

Table 32: Weighted prevalence of dental sealants on the permanent first molars, by selected characteristics among public school children in third grade, Maryland†, 2011-2012 (n=614)

Sample characteristics	Has ≥1 dental sealant	Has no dental sealants
	Percentage (standard error)	
Total	40.4 (3.2)	59.6 (3.2)
Region		
Central Baltimore	35.1 (5.5)	64.9 (5.5)
Central D.C.	40.8 (6.8)	59.2 (6.8)
Eastern Shore	51.1 (5.5)	48.9 (5.5)
Southern	49.7 (5.9)	50.3 (5.9)
Western	42.7 (6.8)	57.3 (6.8)
Sex		
Male	38.3 (4.4)	61.7 (4.4)
Female	42.2 (4.6)	57.8 (4.6)
Race/ethnicity		
Non-Hispanic white	47.5 (3.3)	42.5 (3.3)
Non-Hispanic black	28.6 (7.3)	71.4 (7.3)
Non-Hispanic other	37.5 (10.0)	62.5 (10.0)
Hispanic	42.4 (8.7)	57.6 (8.7)
Parent's education level		
<12 years	15.6* (6.3)	84.4 (6.3)
12 years or GED	48.2 (6.0)	51.8 (6.0)
>12 years	41.7 (3.6)	58.3 (3.6)
Eligibility for free/reduced school meals		
Yes	42.6 (5.4)	57.4 (5.4)
No	39.0 (3.6)	61.0 (3.6)
Dental insurance status		
Private insurance	39.0 (4.1)	61.0 (4.1)
Public insurance	48.9 (6.1)	51.1 (6.1)
No insurance	10.8* (3.8)	89.2 (3.8)

Source: Oral Health Survey of Maryland School Children, 2011-2012

Notes: Analysis restricted to children with at least one permanent molar eligible for scoring.

†Excluding Montgomery County

*Does not meet the standard for statistical reliability (*i.e.,* standard error is ≥30 percent of the estimate)

REFERENCES

1. Department of Pediatric Dentistry, University of Maryland Baltimore College of Dental Surgery Dental School; Office of Child Health Maryland Department of Health and Mental Hygiene. Survey of the oral health status of Maryland's school children, 1994-95. Volume II. Baltimore, MD: University of Maryland, Baltimore, 1996.

2. Macek MD, Wagner ML, Goodman HS. Survey of the oral health status of Maryland schoolchildren, 2000-2001. Baltimore, MD: Baltimore College of Dental Surgery Dental School, 2002.

3. Manski R, Chen H, Chenette RR, Coller S. Survey of the oral health status of Maryland school children, 2005-2006. Baltimore, MD: Family Health Administration, Maryland Department of Health and Mental Hygiene, 2007.

4. Radicke AW. Criteria for diagnosis of dental caries*. In:* proceedings of the conference on the clinical testing of cariostatic agents. Chicago, IL: American Dental Association, 1972; 87-8.

5. National Center for Health Statistics. National Health and Nutrition Examination Survey 1999-2001. Mobile exam center component descriptions. Hyattsville, MD: National Center for Health Statistics, 2002.

6. Maryland State Department of Education. 2012 Report card. Maryland state demographics. Accessed on July 9, 2013 through http://www.mdreportcard.org/Demographics.aspx?K=99AAAA&WDATA=state.

7. Bloom B, Cohen RA, Freeman G. Summary health statistics for US children: National Health Interview Survey, 2011. Vital Health Stat 10(254). Hyattsville, MD: National Center for Health Statistics, 2012.

8. Lewis C, Stout J. Toothache in US children. Arch Pediatr Adolesc Med 2010;164(11):1059-63.

9. Bloom B, Cohen RA, Freeman G. Summary health statistics for US children: National Health Interview Survey, 2010. Vital Health Stat 10(250). Hyattsville, MD: National Center for Health Statistics, 2011.

10. Manski RJ, Brown E. Dental coverage of children and young adults under age 21, United States, 1996 and 2006. Statistical Brief 221. Rockville, MD: Agency for Health Care Research and Quality, 2008.

11. Pew Center on the States. The state of children's dental health: making coverage matter. Washington, DC: The PEW Charitable Trusts, 2011.

12. National Center for Health Statistics. Healthy People 2010 final review. Hyattsville, MD: National Center for Health Statistics, 2012.

13. Association of State and Territorial Dental Directors. The basic screening survey: a tool for oral health surveillance, not research. Sparks, NV: Association of State and Territorial Dental Directors, 2011.

APPENDICES

APPENDIX A: IRB approval letters

University of Maryland, Baltimore
Institutional Review Board (IRB)
Phone: (410) 706-5037
Fax: (410) 706-4189
Email: hrpo@som.umaryland.edu

APPROVAL OF RESEARCH NOTIFICATION

Date: June 17, 2011

To: Mark Macek
RE: HM-HP-00048624-1
Protocol Version and ID #: HP-00048624 (HM-HP-00048624-1)
Type of Submission: Modification
Type of IRB Review: Expedited
Modification request dated: 6/14/2011

Modification Approval Date: 6/17/2011
Approval for this project is valid until
4/24/2012

This is to certify that the University of Maryland, Baltimore (UMB) Institutional Review Board (IRB) approved the above referenced modification request for the protocol entitled, "*Oral Health Survey of Maryland School Children, 2011-2012*".

The IRB approved this modification via expedited review pursuant to Federal regulations 45 CFR 46.110(b)(2)/21 CFR 56.110(b)(2).

The IRB made the following determinations regarding this submission:
- Written informed consent is required. Only the valid IRB-approved informed consent form(s) in CICERO can be used.

Below is a list of the documents attached to your application that have been approved:

Consent form in English (DHMH IRB contact added)
Consent form in Spanish
HIPAA Authorization Form_English version (no changes)
HIPAA Authorization Form_Spanish
Envelope containing project information_English (new logo and color codes)
Envelope containing project information_Spanish
FAQ flyer_English (no changes)
FAQ flyer_Spanish
Health questionnaire_English (new logo)
Health questionnaire_Spanish
Information letter to parents_English (new logo and color codes)
Information letter to parents_Spanish
Summary of findings_English (new logo)
Summary of findings_Spanish
Letter certifying Spanish translation

Eligibility Checklist for HP-00048624 v4-15-2011-1302903398180

Study schedule

In conducting this research you are required to follow the requirements listed in the INVESTIGATOR MANUAL. Investigators are reminded that the IRB must be notified of any changes in the study. In addition, the PI is responsible for ensuring prompt reporting to the IRB of proposed changes in a research activity, and for ensuring that such changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject (45 CFR 46.103(4)(iii)). The PI must also inform the IRB of any new and significant information that may impact a research participants' safety or willingness to continue in the study and any unanticipated problems involving risks to participants or others.

Research activity in which the VA Maryland Healthcare System (VAMHCS) is a recruitment site or in which VA resources (i.e., space, equipment, personnel, funding, data) are otherwise involved, must also be approved by the VAMHCS Research and Development Committee prior to initiation at the VAMHCS. Contact the VA Research Office at 410-605-7000 ext. 6568 for assistance.

The UMB IRB is organized and operated according to guidelines of the International Council on Harmonization, the United States Office for Human Research Protections and the United States Code of Federal Regulations and operates under Federal Wide Assurance No. FWA00007145.

If you have any questions about this review or questions, concerns, and/or suggestions regarding the Human Research Protection Program (HRPP), please do not hesitate to contact the Human Research Protections Office (HRPO) at (410) 706-5037 or HRPO@som.umaryland.edu.

University of Maryland, Baltimore
Institutional Review Board (IRB)
Phone: (410) 706-5037
Fax: (410) 706-4189
Email: hrpo@som.umaryland.edu

APPROVAL OF RESEARCH NOTIFICATION

Date: April 18, 2012

To: Mark Macek
RE: HCR-HP-00048624-1
Type of Submission: Continuing Review
Type of IRB Review: Expedited

Approval for this project is valid from 4/16/2012 to 4/15/2013

This is to certify that the University of Maryland, Baltimore (UMB) Institutional Review Board (IRB) approved the continuing review report for the above referenced protocol entitled, "*Oral Health Survey of Maryland School Children, 2011-2012*".

The IRB has determined that this protocol qualifies for expedited review pursuant to Federal regulations 45 CFR 46.110, 21 CFR 56.110, & 38 CRF 16.110 category(ies):
(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

(4) Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.) Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy; (b) weighing or testing sensory acuity; (c) magnetic resonance imaging;
(d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography; (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

45 CFR 46.404/21 CFR 50.51 - The research presents no greater than minimal risk to the children.

The IRB made the following determinations regarding this submission:
- Subpart D Determination for research involving children: 45 CFR 46.404/21CFR 50.51.
- Written informed consent is required. Only the valid IRB-approved informed consent form(s) in CICERO can be used.

Below is a list of the documents attached to your application that have been approved:

Assent script
Certification of translation from a certified translation service
Certification of translation/back-translation
Consent form_English version_new template language
Consent form_English version_new template language_one logo
Consent form_Spanish version_new template language
Consent form_Spanish version_new template language_one logo
Consent form in Spanish
Consent form in English (DHMH IRB contact added)
Consent form in English
Eligibility Checklist for HP-00048624 v4-15-2011-1302903398180
Study schedule
HIPAA Authorization Form_English (no changes)
HIPAA Authorization Form_Spanish
Health questionnaire_Spanish
FAQ flyer_Spanish
FAQ flyer_English (no changes)
Information letter to parents_English (new logo and color codes)
Summary of findings_English (new logo)
Letter certifying Spanish translation
Envelope containing project information_Spanish
Information letter to parents_Spanish
Health questionnaire_English (new logo)
Envelope containing project information_English (new logo and color codes)
Summary of findings_Spanish

In conducting this research you are required to follow the requirements listed in the INVESTIGATOR MANUAL. Investigators are reminded that the IRB must be notified of any changes in the study. In addition, the PI is responsible for ensuring prompt reporting to the IRB of proposed changes in a research activity, and for ensuring that such changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject (45 CFR 46.103(4)(iii)). The PI must also inform the IRB of any new and significant information that may impact a research participants' safety or willingness to continue in the study and any unanticipated problems involving risks to participants or others.

DHHS regulations at 45 CFR 46.109 (e) require that **continuing review** of research be conducted by the IRB at intervals appropriate to the degree of risk and **not less than once per year.** The regulations make **no provision for any grace period extending the conduct of the research beyond 4/15/2013.** You will receive continuing review email reminder notices prior to this date; however, it is your responsibility to submit your continuing review report in a timely manner to allow adequate time for substantive and meaningful IRB review and assure that this study is not conducted beyond **4/15/2013**. Investigators should submit continuing review reports in the electronic system at least six weeks prior to this date.

Research activity in which the VA Maryland Healthcare System (VAMHCS) is a recruitment site or in which VA resources (i.e., space, equipment, personnel, funding, data) are otherwise involved, must also be approved by the VAMHCS Research and Development Committee prior to initiation at the VAMHCS. Contact the VA Research Office at 410-605-7000 ext. 6568 for assistance.

The UMB IRB is organized and operated according to guidelines of the International Council on Harmonization, the United States Office for Human Research Protections and the United States Code of Federal Regulations and operates under Federal Wide Assurance No. FWA00007145.

If you have any questions about this review or questions, concerns, and/or suggestions regarding the Human Research Protection Program (HRPP), please do not hesitate to contact the Human Research Protections Office (HRPO) at (410) 706-5037 or HRPO@som.umaryland.edu.

University of Maryland, Baltimore
Institutional Review Board (IRB)
Phone: (410) 706-5037
Fax: (410) 706-4189
Email: hrpo@som.umaryland.edu

APPROVAL OF RESEARCH NOTIFICATION

Date: March 8, 2013

To: Mark Macek
RE: HCR-HP-00048624-2
Type of Submission: Continuing Review
Type of IRB Review: Expedited

Approval for this project is valid from 3/7/2013 to 3/6/2014

This is to certify that the University of Maryland, Baltimore (UMB) Institutional Review Board (IRB) approved the continuing review report for the above referenced protocol entitled, "*Oral Health Survey of Maryland School Children, 2011-2012*".

The IRB has determined that this protocol qualifies for expedited review pursuant to Federal regulations 45 CFR 46.110, 21 CFR 56.110, & 38 CRF 16.110 category(ies):
(4) Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves. Where medical devices are employed, they must be cleared/approved for marketing. (Studies intended to evaluate the safety and effectiveness of the medical device are not generally eligible for expedited review, including studies of cleared medical devices for new indications.) Examples: (a) physical sensors that are applied either to the surface of the body or at a distance and do not involve input of significant amounts of energy into the subject or an invasion of the subject's privacy; (b) weighing or testing sensory acuity; (c) magnetic resonance imaging;
(d) electrocardiography, electroencephalography, thermography, detection of naturally occurring radioactivity, electroretinography, ultrasound, diagnostic infrared imaging, doppler blood flow, and echocardiography; (e) moderate exercise, muscular strength testing, body composition assessment, and flexibility testing where appropriate given the age, weight, and health of the individual.

(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies. (NOTE: Some research in this category may be exempt from the HHS regulations for the protection of human subjects. 45 CFR 46.101(b)(2) and (b)(3). This listing refers only to research that is not exempt.)

45 CFR 46.404/21 CFR 50.51 - The research presents no greater than minimal risk to the children.

The IRB made the following determinations regarding this submission:
- Written informed consent is required. Only the valid IRB-approved informed consent form(s) in CICERO can be used.

Below is a list of the documents attached to your application that have been approved:
Consent form in Spanish HRPO CR 1

Consent form in English (DHMH IRB contact added) HRPO CR 1
Consent form in English
Eligibility Checklist for HP-00048624 v4-15-2011-1302903398180
Study schedule
HIPAA Authorization Form_English (no changes)
HIPAA Authorization Form_Spanish
Health questionnaire_Spanish
FAQ flyer_Spanish
FAQ flyer_English (no changes)
Information letter to parents_English (new logo and color codes)
Summary of findings_English (new logo)
Letter certifying Spanish translation
Envelope containing project information_Spanish
Information letter to parents_Spanish
Health questionnaire_English (new logo)
Envelope containing project information_English (new logo and color codes)
Summary of findings_Spanish

In conducting this research you are required to follow the requirements listed in the INVESTIGATOR MANUAL. Investigators are reminded that the IRB must be notified of any changes in the study. In addition, the PI is responsible for ensuring prompt reporting to the IRB of proposed changes in a research activity, and for ensuring that such changes in approved research, during the period for which IRB approval has already been given, may not be initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject (45 CFR 46.103(4)(iii)). The PI must also inform the IRB of any new and significant information that may impact a research participants' safety or willingness to continue in the study and any unanticipated problems involving risks to participants or others.

DHHS regulations at 45 CFR 46.109 (e) require that **continuing review** of research be conducted by the IRB at intervals appropriate to the degree of risk and **not less than once per year.** The regulations make **no provision for any grace period extending the conduct of the research beyond 3/6/2014.** You will receive continuing review email reminder notices prior to this date; however, it is your responsibility to submit your continuing review report in a timely manner to allow adequate time for substantive and meaningful IRB review and assure that this study is not conducted beyond **3/6/2014**. Investigators should submit continuing review reports in the electronic system at least six weeks prior to this date.

Research activity in which the VA Maryland Healthcare System (VAMHCS) is a recruitment site or in which VA resources (i.e., space, equipment, personnel, funding, data) are otherwise involved, must also be approved by the VAMHCS Research and Development Committee prior to initiation at the VAMHCS. Contact the VA Research Office at 410-605-7000 ext. 6568 for assistance.

The UMB IRB is organized and operated according to guidelines of the International Council on Harmonization, the United States Office for Human Research Protections and the United States Code of Federal Regulations and operates under Federal Wide Assurance No. FWA00007145.

If you have any questions about this review or questions, concerns, and/or suggestions regarding the Human Research Protection Program (HRPP), please do not hesitate to contact the Human Research Protections Office (HRPO) at (410) 706-5037 or HRPO@som.umaryland.edu.

STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

INSTITUTIONAL REVIEW BOARD

201 W. Preston Street • Baltimore Maryland 21201

Patricia M. Alt, Ph.D., Chairperson

July 20, 2011

Harry Goodman DDS
DHMH
Office of Oral Health
201 W. Preston Street, 3rd Fl.
Baltimore, MD 21201

REF: **Protocol # 11-18**

Dear Dr. Goodman:

I have received the modification(s)/additional information for your protocol entitled, "Oral Health Survey of Maryland School Children 2011-2012" as requested by the Institutional Review Board (IRB). Your protocol is approved. Your approval will expire on **May 19, 2012**. Please refer to the above referenced protocol number in any future modifications or correspondence pertaining to this study.

You are reminded of the following requirements:

1. The IRB shall suspend or terminate approval of this research if the IRB finds it is not being conducted in accordance with the IRB's requirements or that it is associated with unexpected serious harm to subject.

2. The Principal Investigator shall notify the Chairperson of the IRB of contemplated substantive changes in the study that may affect the interests or rights of human subject and seek approval for the changes prior to implementing same.

3. For any projects which extend beyond one year, the Principal Investigator is responsible for presenting to the Chairperson of the IRB, a completed form DHMH 2125, Continuous Review Notice, forty-five days prior to the anniversary date of the approval of this project.

4. The Principal Investigator shall promptly report new information of unanticipated problems involving possible risks to human subjects or others to the Chairperson.

If you have any questions, please call the IRB Administrator, Gay Hutchen. She can be reached at 410-767-8448.

Sincerely,

Patricia M. Alt

Patricia M. Alt, PhD
Chairperson
Institutional Review Board

cc: IRB Members
Gay Hutchen

CONSENT FORM

Protocol Title: Oral Health Survey of Maryland School Children, 2011-2012

Study Number: HP-00048624

Principal Investigator: Mark D. Macek, DDS, DrPH; 410-706-4218

Sponsor: Maryland Department of Health and Mental Hygiene

Participation in this study project is voluntary. You can ask questions about this project at any time. You are being asked to provide consent for you and your child.

PURPOSE OF PROJECT

- The purpose of this project is to measure the dental health of children in kindergarten and 3rd grade who attend public schools in Maryland.
- You and your child are being asked to be in this project because your child's school was selected to participate.
- About 75 children will participate in the project from your child's school. A total of about 1,750 children will take part in the project from all elementary schools in Maryland.

PROCEDURES

- The project has two parts: a dental screening and a health questionnaire.
- The dental screening will take place at your child's school. A licensed dentist will look at your child's teeth with a dental mirror and light. The dentist will use a new, disposable mirror and new disposable dental gloves for each child.
- During the dental screening, the dentist will count your child's teeth and look for cavities and fillings. The dentist will also see if your child needs dental treatment or dental sealants. A dental sealant is a thin covering that is painted on your child's teeth to protect them from tooth decay. The dentist will not take x-rays.
- You will get a copy of all results after the dental screening. The school nurse will also get a copy of your child's results. No other person, agency, or organization will see your child's screening results.
- The health questionnaire is included in this envelope. It should take about 5 minutes to complete.

POTENTIAL RISKS/DISCOMFORTS:

- The risk to you and your child for being in this project is minimal. Any risk anticipated in this project is no more than would be expected during a routine dental examination or a health survey.
- In all studies there is a risk for potential loss of confidentiality. Loss of confidentiality will be minimized in this project by allowing only members of the project team to see your child's dental screening results or answers to the questionnaire. Loss of confidentiality will also be minimized by storing your data in a secure, locked cabinet. Any electronic data will be password-protected.

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2012
Patricia M. Alt
I.R.B.

POTENTIAL BENEFITS

- You and your child may or may not benefit from taking part in this project. There is no guarantee that you and your child will receive direct benefit from your participation in this study. The dental screening may identify cavities, and it may identify the need for dental treatment or sealants.
- You need to decide if your child's participation in this project is in your child's best interest

ALTERNATIVES TO PARTICIPATION

- This is not a treatment study. The alternative to participation is to not take part. If you chose not to take part, your child's healthcare at the University of Maryland, Baltimore will not be affected.

COSTS TO PARTICIPANTS

- It will not cost you anything to take part in this project.

PAYMENT TO PARTICIPANTS

- You and your child will not be paid to participate in this project.
- If cavities or other need for dental treatment are identified, you will be given a list of dental clinics in your area that can provide dental treatment for your child. The project will not pay for these treatments.

CONFIDENTIALITY

- The dental screening and the health questionnaire contain confidential health information. Only Dr. Macek and members of his project team, and the school nurse at your child's school, will have access to your child's results. The confidential information contained in the dental screening and in the health questionnaire will only be used for the purposes of this project.
- The data from the project may be published. However, you and your child will not be identified by name. People designated from the institutions where the project is being conducted and people from the sponsor will be allowed to inspect sections of the study records related to the project. Everyone using project information will work to keep your child's personal information confidential. Your personal information will not be given out unless required by law.

RIGHT TO WITHDRAW

- Your participation in this project is voluntary. You and your child do not have to take part in this project. You are free to withdraw your consent at anytime. Refusal to take part or to stop taking part in the project will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to stop taking part, if you have questions, concerns, or complaints, or if you need to report an injury related to this project, please contact the investigator, **Dr. Mark Macek**, at **410-706-4218**.
- There are no adverse consequences (physical, social, economic, legal, or psychological) of your decision to withdraw from this project.

UNIVERSITY STATEMENT CONCERNING STUDY RISKS

The University is committed to providing participants in its studies all rights due them under State and federal law. You give up none of your legal rights by signing this consent form or by participating in the study project. Please call the Institutional Review Board (IRB) if you have questions about your rights as a study participant.

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2012
Patricia M. Alt
I.R.B.

The project described in this consent form has been classified as minimal risk by the IRB of the University of Maryland, Baltimore (UMB). The IRB is a group of scientists, physicians, experts, and other persons. The IRB's membership includes persons who are not affiliated with UMB and persons who do not conduct study projects. The IRB's decision that the project is minimal risk does not mean that the project is risk-free. You are assuming risks of injury as a result of study participation, as discussed in the consent form.

If you are harmed as a result of the negligence of an investigator, you can make a claim for compensation. If you have questions, concerns, complaints, or believe you have been harmed through participation in this project as a result of investigator negligence, you can contact members of the IRB, or the staff of the Human Research Protections Office (HRPO), to ask questions, discuss problems or concerns, obtain information, or offer input about your rights as a participant. The contact information for the IRB and the HRPO is:

University of Maryland School of Medicine
Human Research Protections Office, BioPark I
800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

or

Ms. Gay Hutchen, IRB Administrator
Department of Health and Mental Hygiene
201 West Preston Street
Baltimore, MD 21201
410-767-8448

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2012
I.R.B.

SIGNATURE

Signing this page indicates that you have read this consent form and agree to participate in the project. **Please keep one copy of the consent form for your records.**

Check one box:

DENTAL SCREENING

☐ **Yes**, I give permission for my child to receive a dental screening.

☐ **No**, I do not give permission for my child to receive a dental screening.

Check one box:

HEALTH QUESTIONNAIRE

☐ **Yes**, I have completed the health questionnaire.

☐ **No**, I have not completed the health questionnaire.

_____ _____

Signature of parent/guardian **Date**

Your relationship to the child: _____

CHILD'S INFORMATION (please print):

Last name: _____ First name: _____

Grade: _____ Teacher: _____

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012

HP-00048624

D.H.M.H. - O.I.G. EXPIRES MAY 19 2012 I.R.B.

Please, put this signed consent form in the envelope and return the envelope to your child's teacher as soon as possible. Keep the other copy of the consent form for your records.

THANK YOU FOR YOUR TIME

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2012
I.R.B.

FORMULARIO DE CONSENTIMIENTO

Título de Protocolo	:	Encuesta de Salud Oral de Maryland Niños de la Escuela, 2011-2012
Número de Estudio	:	HP-00048624
Investigador Principal:		Mark D. Macek, DDS, DrPH; 410-706-4218
Patrocinador	:	Departamento de la Salud de Maryland y Salud Mental

---

La participación en este proyecto de estudio es voluntaria. Usted puede hacer preguntas sobre este proyecto en cualquier momento. Se le pide dar su consentimiento para usted y su niñjo.

PROPÓSITO DEL PROYECTO

- El objetivo de este proyecto es medir la salud dental de los niños en jardin y 3rd grado que asisten a escuelas públicas en Maryland.
- Usted y su niño se les pide que participen en este proyecto porque la escuela de su niño fue seleccionada para participar.
- Alrededor de 75 niños participarán en el proyecto de la escuela de su niño. Un total de cerca de 1,750 niños tomarán parte en el proyecto de todas las escuelas primarias en Maryland.

PROCEDIMIENTOS

- El proyecto tiene dos partes: un examen dental y un cuestionario de salud.
- El examen dental se llevará a cabo en la escuela de su niño. Un dentista con licencia examinará los dientes de su niño con un espejo dental y luz. El dentista utilizará un nuevo espejo, guantes nuevos y desechables para cada niño.
- Durante el examen dental, el dentista contará los dientes de su niño y buscará las caries y sellantes dentales. El dentista también verá si su niño necesita un tratamiento dental o de selladores dentales. Un sellador dental es una cubierta delgada que se pinta en los dientes de su niño para protegerlos de las caries dentales. El dentista no le tomará radiografías.
- Usted recibirá una copia de todos los resultados después de la evaluación dental. La enfermera de la escuela también recibirá una copia de los resultados de su niño. Ninguna otra persona, agencia u organización verán los resultados de su niño.
- El cuestionario de salud se incluye en este sobre. Le tomará alrededor de 5 minutos para completarlo.

POSIBLES RIESGOS Y MOLESTIAS:

- El riesgo para usted y su niño por participar en este proyecto es mínima. Cualquier riesgo previsto en este proyecto no es más que lo esperado durante un examen dental de rutina o una encuesta de salud.
- En todos los estudios hay un riesgo de posible pérdida de confidencialidad. La pérdida de confidencialidad será reducido al mínimo en este proyecto al permitir que sólo los miembros de equipo del proyecto vean los resultados dentales de su niño y de las respuestas del cuestionario. La pérdida de la confidencialidad también se reducirán al mínimo mediante el almacenamiento de sus datos en un gabinete seguro bajo llave. Los datos electrónicos estarán protegidos con contraseña.

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2012
I.R.B.

POSIBLES BENEFICIOS

- Usted y su niño pueden o no beneficiarse de tomar parte en este proyecto. No hay garantía de que usted y su niño recibian beneficio directo de su participación en este estudio. El examen dental puede identificar cavidades y puede identificar la necesidad de tratamiento dental o sellantes.
- Usted debe decidir si la participación de su niño en este proyecto es de mejor interés para su niño.

ALTERNATIVAS A LA PARTICIPACION

- No se trata de un estudio de tratamiento. La alternativa a participar es la de no participar. Si elige no participar, la atención médica de su niño en la Universidad de Maryland, Baltimore no se verán afectados.

COSTO PARA LOS PARTICIPANTES

- No le costará nada para participar en este proyecto.

PAGO A LOS PARTICIPANTES

- A usted y a su niño no se les pagará por participar en este proyecto.
- Si su niño tiene cavidades o necesita tratamiento dental se le dará una lista de clínicas dentales en su área y puedan proveer tratamiento dental para su niño. El proyecto no pagará por estos tratamientos.

CONFIDENCIALIDAD

- El examen dental y el cuestionario de salud contienen información confidencial de salud. Sólo el Dr. Macek y los miembros de su equipo del proyecto, y la enfermera de la escuela de su niño, tendrán acceso a los resultados de su niño. La información confidencial contenida en la evaluación dental y en el cuestionario de salud sólo será utilizada para los fines de este proyecto.
- Los datos del proyecto podrán ser publicados. Sin embargo, usted y su niño no serán identificados por su nombre. Las personas designadas por las instituciones donde se llevó a cabo el proyecto y la gente del patrocinador se les permitirá inspeccionar las secciones del estudio de los registros relacionados con el proyecto. Cada uno usando la información del proyecto mantendrán la información de su niño confidencial. Sus datos personales no serán entregados a menos que sea requerido por la ley.

DERECHO A RETIRARSE

- Su participación en este proyecto es voluntaria. Usted y su niño no tienen que participar en este proyecto. Usted está libre de retirar su consentimiento en cualquier momento. La negativa a participar o dejar de participar en el proyecto no supone ninguna sanción o pérdida de beneficios a los que tiene derecho. Si usted decide dejar de participar, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con este proyecto, póngase en contacto con el investigador, **Dr. Mark Macek**, at **410-706-4218**.
- No hay consecuencias adversas (físicas, sociales, económicas, jurídicas, o psicológicas) de su decisión de retirarse de este proyecto.

DECLARACION DE LA UNIVERSIDAD DE ESTUDIO SOBRE RIESGOS

La Universidad se compromete a proporcionar a los participantes en sus estudios todos los derechos que se les debe en virtud de las leyes Estatales y Federales. Usted no renuncia a ninguno de sus derechos legales al firmar este

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2012
I.R.B.

formulario de consentimiento o por participar en el proyecto de estudio. Por favor llame a la Junta de Revisión Institucional (IRB) si usted tiene preguntas acerca de sus derechos como participante del estudio.

El proyecto descrito en este formulario ha sido clasificado como un riesgo mínimo por el IRB de la Universidad de Maryland, Baltimore (UMB). El IRB es un grupo de científicos, medicos, expertos y otras personas. Los miembros del IRB's no están afiliados con la UMB y no llevan a cabo projectos de estudio. La decisión del IRB en el projecto es mínima, no significa que el projecto está libre de riesgos. Usted está asumiendo los riesgos de lesiones como resultado de la participación en el estudio, como se indica en el formulario de consentimiento.

Si se perjudican como consecuencia de la negligencia de un investigador, usted puede hacer un reclamo de indemnización. Si usted tiene preguntas, inquietudes, quejas, o cree que han sido perjudicados mediante la participación en este projecto como resultado de negligencia de un investigador, puede comunicarse con los miembros del IRB, o el personal de la Oficina de Protección e Investigación (HRPO), para pedir preguntas, discutir problemas o dudas, obtener información, o dar su opinión sobre sus derechos como un participante. El contacto de información del IRB y del HRPO es:

Universidad de Maryland Escuela de Medicina
Oficina de Investigación y Protección, BioPark I
800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

o

Sra. Gay Hutchen, Administrador de la IRB
Departmento de la Salud de Maryland y Salud Mental
201 W. Preston Street
Baltimore, MD 21201
410-767-8448

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2012
I.R.B.

FIRMA

Firmando esta página indica que usted ha leído el formulario de consentimiento y está de acuerdo a participar en el proyecto. **Por favor, mantenga una copia del fomulario de consentimiento para sus registros.**

Marque uno:

EVALUACION DENTAL

☐ **Si, doy permiso para que mi niño reciba una evaluación dental.**

☐ **No, no doy permiso para que mi niño reciba una evaluación dental.**

Marque uno:

CUESTIONARIO DE SALUD

☐ **Si**, he completado el cuestionario de salud.

☐ **No**, no he completado el cuestionario de salud.

_____ _____

Firma del padre/apoderado **Fecha**

Su relación con el niño: _____

INFORMACION DEL NIÑO (por favor letra imprenta):

Apellido: _____ Nombre: _____

Grado: _____ Profesor: _____

Por favor, ponga este formulario de consentimiento firmado en el sobre y devolver el sobre al profesor de su niño tan pronto como sea posible. Conserve la otra copia del formulario de consentimiento para sus registros.

GRACIAS POR SU TIEMPO

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012

HP-00048624

D.H.M.H. - O.I.G. EXPIRES MAY 19 2012 I.R.B.

STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

INSTITUTIONAL REVIEW BOARD

201 W. Preston Street • Baltimore Maryland 21201

Patricia M. Alt, Ph.D., Chairperson

February 14, 2012

Harry Goodman
DHMH
Office of Oral Health
201 W. Preston Street, 3rd Fl.
Baltimore, MD 21201

REF: Protocol **#11-18**

Dear Dr. Goodman:

As you know, the Institutional Review Board (IRB) requires each principal investigator to file a "Continuing Review Notice (DHMH 2125)" on each active approved project. **Your current approval expires on May 19, 2012.** Please be reminded that unless all required information is received and this project is reviewed and re-approved by the IRB, all research activities should cease and no new participants may be enrolled or records released or reviewed past this date.

Please complete the enclosed DHMH 2125 indicating the current status of your project entitled "Oral Health Survey of Maryland School Children 2011-2012" and return to **the IRB Office by April 9, 2012**. In addition to your completed DHMH 2125 **(MUST HAVE SIGNATURE(S) OF DHMH ADMINISTRATOR(S) PRIOR TO SUBMISSION TO THE IRB OFFICE), please include a brief summary of the current status of your project and if applicable, a copy of the current consent form(s) and updated IRB approval from collaborating institutions.** Please highlight all changes. This will assist us in speeding up the review and approval process.

If you have any questions please feel free to call me at 410-767-8448. Your cooperation is greatly appreciated.

Sincerely,

Gay Y. Hutchen

Gay Y. Hutchen
Administrator
Institutional Review Board

enclosure

PROTOCOL #_____
Date of last renewal _____
IRB Office Use Only

MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE
OFFICE OF THE INSPECTOR GENERAL
INSTITUTIONAL REVIEW BOARD

CONTINUING REVIEW
FORM II (DHMH 2125)

DHMH PROTOCOL #_____

TITLE OF STUDY: _____
_____
_____

PRINCIPAL INVESTIGATOR: _____ _____
SIGNATURE **PRINT OR TYPE NAME**

CO-PRINCIPAL INVESTIGATOR: _____ _____
SIGNATURE **PRINT OR TYPE NAME**

STUDENT INVESTIGATOR: _____ _____
(Academic Advisor should be PI) **SIGNATURE** **PRINT OR TYPE NAME**

MAILING ADDRESS: _____
(only if it has changed since the last renewal) _____
_____
_____

PHONE # _____ FAX # _____ E-MAIL _____

If the limit of DHMH involvement in your study is the use of data from a DHMH agency, please provide the name(s) of all agencies or registries providing the data._____
_____

PROVIDE THE NAME OF THE DEPARTMENT OF HEALTH AND MENTAL HYGIENE'S (DHMH) PROGRAM ADMINISTRATOR(S) AUTHORIZING CONTINUOUS INVOLVEMENT IN THIS STUDY:
(Obtain signature(s) prior to submission to the IRB for review. Will not be reviewed without signature(s))

1._____ SIGNATURE_____
(PRINT)

2._____ SIGNATURE_____
(PRINT)

3._____ SIGNATURE_____
(PRINT)

4._____ SIGNATURE_____
(PRINT)

PROTOCOL # _____
IRB Office Use Only

PROJECT STATUS:

A.

___ Study complete **and:**
(Must submit a closing summary)

____ Inactive (no further contact with human subjects or data)

____ Original data and/or research material have been destroyed

____ The linkage between the existing data and original source of information has been destroyed

____ Data with identifiers will be retained (indicate in a separate memorandum why such data will be retained, where and how long). **This requires an annual report on confidentiality measures**

____ Project never initiated

B.

___ Study is active and:

(check all that apply)

____ Currently enrolling subjects

____ Subject enrollment complete

____ Subjects in follow up phase(s)

____ Data still being collected from records (study involves data abstraction only)

____ Data still being collected from DHMH agency **(e.g. MCR, VSA, or Medicaid)**

____ Data analysis only **(all data collected or (patients enrolled, all follow-up completed)**

C. Has there been any change in the procedures for protecting human subjects? ____Yes ____No **(If yes, please explain in a separate memorandum and attach)**

D. Have there been any changes in the consent process (if applicable) ____Yes ____No

E. Has there been any evidence either from your experience to date or from recent literature which indicate the existence of risks different from those previously described? ___Yes ___No **(If yes, briefly describe in a separate memorandum and attach.)**

F. What is the total number of subjects you expect to recruit for this study? _____ **(If this study does not involve subject recruitment (but data collection only) indicate with N/A)**

G. Number of subjects accrued this year? _____ (____men ____women)
Since the study began? _____ (____men ____women)

H. Has there been a withdrawal of any subjects from the research since your last review? ___Yes ___No **(If yes, briefly describe in a separate memorandum and attach.)**

I. Have there been any complaints about the research? ___Yes ___No
(If yes, briefly describe in a separate memorandum and attach.)

PROTOCOL # _____
IRB Office Use Only

J. Have there been any SAEs (Serious Adverse Events)? ___Yes ___No **(If yes, briefly describe in a separate memorandum and attach.)**

K. If your study involves the collection of death certificates only provide the following information:

- Total number of death certificates received (from Maryland) this year_____
- Total number of death certificates received (from Maryland) since the study begin _____

L. Has this study been modified since the last review? ___Yes ___No
If yes, was the modification (s) approved (by DHMH IRB) ___Yes ___No
List all modifications and indicate approval date for each **(if more space is needed use a separate sheet of paper)**

_____
_____
_____
_____

M. Are you requesting a modification with this review? ___Yes ___No **(If yes, provide a complete description of the modification along with details regarding the need for the changes and indicate if the changes will affect the risk level of the study (or complete a request for modification form))**

N. Have you published any articles resulting from this study? ___Yes ___No **(If yes, provide citation below)** If yes, have you provided copies to the Administration providing the data as well as to the IRB? ___Yes ___No **(citation: _____)**

***********************DO NOT WRITE BELOW THIS LINE – IRB USE ONLY*********************

___Protocol is as previously approved research may continue (if applicable, VSA agreement remains in effect)

___Protocol is approved as modified

___Protocol is as previously approved but risks have increased based on current knowledge, IRB full review completed and protocol approved

___Protocol is not adhering to proposal as approved, research must cease

___Study remains active for data analysis only

___Study never initiated

___Study complete, but data with identifiers will be retained and PI will continue to assure confidentiality and advise the IRB of any breech of confidentiality via annual report

___Study complete – data linkage destroyed

___Study has been modified and no longer qualifies as research, exempt from any further IRB review

___Study has been modified and qualifies as exempt research according to 45CFR46 101(b) _____

Signature_____ Date_____
Chairperson, DHMH Institutional Review Board

STATE OF MARYLAND
DHMH
Maryland Department of Health and Mental Hygiene
INSTITUTIONAL REVIEW BOARD
201 W. Preston Street • Baltimore Maryland 21201
Patricia M. Alt, Ph.D., Chairperson

April 13, 2012

Harry Goodman DDS
DHMH
Office of Oral Health
201 W. Preston Street, 3rd Fl.
Baltimore, MD 21201

REF: **Protocol # 11-18**

Dear Dr. Goodman:

The Maryland Department of Health and Mental Hygiene's Institutional Review Board (IRB) conducted a review of your protocol entitled "Oral Health Survey of Maryland School Children 2011-2012" for continuous approval. The IRB meeting was held on April 12, 2012. Your protocol has been approved. This approval will expire on **May 19, 2013.** Please refer to the above referenced protocol number in any future modifications or correspondence pertaining to the above named study.

Please be reminded that all of the requirements of the original approval letter remain in effect. Thank you for your continued responsiveness to the IRB requirements and we wish you continued success in your efforts.

If you have any questions, please call the IRB Administrator, Ms. Gay Hutchen. She can be reached at (410) 767-8448.

Sincerely,

Patricia M. Alt

Patricia M. Alt, PhD
Chairperson
Institutional Review Board

cc: IRB Members
Gay Hutchen

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

CONSENT FORM

Protocol Title: Oral Health Survey of Maryland School Children, 2011-2012

Study Number: HP-00048624

Principal Investigator: Mark D. Macek, DDS, DrPH; 410-706-4218

Sponsor: Maryland Department of Health and Mental Hygiene

Participation in this study project is voluntary. You can ask questions about this project at any time. You are being asked to provide consent for you and your child.

PURPOSE OF PROJECT

- The purpose of this project is to measure the dental health of children in kindergarten and 3rd grade who attend public schools in Maryland.
- You and your child are being asked to be in this project because your child's school was selected to participate.
- About 75 children will participate in the project from your child's school. A total of about 1,750 children will take part in the project from all elementary schools in Maryland.

PROCEDURES

- The project has two parts: a dental screening and a health questionnaire.
- The dental screening will take place at your child's school. A licensed dentist will look at your child's teeth with a dental mirror and light. The dentist will use a new, disposable mirror and new disposable dental gloves for each child.
- During the dental screening, the dentist will count your child's teeth and look for cavities and fillings. The dentist will also see if your child needs dental treatment or dental sealants. A dental sealant is a thin covering that is painted on your child's teeth to protect them from tooth decay. The dentist will not take x-rays.
- You will get a copy of all results after the dental screening. The school nurse will also get a copy of your child's results. No other person, agency, or organization will see your child's screening results.
- The health questionnaire is included in this envelope. It should take about 5 minutes to complete.

POTENTIAL RISKS/DISCOMFORTS:

- The risk to you and your child for being in this project is minimal. Any risk anticipated in this project is no more than would be expected during a routine dental examination or a health survey.
- In all studies there is a risk for potential loss of confidentiality. Loss of confidentiality will be minimized in this project by allowing only members of the project team to see your child's dental screening results or answers to the questionnaire. Loss of confidentiality will also be minimized by storing your data in a secure, locked cabinet. Any electronic data will be password-protected.

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2013
I.R.B.

POTENTIAL BENEFITS

- You and your child may or may not benefit from taking part in this project. There is no guarantee that you and your child will receive direct benefit from your participation in this study. The dental screening may identify cavities, and it may identify the need for dental treatment or sealants.
- You need to decide if your child's participation in this project is in your child's best interest

ALTERNATIVES TO PARTICIPATION

- This is not a treatment study. The alternative to participation is to not take part. If you chose not to take part, your child's healthcare at the University of Maryland, Baltimore will not be affected.

COSTS TO PARTICIPANTS

- It will not cost you anything to take part in this project.

PAYMENT TO PARTICIPANTS

- You and your child will not be paid to participate in this project.
- If cavities or other need for dental treatment are identified, you will be given a list of dental clinics in your area that can provide dental treatment for your child. The project will not pay for these treatments.

CONFIDENTIALITY

- The dental screening and the health questionnaire contain confidential health information. Only Dr. Macek and members of his project team, and the school nurse at your child's school, will have access to your child's results. The confidential information contained in the dental screening and in the health questionnaire will only be used for the purposes of this project.
- The data from the project may be published. However, you and your child will not be identified by name. People designated from the institutions where the project is being conducted and people from the sponsor will be allowed to inspect sections of the study records related to the project. Everyone using project information will work to keep your child's personal information confidential. Your personal information will not be given out unless required by law.

RIGHT TO WITHDRAW

- Your participation in this project is voluntary. You and your child do not have to take part in this project. You are free to withdraw your consent at anytime. Refusal to take part or to stop taking part in the project will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to stop taking part, if you have questions, concerns, or complaints, or if you need to report an injury related to this project, please contact the investigator, **Dr. Mark Macek**, at **410-706-4218**.
- There are no adverse consequences of your decision to withdraw from this project.

CAN YOU AND YOUR CHILD BE REMOVED FROM THE PROJECT?

- The person in charge of the project or the sponsor of the project can remove you from the research study without your approval. Possible reasons for removal include failure to follow instructions or a decision that the project is no longer in you and your child's best interest. The sponsor can also end the project early. The person in charge will tell you about this and you will have the chance to ask questions if this were to happen.

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

UNIVERSITY STATEMENT CONCERNING STUDY RISKS

The University is committed to providing participants in its studies all rights due them under State and federal law. You give up none of your legal rights by signing this consent form or by participating in the study project. Please call the Institutional Review Board (IRB) if you have questions about your rights as a study participant.

The project described in this consent form has been reviewed and approved by the IRB. The IRB is a group of scientists, physicians, experts, and other persons. The IRB's membership includes persons who are not affiliated with UMB and who do not conduct study projects. The IRB of the University of Maryland, Baltimore (UMB) classified the project as minimal risk. The IRB's decision that the project is minimal risk does not mean that the project is risk-free. You are assuming risks of injury as a result of study participation, as discussed in the consent form.

If you are harmed as a result of the negligence of an investigator, you can make a claim for compensation. If you have questions, concerns, complaints, or believe you have been harmed through participation in this project as a result of investigator negligence, you can contact members of the IRB, or the staff of the Human Research Protections

Office (HRPO), to ask questions, discuss problems or concerns, obtain information, or offer input about your rights as a participant. The contact information for the IRB and the HRPO is:

University of Maryland School of Medicine
Human Research Protections Office, BioPark I
800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

or

Ms. Gay Hutchen, IRB Administrator
Department of Health and Mental Hygiene
201 West Preston Street
Baltimore, MD 21201
410-767-8448

Please go to next page

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2013
I.R.B.

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

SIGNATURE

Signing this page indicates that you have read this consent form and agree to participate in the project. **Please keep one copy of the consent form for your records.**

Check one box:

DENTAL SCREENING

☐ **Yes**, I give permission for my child to receive a dental screening.

☐ **No**, I do not give permission for my child to receive a dental screening.

Check one box:

HEALTH QUESTIONNAIRE

☐ **Yes**, I have completed the health questionnaire.

☐ **No**, I have not completed the health questionnaire.

_____ _____

Signature of parent/guardian **Date**

Your relationship to the child: _____

CHILD'S INFORMATION (please print):

Last name: _____ First name: _____

Grade: _____ Teacher: _____

Please, put this signed consent form in the envelope and return the envelope to your child's teacher as soon as possible. Keep the other copy of the consent form for your records.

THANK YOU FOR YOUR TIME

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2013
I.R.B.

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

FORMULARIO DE CONSENTIMIENTO

Título de Protocolo	:	Encuesta de Salud Oral de Maryland Niños de la Escuela, 2011-2012
Número de Estudio	:	HP-00048624
Investigador Principal:		Mark D. Macek, DDS, DrPH; 410-706-4218
Patrocinador	:	Departamento de la Salud de Maryland y Salud Mental

---

La participación en este proyecto de estudio es voluntaria. Usted puede hacer preguntas sobre este proyecto en cualquier momento. Se le pide dar su consentimiento para usted y su niñjo.

PROPÓSITO DEL PROYECTO

- El objetivo de este proyecto es medir la salud dental de los niños en jardin y 3rd grado que asisten a escuelas públicas en Maryland.
- Usted y su niño se les pide que participen en este proyecto porque la escuela de su niño fue seleccionada para participar.
- Alrededor de 75 niños participarán en el proyecto de la escuela de su niño. Un total de cerca de 1,750 niños tomarán parte en el proyecto de todas las escuelas primarias en Maryland.

PROCEDIMIENTOS

- El proyecto tiene dos partes: un examen dental y un cuestionario de salud.
- El examen dental se llevará a cabo en la escuela de su niño. Un dentista con licencia examinará los dientes de su niño con un espejo dental y luz. El dentista utilizará un nuevo espejo, guantes nuevos y desechables para cada niño.
- Durante el examen dental, el dentista contará los dientes de su niño y buscará las caries y sellantes dentales.
  El dentista también verá si su niño necesita un tratamiento dental o de selladores dentales. Un sellador dental es una cubierta delgada que se pinta en los dientes de su niño para protegerlos de las caries dentales. El dentista no le tomará radiografías.
- Usted recibirá una copia de todos los resultados después de la evaluación dental. La enfermera de la escuela también recibirá una copia de los resultados de su niño. Ninguna otra persona, agencia u organización verán los resultados de su niño.
- El cuestionario de salud se incluye en este sobre. Le tomará alrededor de 5 minutos para completarlo.

POSIBLES RIESGOS Y MOLESTIAS:

- El riesgo para usted y su niño por participar en este proyecto es mínima. Cualquier riesgo previsto en este proyecto no es más que lo esperado durante un examen dental de rutina o una encuesta de salud.
- En todos los estudios hay un riesgo de posible pérdida de confidencialidad. La pérdida de confidencialidad será reducido al mínimo en este proyecto al permitir que sólo los miembros de equipo del proyecto vean los resultados dentales de su niño y de las respuestas del cuestionario. La pérdida de la confidencialidad también se reducirán al mínimo mediante el almacenamiento de sus datos en un gabinete seguro bajo llave. Los datos electrónicos estarán protegidos con contraseña.

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2013
I.R.B.

POSIBLES BENEFICIOS

- Usted y su niño pueden o no beneficiarse de tomar parte en este proyecto. No hay garantía de que usted y su niño recibian beneficio directo de su participación en este estudio. El examen dental puede identificar cavidades y puede identificar la necesidad de tratamiento dental o sellantes.
- Usted debe decidir si la participación de su niño en este proyecto es de mejor interés para su niño.

ALTERNATIVAS A LA PARTICIPACION

- No se trata de un estudio de tratamiento. La alternativa a participar es la de no participar. Si elige no participar, la atención médica de su niño en la Universidad de Maryland, Baltimore no se verán afectados.

COSTO PARA LOS PARTICIPANTES

- No le costará nada para participar en este proyecto.

PAGO A LOS PARTICIPANTES

- A usted y a su niño no se les pagará por participar en este proyecto.
- Si su niño tiene cavidades o necesita tratamiento dental se le dará una lista de clínicas dentales en su área y puedan proveer tratamiento dental para su niño. El proyecto no pagará por estos tratamientos.

CONFIDENCIALIDAD

- El examen dental y el cuestionario de salud contienen información confidencial de salud. Sólo el Dr. Macek y los miembros de su equipo del proyecto, y la enfermera de la escuela de su niño, tendrán acceso a los resultados de su niño. La información confidencial contenida en la evaluación dental y en el cuestionario de salud sólo será utilizada para los fines de este proyecto.
- Los datos del proyecto podrán ser publicados. Sin embargo, usted y su niño no serán identificados por su nombre. Las personas designadas por las instituciones donde se llevó a cabo el proyecto y la gente del patrocinador se les permitirá inspeccionar las secciones del estudio de los registros relacionados con el proyecto. Cada uno usando la información del proyecto mantendrán la información de su niño confidencial. Sus datos personales no serán entregados a menos que sea requerido por la ley.

DERECHO A RETIRARSE

- Su participación en este proyecto es voluntaria. Usted y su niño no tienen que participar en este proyecto. Usted está libre de retirar su consentimiento en cualquier momento. La negativa a participar o dejar de participar en el proyecto no supone ninguna sanción o pérdida de beneficios a los que tiene derecho. Si usted decide dejar de participar, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con este proyecto, póngase en contacto con el investigador, **Dr. Mark Macek**, at **410-706-4218**.
- No hay consecuencias adversas (físicas, sociales, económicas, jurídicas, o psicológicas) de su decisión de retirarse de este proyecto.

¿PUEDEN USTED Y SU NIÑO SER RETIRADOS DEL PROYECTO?

- La persona encargada del proyecto o el patrocinador del proyecto pueden retirarlo del estudio de investigación sin su aprobación. Las posibles razones del retiro incluyen no seguir las instrucciones o una decisión de que el proyecto ya no continúe con usted y su niño. El patrocinador también puede finalizar el proyecto temprano. La persona encargada le informará acerca de esto y tendrá la oportunidad de hacer preguntas si esto llegara a suceder.

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

DECLARACION DE LA UNIVERSIDAD DE ESTUDIO SOBRE RIESGOS

La Universidad se compromete a proporcionar a los participantes en sus estudios todos los derechos que se les debe en virtud de las leyes Estatales y Federales. Usted no renuncia a ninguno de sus derechos legales al firmar este formulario de consentimiento o por participar en el proyecto de estudio. Por favor llame a la Junta de Revisión Institucional (IRB) si usted tiene preguntas acerca de sus derechos como participante del estudio.

El proyecto descrito en este formulario ha sido clasificado como un riesgo mínimo por el IRB de la Universidad de Maryland, Baltimore (UMB). El IRB es un grupo de científicos, medicos, expertos y otras personas. Los miembros del IRB's no están afiliados con la UMB y no llevan a cabo projectos de estudio. La decisión del IRB en el projecto es mínima, no significa que el projecto está libre de riesgos. Usted está asumiendo los riesgos de lesiones como resultado de la participación en el estudio, como se indica en el formulario de consentimiento.

Si se perjudican como consecuencia de la negligencia de un investigador, usted puede hacer un reclamo de indemnización. Si usted tiene preguntas, inquietudes, quejas, o cree que han sido perjudicados mediante la participación en este projecto como resultado de negligencia de un investigador, puede comunicarse con los miembros del IRB, o el personal de la Oficina de Protección e Investigación (HRPO), para pedir preguntas, discutir problemas o dudas, obtener información, o dar su opinión sobre sus derechos como un participante. El contacto de información del IRB y del HRPO es:

Universidad de Maryland Escuela de Medicina
Oficina de Investigación y Protección, BioPark I
800 W. Baltimore Street
Suite 100
Baltimore, MD 21201
410-706-5037

o

Sra. Gay Hutchen, Administrador de la IRB
Departmento de la Salud de Maryland
y Salud Mental
201 W. Preston Street
Baltimore, MD 21201
410-767-8448

VAYA A LA PÁGINA SIGUIENTE

D.H.M.H. - O.I.G.
EXPIRES
MAY 19 2013
I.R.B.

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

FIRMA

Firmando esta página indica que usted ha leído el formulario de consentimiento y está de acuerdo a participar en el proyecto. **Por favor, mantenga una copia del fomulario de consentimiento para sus registros.**

Marque uno:

EVALUACION DENTAL

☐ **Si, doy permiso para que mi niño reciba una evaluación dental.**

☐ **No, no doy permiso para que mi niño reciba una evaluación dental.**

Marque uno:

CUESTIONARIO DE SALUD

☐ **Si**, he completado el cuestionario de salud.

☐ **No**, no he completado el cuestionario de salud.

_____ _____

Firma del padre/apoderado **Fecha**

Su relación con el niño: _____

INFORMACION DEL NIÑO (por favor letra imprenta):

Apellido: _____ Nombre: _____

Grado: _____ Profesor: _____

Por favor, ponga este formulario de consentimiento firmado en el sobre y devolver el sobre al profesor de su niño tan pronto como sea posible. Conserve la otra copia del formulario de consentimiento para sus registros.

GRACIAS POR SU TIEMPO

MAY 1 9 2015

APPENDIX B: Consent forms

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

CONSENT FORM

Protocol Title: Oral Health Survey of Maryland School Children, 2011-2012

Study Number: HP-00048624

Principal Investigator: Mark D. Macek, DDS, DrPH; 410-706-4218

Sponsor: Maryland Department of Health and Mental Hygiene

Participation in this study project is voluntary. You can ask questions about this project at any time. You are being asked to provide consent for you and your child.

PURPOSE OF PROJECT

- The purpose of this project is to measure the dental health of children in kindergarten and 3rd grade who attend public schools in Maryland.
- You and your child are being asked to be in this project because your child's school was selected to participate.
- About 75 children will participate in the project from your child's school. A total of about 1,750 children will take part in the project from all elementary schools in Maryland.

PROCEDURES

- The project has two parts: a dental screening and a health questionnaire.
- The dental screening will take place at your child's school. A licensed dentist will look at your child's teeth with a dental mirror and light. The dentist will use a new, disposable mirror and new disposable dental gloves for each child.
- During the dental screening, the dentist will count your child's teeth and look for cavities and fillings. The dentist will also see if your child needs dental treatment or dental sealants. A dental sealant is a thin covering that is painted on your child's teeth to protect them from tooth decay. The dentist will not take x-rays.
- You will get a copy of all results after the dental screening. The school nurse will also get a copy of your child's results. No other person, agency, or organization will see your child's screening results.
- The health questionnaire is included in this envelope. It should take about 5 minutes to complete.

POTENTIAL RISKS/DISCOMFORTS:

- The risk to you and your child for being in this project is minimal. Any risk anticipated in this project is no more than would be expected during a routine dental examination or a health survey.
- In all studies there is a risk for potential loss of confidentiality. Loss of confidentiality will be minimized in this project by allowing only members of the project team to see your child's dental screening results or answers to the questionnaire. Loss of confidentiality will also be minimized by storing your data in a secure, locked cabinet. Any electronic data will be password-protected.

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

POTENTIAL BENEFITS

- You and your child may or may not benefit from taking part in this project. There is no guarantee that you and your child will receive direct benefit from your participation in this study. The dental screening may identify cavities, and it may identify the need for dental treatment or sealants.
- You need to decide if your child's participation in this project is in your child's best interest

ALTERNATIVES TO PARTICIPATION

- This is not a treatment study. The alternative to participation is to not take part. If you chose not to take part, your child's healthcare at the University of Maryland, Baltimore will not be affected.

COSTS TO PARTICIPANTS

- It will not cost you anything to take part in this project.

PAYMENT TO PARTICIPANTS

- You and your child will not be paid to participate in this project.
- If cavities or other need for dental treatment are identified, you will be given a list of dental clinics in your area that can provide dental treatment for your child. The project will not pay for these treatments.

CONFIDENTIALITY

- The dental screening and the health questionnaire contain confidential health information. Only Dr. Macek and members of his project team, and the school nurse at your child's school, will have access to your child's results. The confidential information contained in the dental screening and in the health questionnaire will only be used for the purposes of this project.
- The data from the project may be published. However, you and your child will not be identified by name. People designated from the institutions where the project is being conducted and people from the sponsor will be allowed to inspect sections of the study records related to the project. Everyone using project information will work to keep your child's personal information confidential. Your personal information will not be given out unless required by law.

RIGHT TO WITHDRAW

- Your participation in this project is voluntary. You and your child do not have to take part in this project. You are free to withdraw your consent at anytime. Refusal to take part or to stop taking part in the project will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to stop taking part, if you have questions, concerns, or complaints, or if you need to report an injury related to this project, please contact the investigator, **Dr. Mark Macek**, at **410-706-4218**.
- There are no adverse consequences (physical, social, economic, legal, or psychological) of your decision to withdraw from this project.

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

UNIVERSITY STATEMENT CONCERNING STUDY RISKS

The University is committed to providing participants in its studies all rights due them under State and federal law. You give up none of your legal rights by signing this consent form or by participating in the study project. Please call the Institutional Review Board (IRB) if you have questions about your rights as a study participant.

The project described in this consent form has been classified as minimal risk by the IRB of the University of Maryland, Baltimore (UMB). The IRB is a group of scientists, physicians, experts, and other persons. The IRB's membership includes persons who are not affiliated with UMB and persons who do not conduct study projects. The IRB's decision that the project is minimal risk does not mean that the project is risk-free. You are assuming risks of injury as a result of study participation, as discussed in the consent form.

If you are harmed as a result of the negligence of an investigator, you can make a claim for compensation. If you have questions, concerns, complaints, or believe you have been harmed through participation in this project as a result of investigator negligence, you can contact members of the IRB, or the staff of the Human Research Protections Office (HRPO), to ask questions, discuss problems or concerns, obtain information, or offer input about your rights as a participant. The contact information for the IRB and the HRPO is:

University of Maryland School of Medicine
Human Research Protections Office, BioPark I
800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

or

Ms. Gay Hutchen, IRB Administrator
Department of Health and Mental Hygiene
201 West Preston Street
Baltimore, MD 21201
410-767-8448

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

SIGNATURE

Signing this page indicates that you have read this consent form and agree to participate in the project. **Please keep one copy of the consent form for your records.**

Check one box:

DENTAL SCREENING

☐ **Yes**, I give permission for my child to receive a dental screening.

☐ **No**, I do not give permission for my child to receive a dental screening.

Check one box:

HEALTH QUESTIONNAIRE

☐ **Yes**, I have completed the health questionnaire.

☐ **No**, I have not completed the health questionnaire.

_____ _____

Signature of parent/guardian **Date**

Your relationship to the child: _____

CHILD'S INFORMATION (please print):

Last name: _____ First name: _____

Grade: _____ Teacher: _____

Please, put this signed consent form in the envelope and return the envelope to your child's teacher as soon as possible. Keep the other copy of the consent form for your records.

THANK YOU FOR YOUR TIME

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012
HP-00048624

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

CONSENT FORM

Protocol Title: Oral Health Survey of Maryland School Children, 2011-2012

Study Number: HP-00048624

Principal Investigator: Mark D. Macek, DDS, DrPH; 410-706-4218

Sponsor: Maryland Department of Health and Mental Hygiene

Participation in this study project is voluntary. You can ask questions about this project at any time. You are being asked to provide consent for you and your child.

PURPOSE OF PROJECT

- The purpose of this project is to measure the dental health of children in kindergarten and 3rd grade who attend public schools in Maryland.
- You and your child are being asked to be in this project because your child's school was selected to participate.
- About 75 children will participate in the project from your child's school. A total of about 1,750 children will take part in the project from all elementary schools in Maryland.

PROCEDURES

- The project has two parts: a dental screening and a health questionnaire.
- The dental screening will take place at your child's school. A licensed dentist will look at your child's teeth with a dental mirror and light. The dentist will use a new, disposable mirror and new disposable dental gloves for each child.
- During the dental screening, the dentist will count your child's teeth and look for cavities and fillings. The dentist will also see if your child needs dental treatment or dental sealants. A dental sealant is a thin covering that is painted on your child's teeth to protect them from tooth decay. The dentist will not take x-rays.
- You will get a copy of all results after the dental screening. The school nurse will also get a copy of your child's results. No other person, agency, or organization will see your child's screening results.
- The health questionnaire is included in this envelope. It should take about 5 minutes to complete.

POTENTIAL RISKS/DISCOMFORTS:

- The risk to you and your child for being in this project is minimal. Any risk anticipated in this project is no more than would be expected during a routine dental examination or a health survey.
- In all studies there is a risk for potential loss of confidentiality. Loss of confidentiality will be minimized in this project by allowing only members of the project team to see your child's dental screening results or answers to the questionnaire. Loss of confidentiality will also be minimized by storing your data in a secure, locked cabinet. Any electronic data will be password-protected.

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

POTENTIAL BENEFITS

- You and your child may or may not benefit from taking part in this project. There is no guarantee that you and your child will receive direct benefit from your participation in this study. The dental screening may identify cavities, and it may identify the need for dental treatment or sealants.
- You need to decide if your child's participation in this project is in your child's best interest

ALTERNATIVES TO PARTICIPATION

- This is not a treatment study. The alternative to participation is to not take part. If you chose not to take part, your child's healthcare at the University of Maryland, Baltimore will not be affected.

COSTS TO PARTICIPANTS

- It will not cost you anything to take part in this project.

PAYMENT TO PARTICIPANTS

- You and your child will not be paid to participate in this project.
- If cavities or other need for dental treatment are identified, you will be given a list of dental clinics in your area that can provide dental treatment for your child. The project will not pay for these treatments.

CONFIDENTIALITY

- The dental screening and the health questionnaire contain confidential health information. Only Dr. Macek and members of his project team, and the school nurse at your child's school, will have access to your child's results. The confidential information contained in the dental screening and in the health questionnaire will only be used for the purposes of this project.
- The data from the project may be published. However, you and your child will not be identified by name. People designated from the institutions where the project is being conducted and people from the sponsor will be allowed to inspect sections of the study records related to the project. Everyone using project information will work to keep your child's personal information confidential. Your personal information will not be given out unless required by law.

RIGHT TO WITHDRAW

- Your participation in this project is voluntary. You and your child do not have to take part in this project. You are free to withdraw your consent at anytime. Refusal to take part or to stop taking part in the project will involve no penalty or loss of benefits to which you are otherwise entitled. If you decide to stop taking part, if you have questions, concerns, or complaints, or if you need to report an injury related to this project, please contact the investigator, **Dr. Mark Macek**, at **410-706-4218**.
- There are no adverse consequences of your decision to withdraw from this project.

CAN YOU AND YOUR CHILD BE REMOVED FROM THE PROJECT?

- The person in charge of the project or the sponsor of the project can remove you from the research study without your approval. Possible reasons for removal include failure to follow instructions or a decision that the project is no longer in you and your child's best interest. The sponsor can also end the project early. The person in charge will tell you about this and you will have the chance to ask questions if this were to happen.

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

UNIVERSITY STATEMENT CONCERNING STUDY RISKS

The University is committed to providing participants in its studies all rights due them under State and federal law. You give up none of your legal rights by signing this consent form or by participating in the study project. Please call the Institutional Review Board (IRB) if you have questions about your rights as a study participant.

The project described in this consent form has been reviewed and approved by the IRB. The IRB is a group of scientists, physicians, experts, and other persons. The IRB's membership includes persons who are not affiliated with UMB and who do not conduct study projects. The IRB of the University of Maryland, Baltimore (UMB) classified the project as minimal risk. The IRB's decision that the project is minimal risk does not mean that the project is risk-free. You are assuming risks of injury as a result of study participation, as discussed in the consent form.

If you are harmed as a result of the negligence of an investigator, you can make a claim for compensation. If you have questions, concerns, complaints, or believe you have been harmed through participation in this project as a result of investigator negligence, you can contact members of the IRB, or the staff of the Human Research Protections

Office (HRPO), to ask questions, discuss problems or concerns, obtain information, or offer input about your rights as a participant. The contact information for the IRB and the HRPO is:

University of Maryland School of Medicine
Human Research Protections Office, BioPark I
800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

or

Ms. Gay Hutchen, IRB Administrator
Department of Health and Mental Hygiene
201 West Preston Street
Baltimore, MD 21201
410-767-8448

Please go to next page

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

SIGNATURE

Signing this page indicates that you have read this consent form and agree to participate in the project. **Please keep one copy of the consent form for your records.**

Check one box:

DENTAL SCREENING

☐ **Yes**, I give permission for my child to receive a dental screening.

☐ **No**, I do not give permission for my child to receive a dental screening.

Check one box:

HEALTH QUESTIONNAIRE

☐ **Yes**, I have completed the health questionnaire.

☐ **No**, I have not completed the health questionnaire.

_____ _____

Signature of parent/guardian **Date**

Your relationship to the child: _____

CHILD'S INFORMATION (please print):

Last name: _____ First name: _____

Grade: _____ Teacher: _____

Please, put this signed consent form in the envelope and return the envelope to your child's teacher as soon as possible. Keep the other copy of the consent form for your records.

THANK YOU FOR YOUR TIME

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

FORMULARIO DE CONSENTIMIENTO

Título de Protocolo	**:**	Encuesta de Salud Oral de Maryland Niños de la Escuela, 2011-2012
Número de Estudio	**:**	HP-00048624
Investigador Principal:		Mark D. Macek, DDS, DrPH; 410-706-4218
Patrocinador	**:**	Departamento de la Salud de Maryland y Salud Mental

---

La participación en este proyecto de estudio es voluntaria. Usted puede hacer preguntas sobre este proyecto en cualquier momento. Se le pide dar su consentimiento para usted y su niñjo.

PROPÓSITO DEL PROYECTO

- El objetivo de este proyecto es medir la salud dental de los niños en jardin y 3rd grado que asisten a escuelas públicas en Maryland.
- Usted y su niño se les pide que participen en este proyecto porque la escuela de su niño fue seleccionada para participar.
- Alrededor de 75 niños participarán en el proyecto de la escuela de su niño. Un total de cerca de 1,750 niños tomarán parte en el proyecto de todas las escuelas primarias en Maryland.

PROCEDIMIENTOS

- El proyecto tiene dos partes: un examen dental y un cuestionario de salud.
- El examen dental se llevará a cabo en la escuela de su niño. Un dentista con licencia examinará los dientes de su niño con un espejo dental y luz. El dentista utilizará un nuevo espejo, guantes nuevos y desechables para cada niño.
- Durante el examen dental, el dentista contará los dientes de su niño y buscará las caries y sellantes dentales. El dentista también verá si su niño necesita un tratamiento dental o de selladores dentales. Un sellador dental es una cubierta delgada que se pinta en los dientes de su niño para protegerlos de las caries dentales. El dentista no le tomará radiografías.
- Usted recibirá una copia de todos los resultados después de la evaluación dental. La enfermera de la escuela también recibirá una copia de los resultados de su niño. Ninguna otra persona, agencia u organización verán los resultados de su niño.
- El cuestionario de salud se incluye en este sobre. Le tomará alrededor de 5 minutos para completarlo.

POSIBLES RIESGOS Y MOLESTIAS:

- El riesgo para usted y su niño por participar en este proyecto es mínima. Cualquier riesgo previsto en este proyecto no es más que lo esperado durante un examen dental de rutina o una encuesta de salud.
- En todos los estudios hay un riesgo de posible pérdida de confidencialidad. La pérdida de confidencialidad será reducido al mínimo en este proyecto al permitir que sólo los miembros de equipo del proyecto vean los resultados dentales de su niño y de las respuestas del cuestionario. La pérdida de la confidencialidad también se reducirán al mínimo mediante el almacenamiento de sus datos en un gabinete seguro bajo llave. Los datos electrónicos estarán protegidos con contraseña.

POSIBLES BENEFICIOS

- Usted y su niño pueden o no beneficiarse de tomar parte en este proyecto. No hay garantía de que usted y su niño recibian beneficio directo de su participación en este estudio. El examen dental puede identificar cavidades y puede identificar la necesidad de tratamiento dental o sellantes.
- Usted debe decidir si la participación de su niño en este proyecto es de mejor interés para su niño.

ALTERNATIVAS A LA PARTICIPACION

- No se trata de un estudio de tratamiento. La alternativa a participar es la de no participar. Si elige no participar, la atención médica de su niño en la Universidad de Maryland, Baltimore no se verán afectados.

COSTO PARA LOS PARTICIPANTES

- No le costará nada para participar en este proyecto.

PAGO A LOS PARTICIPANTES

- A usted y a su niño no se les pagará por participar en este proyecto.
- Si su niño tiene cavidades o necesita tratamiento dental se le dará una lista de clínicas dentales en su área y puedan proveer tratamiento dental para su niño. El proyecto no pagará por estos tratamientos.

CONFIDENCIALIDAD

- El examen dental y el cuestionario de salud contienen información confidencial de salud. Sólo el Dr. Macek y los miembros de su equipo del proyecto, y la enfermera de la escuela de su niño, tendrán acceso a los resultados de su niño. La información confidencial contenida en la evaluación dental y en el cuestionario de salud sólo será utilizada para los fines de este proyecto.
- Los datos del proyecto podrán ser publicados. Sin embargo, usted y su niño no serán identificados por su nombre. Las personas designadas por las instituciones donde se llevó a cabo el proyecto y la gente del patrocinador se les permitirá inspeccionar las secciones del estudio de los registros relacionados con el proyecto. Cada uno usando la información del proyecto mantendrán la información de su niño confidencial. Sus datos personales no serán entregados a menos que sea requerido por la ley.

DERECHO A RETIRARSE

- Su participación en este proyecto es voluntaria. Usted y su niño no tienen que participar en este proyecto. Usted está libre de retirar su consentimiento en cualquier momento. La negativa a participar o dejar de participar en el proyecto no supone ninguna sanción o pérdida de beneficios a los que tiene derecho. Si usted decide dejar de participar, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con este proyecto, póngase en contacto con el investigador, **Dr. Mark Macek**, at **410-706-4218**.
- No hay consecuencias adversas (físicas, sociales, económicas, jurídicas, o psicológicas) de su decisión de retirarse de este proyecto.

DECLARACION DE LA UNIVERSIDAD DE ESTUDIO SOBRE RIESGOS

La Universidad se compromete a proporcionar a los participantes en sus estudios todos los derechos que se les debe en virtud de las leyes Estatales y Federales. Usted no renuncia a ninguno de sus derechos legales al firmar este

formulario de consentimiento o por participar en el proyecto de estudio. Por favor llame a la Junta de Revisión Institucional (IRB) si usted tiene preguntas acerca de sus derechos como participante del estudio.

El proyecto descrito en este formulario ha sido clasificado como un riesgo mínimo por el IRB de la Universidad de Maryland, Baltimore (UMB). El IRB es un grupo de científicos, medicos, expertos y otras personas. Los miembros del IRB's no están afiliados con la UMB y no llevan a cabo projectos de estudio. La decisión del IRB en el projecto es mínima, no significa que el projecto está libre de riesgos. Usted está asumiendo los riesgos de lesiones como resultado de la participación en el estudio, como se indica en el formulario de consentimiento.

Si se perjudican como consecuencia de la negligencia de un investigador, usted puede hacer un reclamo de indemnización. Si usted tiene preguntas, inquietudes, quejas, o cree que han sido perjudicados mediante la participación en este projecto como resultado de negligencia de un investigador, puede comunicarse con los miembros del IRB, o el personal de la Oficina de Protección e Investigación (HRPO), para pedir preguntas, discutir problemas o dudas, obtener información, o dar su opinión sobre sus derechos como un participante. El contacto de información del IRB y del HRPO es:

Universidad de Maryland Escuela de Medicina
Oficina de Investigación y Protección, BioPark I
800 W. Baltimore Street, Suite 100
Baltimore, MD 21201
410-706-5037

o

Sra. Gay Hutchen, Administrador de la IRB
Departmento de la Salud de Maryland y Salud Mental
201 W. Preston Street
Baltimore, MD 21201
410-767-8448

FIRMA

Firmando esta página indica que usted ha leído el formulario de consentimiento y está de acuerdo a participar en el proyecto. **Por favor, mantenga una copia del fomulario de consentimiento para sus registros.**

Marque uno:

EVALUACION DENTAL

☐ **Si, doy permiso para que mi niño reciba una evaluación dental.**

☐ **No**, **no doy permiso para que mi niño reciba una evaluación dental.**

Marque uno:

CUESTIONARIO DE SALUD

☐ **Si**, he completado el cuestionario de salud.

☐ **No**, no he completado el cuestionario de salud.

_____ _____

Firma del padre/apoderado **Fecha**

Su relación con el niño: _____

INFORMACION DEL NIÑO (por favor letra imprenta):

Apellido: _____ Nombre: _____

Grado: _____ Profesor: _____

Por favor, ponga este <u>formulario de consentimiento firmado</u> en el sobre y devolver el sobre al profesor de su niño tan pronto como sea posible. Conserve la otra copia del formulario de consentimiento para sus registros.

GRACIAS POR SU TIEMPO

UMB IRB Approval for this project is valid from 6/17/2011 – 4/24/2012

HP-00048624

UNIVERSITY of MARYLAND
THE FOUNDING CAMPUS

FORMULARIO DE CONSENTIMIENTO

Título de Protocolo	**:**	Encuesta de Salud Oral de Maryland Niños de la Escuela, 2011-2012
Número de Estudio	**:**	HP-00048624
Investigador Principal:		Mark D. Macek, DDS, DrPH; 410-706-4218
Patrocinador	**:**	Departamento de la Salud de Maryland y Salud Mental

---

La participación en este proyecto de estudio es voluntaria. Usted puede hacer preguntas sobre este proyecto en cualquier momento. Se le pide dar su consentimiento para usted y su niñjo.

PROPÓSITO DEL PROYECTO

- El objetivo de este proyecto es medir la salud dental de los niños en jardin y 3rd grado que asisten a escuelas públicas en Maryland.
- Usted y su niño se les pide que participen en este proyecto porque la escuela de su niño fue seleccionada para participar.
- Alrededor de 75 niños participarán en el proyecto de la escuela de su niño. Un total de cerca de 1,750 niños tomarán parte en el proyecto de todas las escuelas primarias en Maryland.

PROCEDIMIENTOS

- El proyecto tiene dos partes: un examen dental y un cuestionario de salud.
- El examen dental se llevará a cabo en la escuela de su niño. Un dentista con licencia examinará los dientes de su niño con un espejo dental y luz. El dentista utilizará un nuevo espejo, guantes nuevos y desechables para cada niño.
- Durante el examen dental, el dentista contará los dientes de su niño y buscará las caries y sellantes dentales.
  El dentista también verá si su niño necesita un tratamiento dental o de selladores dentales. Un sellador dental es una cubierta delgada que se pinta en los dientes de su niño para protegerlos de las caries dentales. El dentista no le tomará radiografías.
- Usted recibirá una copia de todos los resultados después de la evaluación dental. La enfermera de la escuela también recibirá una copia de los resultados de su niño. Ninguna otra persona, agencia u organización verán los resultados de su niño.
- El cuestionario de salud se incluye en este sobre. Le tomará alrededor de 5 minutos para completarlo.

POSIBLES RIESGOS Y MOLESTIAS:

- El riesgo para usted y su niño por participar en este proyecto es mínima. Cualquier riesgo previsto en este proyecto no es más que lo esperado durante un examen dental de rutina o una encuesta de salud.
- En todos los estudios hay un riesgo de posible pérdida de confidencialidad. La pérdida de confidencialidad será reducido al mínimo en este proyecto al permitir que sólo los miembros de equipo del proyecto vean los resultados dentales de su niño y de las respuestas del cuestionario. La pérdida de la confidencialidad también se reducirán al mínimo mediante el almacenamiento de sus datos en un gabinete seguro bajo llave. Los datos electrónicos estarán protegidos con contraseña.

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

POSIBLES BENEFICIOS

- Usted y su niño pueden o no beneficiarse de tomar parte en este proyecto. No hay garantía de que usted y su niño recibian beneficio directo de su participación en este estudio. El examen dental puede identificar cavidades y puede identificar la necesidad de tratamiento dental o sellantes.
- Usted debe decidir si la participación de su niño en este proyecto es de mejor interés para su niño.

ALTERNATIVAS A LA PARTICIPACION

- No se trata de un estudio de tratamiento. La alternativa a participar es la de no participar. Si elige no participar, la atención médica de su niño en la Universidad de Maryland, Baltimore no se verán afectados.

COSTO PARA LOS PARTICIPANTES

- No le costará nada para participar en este proyecto.

PAGO A LOS PARTICIPANTES

- A usted y a su niño no se les pagará por participar en este proyecto.
- Si su niño tiene cavidades o necesita tratamiento dental se le dará una lista de clínicas dentales en su área y puedan proveer tratamiento dental para su niño. El proyecto no pagará por estos tratamientos.

CONFIDENCIALIDAD

- El examen dental y el cuestionario de salud contienen información confidencial de salud. Sólo el Dr. Macek y los miembros de su equipo del proyecto, y la enfermera de la escuela de su niño, tendrán acceso a los resultados de su niño. La información confidencial contenida en la evaluación dental y en el cuestionario de salud sólo será utilizada para los fines de este proyecto.
- Los datos del proyecto podrán ser publicados. Sin embargo, usted y su niño no serán identificados por su nombre. Las personas designadas por las instituciones donde se llevó a cabo el proyecto y la gente del patrocinador se les permitirá inspeccionar las secciones del estudio de los registros relacionados con el proyecto. Cada uno usando la información del proyecto mantendrán la información de su niño confidencial. Sus datos personales no serán entregados a menos que sea requerido por la ley.

DERECHO A RETIRARSE

- Su participación en este proyecto es voluntaria. Usted y su niño no tienen que participar en este proyecto. Usted está libre de retirar su consentimiento en cualquier momento. La negativa a participar o dejar de participar en el proyecto no supone ninguna sanción o pérdida de beneficios a los que tiene derecho. Si usted decide dejar de participar, si usted tiene preguntas, inquietudes o quejas, o si necesita reportar una lesión relacionada con este proyecto, póngase en contacto con el investigador, **Dr. Mark Macek**, at **410-706-4218**.
- No hay consecuencias adversas (físicas, sociales, económicas, jurídicas, o psicológicas) de su decisión de retirarse de este proyecto.

¿SE LES PUEDE RETIRAR DEL PROYECTO A USTED Y A SU HIJO(A)?

- La persona a cargo del proyecto o el patrocinador del mismo puede retirarlos del estudio de investigación sin su consentimiento. Entre las posibles razones para retirarlos están el incumplimiento de las instrucciones o la decisión de que el proyecto ya no redunda en su bienestar ni en el de su hijo(a). El patrocinador también puede ponerle fin al proyecto en forma prematura. La persona a cargo le informará al respecto y usted tendrá la oportunidad de formular preguntas si esto llegara a suceder.

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

DECLARACION DE LA UNIVERSIDAD DE ESTUDIO SOBRE RIESGOS

La Universidad se compromete a proporcionar a los participantes en sus estudios todos los derechos que se les debe en virtud de las leyes Estatales y Federales. Usted no renuncia a ninguno de sus derechos legales al firmar este formulario de consentimiento o por participar en el proyecto de estudio. Por favor llame a la Junta de Revisión Institucional (IRB) si usted tiene preguntas acerca de sus derechos como participante del estudio.

El proyecto descrito en este formulario ha sido clasificado como un riesgo mínimo por el IRB de la Universidad de Maryland, Baltimore (UMB). El IRB es un grupo de científicos, medicos, expertos y otras personas. Los miembros del IRB's no están afiliados con la UMB y no llevan a cabo projectos de estudio. La decisión del IRB en el projecto es mínima, no significa que el projecto está libre de riesgos. Usted está asumiendo los riesgos de lesiones como resultado de la participación en el estudio, como se indica en el formulario de consentimiento.

Si se perjudican como consecuencia de la negligencia de un investigador, usted puede hacer un reclamo de indemnización. Si usted tiene preguntas, inquietudes, quejas, o cree que han sido perjudicados mediante la participación en este projecto como resultado de negligencia de un investigador, puede comunicarse con los miembros del IRB, o el personal de la Oficina de Protección e Investigación (HRPO), para pedir preguntas, discutir problemas o dudas, obtener información, o dar su opinión sobre sus derechos como un participante. El contacto de información del IRB y del HRPO es:

Universidad de Maryland Escuela de Medicina
Oficina de Investigación y Protección, BioPark I
800 W. Baltimore Street
Suite 100
Baltimore, MD 21201
410-706-5037

o

Sra. Gay Hutchen, Administrador de la IRB
Departmento de la Salud de Maryland
y Salud Mental
201 W. Preston Street
Baltimore, MD 21201
410-767-8448

FAVOR DE PASAR A LA SIGUIENTE PÁGINA

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

FIRMA

Firmando esta página indica que usted ha leído el formulario de consentimiento y está de acuerdo a participar en el proyecto. **Por favor, mantenga una copia del fomulario de consentimiento para sus registros.**

Marque uno:

EVALUACION DENTAL

☐ **Si, doy permiso para que mi niño reciba una evaluación dental.**

☐ **No**, **no doy permiso para que mi niño reciba una evaluación dental.**

Marque uno:

CUESTIONARIO DE SALUD

☐ **Si**, he completado el cuestionario de salud.

☐ **No**, no he completado el cuestionario de salud.

_____ _____

Firma del padre/apoderado **Fecha**

Su relación con el niño: □□□□□□□□□□□□ _____

INFORMACION DEL NIÑO (por favor letra imprenta):

Apellido: _____ Nombre: _____

Grado: _____ Profesor: _____

Por favor, ponga este <u>formulario de consentimiento firmado</u> en el sobre y devolver el sobre al profesor de su niño tan pronto como sea posible. Conserve la otra copia del formulario de consentimiento para sus registros.

GRACIAS POR SU TIEMPO

HP-00048624 UM IRB Approval Date 4/16/2012
Do Not Sign this Form after this Date 4/15/2013

APPENDIX C: Letter of support from Dr. Grasmick

MARYLAND STATE DEPARTMENT OF EDUCATION
Achievement Matters Most

Nancy S. Grasmick
State Superintendent of Schools

200 West Baltimore Street • Baltimore, MD 21201 • 410-767-0100 • 410-333-6442 TTY/TDD

November 4, 2010

To Local Superintendents of Schools:

The purpose of this letter is to provide information regarding the Maryland Department of Health and Mental Hygiene (DHMH) Office of Oral Health oral health needs assessment of Maryland school children. This assessment, entitled *"Oral Health Survey of Maryland School Children,"* is conducted every five years in conjunction with the University of Maryland Dental School. The DHMH Office of Oral Health is requesting your support for an oral health needs assessment of Maryland school children in kindergarten and third grade to be conducted during the 2010-2011 school year. The 2010-2011 assessment will be a follow-up to the *2005-2006 Oral Health Survey of Maryland School Children*. According to the *2005-2006 Oral Health Survey of Maryland School Children*, third graders had a higher prevalence of untreated tooth decay and were less likely to receive dental sealants.

Approximately 50 schools will be chosen to participate in this oral health assessment. DHMH will contact each local superintendent individually and ask for his or her support of the survey. Selected children will receive a non-invasive clinical oral assessment to identify dental cavities. In addition, parents of selected children will be asked to sign a consent form and complete a dental services access and oral disease risk behavior questionnaire at home. Children identified with untreated oral diseases will be referred to a dentist.

If you have any questions or need additional information, please contact Ms. Daphene Altema-Johnson, Office of Oral Health, DHMH at (410) 767-5799 or email daltemajohnson@dhmh.state.md.us.

Sincerely,

Nancy S. Grasmick
State Superintendent of Schools

NSG:DM:mw

c: Daphene Altema-Johnson
Donna Mazyck

Oral Health Assessment-2010-2011-Letter to Local Superintendents

APPENDIX D: Letter of support from Dr. Goodman

STATE OF MARYLAND
DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

January 18, 2011

The purpose of this letter is to demonstrate the strong support of the Maryland Department of Health and Mental Hygiene Office of Oral Health for the 2011 "*Oral Health Survey of Maryland School Children.*" The purpose of this survey is to help evaluate the prevalence of tooth decay, preventive dental sealants, and to gain insight regarding barriers to dental care.

The "2011 *Oral Health Survey of Maryland School Children*" is conducted every five years in collaboration with the University of Maryland Dental School and is a follow-up to a 2005-2006 oral health survey which provided the State with detailed information that helped quantify the continued need for implementing new and expanded public oral health programs. The 2005-2006 survey reported 29.7% of third graders and 32.6% of Kindergarten had tooth decay.

Tooth decay is the most common chronic disease of childhood. According to the Centers for Disease Control and Prevention (CDC), tooth decay affects more than one fourth of U.S. children aged 2-5 and half of those aged 12-15. Untreated tooth decay often results in children experiencing school absences, difficulty in concentrating, pain, and failure to thrive. To address these issues, it is imperative that we collect community level oral health status and access to care data to better understand the dental problems facing our children, especially those from low-income families where tooth decay is more prevalent.

It is with great pleasure that I support the "2011 *Oral Health Survey of Maryland School Children.*" Not only will it help our office better understand the current oral health status of our children but it also will be used to measure the effectiveness of our ongoing programs and help guide future policy direction for Maryland children.

Sincerely,

Dr. Harry Goodman, Director
Office of Oral Health

APPENDIX E: Letter of introduction to superintendents

BALTIMORE COLLEGE OF
DENTAL SURGERY, DENTAL SCHOOL

DEPARTMENT OF
HEALTH PROMOTION AND POLICY

UNIVERSITY OF MARYLAND

Dr. Andres Alonso
Chief Executive Officer
Baltimore City Public Schools
200 East North Avenue
Baltimore, MD 21202

Dear Dr. Alonso:

The University of Maryland Dental School and the Maryland Department of Health and Mental Hygiene are seeking the participation of your school district in the *Oral Health Survey of Maryland School Children, 2011-2012* (*Oral Health 11/12*). What is *Oral Health 11/12?* It is an assessment of the oral health status of public schoolchildren in kindergarten and 3rd grade. Approximately every five years, Maryland is required by law to conduct this survey and to issue a report that will be disseminated to state and federal agencies. *Oral Health 11/12* represents the next of these scheduled assessments.

As you may know, tooth decay is the most common chronic disease in children. In order to effectively address this public health problem, an accurate assessment of dental needs in Maryland is needed. Your participation will help us bring beneficial dental programs to your region and other areas in the state.

Previous assessments have provided valuable insights into the dental health status of Maryland's children. Findings from the last survey, conducted during the 2005-2006 term, revealed significant unmet dental need in the state – a startling 32.6% of public schoolchildren in kindergarten and 29.7% of schoolchildren in 3rd grade had active tooth decay at the time. These findings were used to allocate resources at the state and county levels, as well as solicit grant funds for preventive dental programs targeted to the children with the highest levels of need.

Approximately 50-60 elementary schools will be selected at random by our survey team to participate from among all public schools in the state. Once your support is provided, about 2-5 elementary schools will be selected from your school district. Students in kindergarten and 3rd grade from these selected schools will then be given an opportunity to participate. **Note that no schoolchildren will participate in *Oral Health 11/12* without parental consent.**

In preparation for the assessment, an information packet will be sent home to parents containing: a description of the project, a consent form, and a short questionnaire (draft version is enclosed). For the children of parents who provide consent, a brief oral screening examination will be conducted at a designated area within their school by a member of the survey team who is a licensed Maryland dentist.

This dentist examiner will count the teeth, look for tooth decay, dental sealants, and other findings, and determine the need for follow-up care. A new, disposable dental mirror and tongue depressor will be used for each child and strict adherence to infection control will be followed at all times. The same procedures that were successfully used in previous years will be used during the *Oral Health 11/12* assessment.

From the desk of SUSAN COLLER
650 West Baltimore Street • Room 2206 • Baltimore, Maryland 21201-1586 • 410 706 3051 • 410 706 4031 *fax* • scoller@umaryland.edu

Upon completion of the screening examination, each child will receive a *Summary of Findings* form describing the results of their screening examination (draft version is enclosed). A copy of the *Summary of Findings* form will also be given to the school nurse. In addition, each participating child will also receive a toothbrush and some fun items (*e.g.,* coloring book, stickers) to take home.

A *Frequently Asked Questions* brochure is enclosed in this mailing to provide additional information about the *Oral Health 11/12* project. A letter of support from Maryland's State Dental Director, Dr. Harry Goodman, and a copy of the November 4, 2010 letter from Dr. Nancy G. Grasmick, State Superintendent, Maryland State Department of Education, are also enclosed.

Within the next two weeks, you will be contacted by our project Director, Ms. Susan Coller. She will supply further details about the project and answer any questions that you might have. Once your support is provided, the survey team will proceed with the selection ogf a random sample of schools from your district. The principals of these selected schools will also be contacted by Ms. Coller.

We thank you for your attention to this important request. If you have any questions for the Principal Investigators of this project, their contact information is provided below. We look forward to the opportunity to work with you and your staff.

Most gratefully yours,

Mark D. Macek

Mark D. Macek, DDS, DrPH
Associate Professor
Division of Health Services Research

Daphene Altema-Johnson

Daphene Altema-Johnson, MPH, MBA
Epidemiologist / Evaluation Scientist
Office of Oral Health

Enclosures (5)

APPENDIX F: Letter of introduction to principals

BALTIMORE COLLEGE OF
DEPARTMENT OF
DENTAL SURGERY, DENTAL SCHOOL
AND POLICY

HEALTH PROMOTION

UNIVERSITY OF MARYLAND

July 13, 2011

Ms. Debra Sharpe, Principal
Yorkwood Elementary School
5931 Yorkwood Road
Baltimore, Maryland 21238

Dear Ms. Sharpe:

The University of Maryland Dental School and the Maryland Department of Health and Mental Hygiene are seeking the participation of your school in a state-mandated study of dental health, known as the *Oral Health Survey of Maryland School Children 2011-2012*. Every five years, Maryland is required by law to conduct this project and to issue a report that is disseminated to state and federal agencies. The last project was conducted in 2005-2006. Enclosed you will find a letter of support from Dr. Nancy G. Grasmick. The Superintendent in your jurisdiction has already provided endorsement for the project.

The purpose of the *Oral Health Survey* is to describe the dental health status of kindergarten and 3rd grade children in Maryland. Findings will be used to guide policy and allocate resources at state and local levels. Children who participate in the project will receive a brief dental screening exam by a licensed dentist. The screening will take place on one day in your school at a location that you designate. After the screening, the children will be given a summary of the findings, and their parents/guardians will receive information about where to find dental care in their area, if needed. **Note that no child will receive a dental screening without the written consent of his/her parent/guardian.**

A total of 60 elementary schools in Maryland were selected at random to participate in the study. Your school was selected as a part of that sampling process. The next step will be scheduling a date for your school's participation. I will be calling you shortly to describe the project in greater detail and to schedule a date for the dental screening at your school. I am enclosing a copy of the documents that will be used for the project. The *Frequently Asked Questions* flyer is particularly informative. Of course, these documents will also be available in Spanish, as needed. Thank you for your assistance in this important state-mandated project.

Sincerely,

Susan Coller

Susan Coller
Project Director

From the desk of SUSAN COLLER
650 West Baltimore Street • Room 2206 • Baltimore, Maryland 21201-1586 • 410 706 3051 • 410 706 4031 *fax* • scoller@umaryland.edu

APPENDIX G: List of requested items

UNIVERSITY OF MARYLAND SCHOOL OF DENTISTRY

Oral Health Survey of Maryland School Children 2011-2012

Items Requested by the Dental Team

We would like to ask that you have the following items available for our dental team when they visit your school. Please contact the Project Director, Ms. Susan Coller, if you have any questions and/or if any of these items cannot be provided. Ms. Coller can be reached at 410.706.3051 or at scoller@umaryland.edu

Requested Items

1. Name of contact and contact information for the person who will meet us when we arrive.
2. Well-lit quiet area
3. Two tables for dental supplies
4. One table for data recording
5. Three chairs for the dental team
6. Six chairs for students who are waiting for their screening examination
7. Nearby electrical outlets
8. Trash can
9. Nurse/aide/volunteer/assistant who will bring students to the screening area and back to their classrooms
10. Name of custodian plus his/her cell phone number and email address in the event of an issue that occurs

We look forward to meeting you and screening the students in kindergarten and 3rd grade at your school.

APPENDIX H: Elements contained in the *Information Packet*

Oral Health Survey of Maryland School Children, 2011-2012

Sponsored by the Maryland Department of Health and Mental Hygiene
Project Director: Ms. Susan Coller; 410-706-3051

Dear Parent/Guardian:

The State of Maryland measures the dental health of its public school children every five years. Maryland professionals use the results to plan new dental programs and services for all children in the state. We invite you and your child to participate in this year's project. The information in this envelope will explain the project and answer your questions.

This envelope has:

1. An invitation to participate
2. A *Frequently Asked Questions* flyer
3. Two copies of the consent form
4. Two copies of the HIPAA form
5. The health questionnaire

Please read the information. Then, put the signed consent form (yellow paper), the signed HIPAA form (yellow paper), and the health questionnaire (yellow paper) back in this envelope. And, return the envelope to your child's teacher. Please, write your child's information on the bottom of this envelope.

You can keep the invitation, the second consent form, the second HIPAA form, and the *Frequently Asked Questions* flyer for your records.

If you have questions or need more information about the project, please contact the Project Director, **Ms. Susan Coller**, at **410-706-3051**.

Thank you very much for your time.

Your child's information (please print):

Last name: _____ First name: _____

Grade: _____ Teacher: _____

- ✓ I put a signed copy of the consent form (yellow paper) in this envelope
- ✓ I put a signed copy of the HIPAA form (yellow paper) in this envelope
- ✓ I put the health questionnaire (yellow paper) in this envelope
- ✓ I kept a copy of the consent form (blue paper), the HIPAA form (blue paper), and the *Frequently Asked Questions* flyer (blue paper) for my records

Encuesta de Salud Oral de Maryland
Niños de la Escuela, 2011-2012

Patrocinado por el Departamento de Salud e Higiene Mental de Maryland
Director de Proyecto: Sra. Susan Coller; 410-706-3051

Estimado Padre/Tutor:

El Estado de Maryland mide la salud dental de sus niños de escuelas públicas cada cinco años. Profesionales de Maryland utilizan los resultados para planificar nuevos programas dentales y servicios para todos los niños en el Estado. Invitamos a usted y a su niño a participar en el proyecto de este año. La información contenida en este sobre le explicará el proyecto y deberá responder a sus preguntas.

El sobre contiene:

1. Una invitación a participar
2. Un folleto de *Preguntas Más Frecuentes*
3. Dos copias del formulario de consentimiento
4. Dos copias del formulario de HIPAA
5. El cuestionario de salud

Por favor lea la información. Firmar el formulario de consentimiento (papel amarillo), el formulario de HIPAA (papel amarillo), y el cuestionario de salud (papel amarillo), retornar el sobre al profesor de su niño. Por favor, escriba la información de su niño en la parte inferior del sobre.

Usted puede quedarse con la invitación, el segundo formulario de consentimiento, el segundo formulario de HIPAA y el folleto de *Preguntas Más Frecuentes* para sus registros.

Si usted tiene preguntas o necesita más información sobre el proyecto, por favor póngase en contacto con el Director del Proyecto, **Sra. Susan Coller, al 410-706-3051.**

Muchas gracias por su tiempo.

Información de su niño (por favor letra imprenta):

Apellido: _____ Primer Nombre:_____

Grado:_____ Profesor:_____

- ✓ Retorno en el sobre una copia firmada del formulario de consentimiento (papel amarillo)
- ✓ Retorno en el sobre una copia firmada del formulario de HIPAA (papel amarillo)
- ✓ Retorno en el sobre el cuestionario de salud (papel amarillo)
- ✓ Mantengo una copia del formulario de consentimiento (papel azul), formulario de HIPAA (papel azul) y el folleto *Preguntas Más Frecuentes* (papel azul) para mis registros

Oral Health Survey of Maryland School Children, 2011-2012

Sponsored by the Maryland Department of Health and Mental Hygiene
Project Director: Ms. Susan Coller; 410-706-3051

Dear Parent/Guardian:

The State of Maryland measures the dental health of its public school children every five years. Maryland professionals use the results to plan new dental programs and services for all children in the state. We invite you and your child to participate in this year's project.

The project has two parts, a simple dental screening and a short health questionnaire.

The dental screening will take place at your child's school. A licensed dentist will look at your child's teeth with a dental mirror and light. The dentist will count your child's teeth and look for cavities and fillings. The dentist will also see if your child needs dental treatment or dental sealants. A dental sealant is a thin covering that is painted on your child's teeth to protect them from tooth decay. You will receive a copy of all results after the dental screening. If your child has cavities or needs dental sealants, you will get a list of dental clinics in your area.

The health questionnaire asks simple questions about your child's dental health. It should take about 5 minutes to complete.

In this envelope you will find:

1. A *Frequently Asked Questions* flyer
2. Two copies of the consent form
3. Two copies of the HIPAA form
4. The health questionnaire

Taking part in this project is completely voluntary. We hope you will sign the consent form and the HIPAA form, and complete the health questionnaire. **No child will get a dental screening unless his/her parent/guardian gives consent.**

Please put the signed consent form (yellow paper), signed HIPAA form (yellow paper), and the health questionnaire (yellow paper) in this envelope and return it to your child's teacher. You can keep the *Frequently Asked Questions* flyer (blue paper) and the unsigned copies of the consent form (blue paper) and the HIPAA form (blue paper) for your records.

If you have questions or need more information about the project, please contact the Project Director, **Ms. Susan Coller**, at **410-706-3051**.

Gratefully yours,

Susan Coller

Project Director

Encuesta de Salud Oral de Maryland
Niños de la Escuela, 2011-2012

Patrocinado por el Departamento de Salud e Higiene Mental de Maryland
Director de Proyecto: Sra. Susan Coller; 410-706-3051

Estimado Padre/Tutor:

El Estado de Maryland mide la salud dental de sus niños de escuelas públicas cada cinco años. Profesionales de Maryland utilizan los resultados para planificar nuevos programas dentales y servicios para todos los niños en el Estado. Lo invitamos a usted y a su niño a participar en el proyecto de este año.

El proyecto tiene dos partes, un simple examen dental y un cuestionario de salud corto.

El examen dental se llevará a cabo en la escuela de su niño. Un dentista licenciado verá a su niño, los dientes con un espejo dental y luz. El dentista contará los dientes de su niño y buscará las cavidades y rellenos. El dentista también verá si su niño necesita un tratamiento dental o sellantes dentales. Un sellador dental es una cubierta delgada que se pinta en los dientes de su niño, para protegerlos de caries dentales. Usted recibirá una copia de todos los resultados después del examen dental. Si su niño tiene cavidades o necesita sellantes dentales, usted obtendrá una lista de clínicas dentales en su área.

El cuestionario de salud hace preguntas simples acerca de la salud dental de su niño. Le tomará alrededor de 5 minutos para completarlo.

En el sobre usted encontrará:

1. Un folleto de *Preguntas Más Frecuentes*
2. Dos copias del formulario de consentimiento
3. El cuestionario de salud

La participación en este proyecto es voluntaria. Esperamos que usted firme el formulario de consentimiento y complete el cuestionario de salud. **Ningún niño recibirá un examen dental a menos que su padre/madre/tutor de su consentimiento.**

Por favor poner el formulario de consentimiento (papel amarillo), el formulario de HIPAA (papel amarillo), y el cuestionario de salud (papel amarillo) en el sobre y devolverlo al profesor de su niño. Usted puede mantener el folleto de *Preguntas Más Frecuentes* (papel azul), y la otras copias del formulario de consentimiento (papel azul) y del formulario de HIPAA (papel azul) para sus registros.

Si usted tiene preguntas o necesita más información sobre el proyecto, póngase en contacto con el Director del Proyecto, **Sra. Susan Coller, al 410-706-3051.**

Muy agradecida,

Susan Coller

Director de Proyecto

Q. What happens if the dentist finds tooth decay or a serious dental problem?

A. Although the main purpose of *Oral Health 11/12* is to measure the overall dental health of school children in Maryland, the other purpose is to refer children with dental problems for care. At the end of each screening, children will get a summary sheet describing their screening results. The parent/guardian will also get a list of dental clinics that can provide treatment services, if needed. School nurses will also get a copy of the screening results.

Q. What questions will be on the health questionnaire?

A. The short health questionnaire will have questions about visiting the dentist, dental insurance, and access to dental care services. Answers to the questions will be kept strictly confidential.

Q. Who will see the results?

A. Only members of the *Oral Health 11/12* project team will have access to the information. Final reports will contain summary results only. At no time will schools or individual school children be identified or described. The project team will follow all rules for maintaining confidentiality defined by the Maryland Departments of Education and Health and Mental Hygiene, and by the University of Maryland, Baltimore.

Q. What if I have additional questions?

A. Members of the *Oral Health 11/12* project team would be happy to answer any of your questions and provide additional information. Please, feel free to contact the Project Director, Ms. Susan Coller, at 410-706-3051.

Thank you very much for your time.

Oral Health Survey of Maryland School Children 2011-2012

Frequently Asked Questions

Administered by the
Department of Health Promotion and Policy
University of Maryland Dental School
Baltimore, Maryland

Sponsored by the
Office of Oral Health
Maryland Department of Health and Mental Hygiene

Project Director
Ms. Susan Coller
Department of Health Promotion & Policy
Office: (410) 706-3051
Fax: (410) 706-4031
E-mail: scoller@umaryland.edu

Oral Health Survey of Maryland School Children 2011-2012

FREQUENTLY ASKED QUESTIONS

Q. What is this project?

A. The *Oral Health Survey of Maryland School Children, 2011-2012 (Oral Health 11/12)* is an assessment of the dental health of public school children in kindergarten and 3rd grade. It has two parts: a dental screening and health questionnaire.

Q. What is the purpose of this project?

A. Maryland must measure the dental health of its public school children every five years so that public programs and funding can be properly determined. *Oral Health 11/12* will show where the greatest needs are in the state.

Q. Who will run Oral Health 11/12?

A. A team of dentists and dental hygienists from the University of Maryland Dental School will conduct *Oral Health 11/12*.

Q. Will all school districts and schools be involved?

A. *Oral Health 11/12* does not have the resources to examine all school children in Maryland. The project team will pick a sample of about 50 schools so that they represent all Maryland public schools.

Q. Who will carry out the dental screenings?

A. Only dentists licensed in Maryland will conduct the dental screenings. Each dentist will also have two assistants to help with paperwork.

Q. Will the children's health benefits be affected if they choose not to participate?

A. Participation in *Oral Health 11/12* is completely voluntary. The dental health benefits of school children who choose not to participate will not be affected in any way.

Q. How will the dental screenings be done?

A. The dentist will use a portable chair to conduct the dental screenings. During each screening, the dentist will count teeth, look for tooth decay and fillings, and see if dental treatment or dental sealants are needed.

The dentist will use a new, disposable dental mirror and a new pair of disposable gloves for each child. The dentist will follow all health and safety rules at all times.

The dental screening will take about 2-3 minutes. No child will get a dental screening unless his or her parent/guardian gives written consent. All information from the dental screening will be kept completely confidential. Only the parent/guardian and the school nurse will see the results of the dental screening.

Q. What are dental sealants?

A. A dental sealant is a thin coating painted on the teeth to protect them from tooth decay. Dental sealants are placed by dentists and dental hygienists.

Q. Where will the dental screenings take place?

A. The dental screenings will be conducted in common areas picked by the principal or school nurse (such as the cafeteria, music room, or gymnasium).

P. Qué sucede si el dentista encuentra caries o un grave problema dental?

R. Aunque el objetivo principal de la *Salud Oral 11/12* es medir la salud dental en general de los niños escolares en Maryland, el otro propósito es para referirse a los niños con problemas dentales para su atención. Al final de cada control, los niños obtendrán una hoja de resumen que describe los resultados de la evaluación. El padre o tutor también obtendrá una lista de clínicas dentales que pueden proporcionar servicios de tratamiento, si es necesario. Enfermeras escolares también recibirán una copia de los resultados de la evaluación.

P.Qué preguntas estarán en el cuestionario de salud?

R. El cuestionario de salud corto tendrá preguntas acerca de la visita al dentista, seguro dental y acceso a servicios de cuidado dental. Las respuestas a las preguntas se mantendrán estrictamente confidenciales.

P. ¿Quién verá los resultados?

R. Sólo los miembros del proyecto de *Salud Oral 11/12* tendrán acceso a la información. Resumen de los resultados contendrán en el reporte final. En ningún momento las escuelas o los niños de escuela serán identificados o descritos. El equipo del proyecto sigue todas las reglas para mantener la confidencialidad definidas por los Departamentos de Educación de Maryland, Salud e Higiene Mental y por la Universidad de Maryland, en Baltimore.

P. ¿Qué sucede si tengo preguntas adicionales?

R. Miembros del equipo del proyecto de *Salud Oral 11/12* estarán encantados de responder a sus preguntas y proveer información adicional. Por favor, no dude en ponerse en contacto con el Director del Proyecto, Srta. Susan Coller, al 410-706-3051.

Muchas gracias por su tiempo

Encuesta de salud oral de Maryland niños de la escuela 2011-2012

Preguntas Más Frecuentes

Administrado por el
Departamento de Promoción de Salud y Política
Universidad de Odontología de Maryland
Baltimore, Maryland

Patrocinado por la
Oficina de Salud Oral
Departamento de Salud e Higiene Mental de Maryland

Director de Proyecto
Sra. Susan Coller
Departamento de Promoción de Salud y Política
Oficina : (410) 706-3051
Fax : (410) 706-4031
Correo electrónico: scoller@umaryland.edu

Encuesta de salud oral de Maryland niños de la escuela 2011-2012

PREGUNTAS MÁS FRECUENTES

P. ¿Qué es este proyecto?

R. La encuesta de salud oral de Maryland niños de la escuela, 2011-2012 *(Salud Oral 11/12)* es una evaluación de la salud dental de los niños de escuelas públicas en jardín y 3rd grado. Se compone de dos partes: un chequeo dental y un cuestionario de salud.

P. ¿Cuál es el propósito de este proyecto?

R. Maryland debe medir la salud dental de los niños de las escuelas públicas cada cinco años para que los programas públicos y de financiación puedan ser determinados de forma adecuada. *Salud Oral 11/12* muestran las mayores necesidades en el Estado.

P. ¿Quién ejecutará la Salud Oral 11/12?

R. Un equipo de dentistas e higienistas dentales de la Universidad de Maryland Escuela de Odontología dirigirá S*alud Oral 11/12.*

P. ¿Todas las escuelas del distrito y escuelas participarán?

R. *Salud Oral 11/12* no tiene los recursos para examinar todos los niños de las escuelas en Maryland. El equipo del proyecto recogerá una muestra de 50 escuelas para que representen a todas las escuelas públicas de Maryland.

P. ¿Quién llevará a cabo las evaluaciones dentales?

R. Sólo los dentistas licenciados en Maryland llevarán a cabo las evaluaciones dentales. Cada dentista también contará con dos asistentes para ayudar con el papeleo.

P. Los beneficios de la salud de los niños se afectarán si deciden no participar?

R. La participación en *Salud Oral 11/12* es completamente voluntaria. Los beneficios de la salud dental de los niños de las escuelas que decidan no participar no se verán afectados de ninguna manera.

P. ¿Cómo se harán las evaluaciones dentales?

R. El dentista utilizará una silla portátil para llevar a cabo las evaluaciones dentales. Durante cada examen, el dentista contará los dientes, mirará las caries dentales y rellenos y verá si el tratamiento dental o sellantes dentales son necesarios.

El dentista utilizará un espejo dental nuevo, desechable y un par de guantes nuevos y desechables para cada niño. El dentista seguirá en todo momento las normas de salud y seguridad.

El examen dental tomará alrededor de 2-3 minutos. Ningún niño recibirá un examen dental a menos que su padre/tutor de su consentimiento por escrito. Toda la información del examen dental se mantendrá completamente confidencial. Sólo el padre/tutor y la enfermera de la escuela verán los resultados de la evaluación dental.

P. ¿Qué son los sellantes dentales?

R. Un sellador dental es una capa fina pintada en los dientes para protegerlos de las caries dentales. Los sellantes dentales son colocados por dentistas e higienistas dentales.

P. ¿Dónde se llevarán a cabo las evaluaciones dentales?

R. Los exámenes dentales se llevarán a cabo en áreas Comunes seleccionadas por el director o enfermera de la Escuelas (como la cafetería, sala de música o gimnasio).

Health Insurance Portability and Accountability Act (HIPAA)
AUTHORIZATION TO OBTAIN, USE AND DISCLOSE
PROTECTED HEALTH INFORMATION

Name of Participant: _____

Date of Birth: _____

NAME OF THIS PROJECT: **Oral Health Survey of Maryland School Children, 2011-2012**

UMB IRB APPROVAL NUMBER: **HP-000486**

INVESTIGATOR'S NAME: **DR. MARK D. MACEK**

INVESTIGATOR'S CONTACT INFORMATION: **DEPARTMENT OF HEALTH PROMOTION AND POLICY**
University of Maryland Dental School
650 West Baltimore Street; Room 2207
Baltimore, Maryland 21201
410-706-4218

This project will use health information that identifies your child. If you and your child agree to participate, this project will use only the health information listed below.

THE SPECIFIC HEALTH INFORMATION TO BE USED OR SHARED:

- Dental screening results (including number of teeth and number of cavities and fillings)

Federal laws require this investigator to protect the privacy of this health information. He will share it only with the people and groups described here.

PEOPLE AND ORGANIZATIONS WHO WILL USE OR SHARE THIS INFORMATION:

- Dr. Mark D. Macek and his research team
- School nurse at your child's school

THIS AUTHORIZATION WILL NOT EXPIRE. BUT YOU CAN REVOKE IT AT ANY TIME
To revoke this Authorization, send a letter to this investigator stating your decision. He will stop collecting health information about your child. The investigator might not allow your child to continue in the project. He can use or share the health information already gathered.

ADDITIONAL INFORMATION:

- You can refuse to sign this form. If you do not sign the form, you and your child cannot participate in this project. It will not cause any loss of benefits to which you and your child are otherwise entitled.
- This researcher will take reasonable steps to protect your/your child's health information.
- You and your child have the right to a copy of your child's health information collected during this project. A copy of the dental screening results will be sent home to you.

My signature indicates that I authorize the use and sharing of my child's protected health information for the purposes described above.

Signature: _____ Date: _____

Your name (printed) _____

Portabilidad del Seguro de Salud y Ley de Responsabilidad (HIPAA)
AUTORIZACION PARA OBTENER, UTILIZAR Y DIVULGAR
INFORMACION DE SALUD PROTEGIDA

Nombre del participante: _____

Fecha de nacimiento: _____

NOMBRE DE ESTE PROYECTO: ENCUESTA DE SALUD ORAL DE MARYLAND, NIÑOS DE LA ESCUELA, 2011-2012

UMB IRB NUMERO DE APROBACION: **HP-000486**

NOMBRE DEL INVESTIGADOR: **DR. MARK D. MACEK**

INFORMACION DEL CONTACTO: **DEPARTMENTO DE SALUD PROMOCION Y POLITICA**
Universidad de Maryland Escuela Dental
650 West Baltimore Street; Room 2207
Baltimore, Maryland 21201
410-706-4218

Este proyecto utilizará la información de salud que identifique a su niño. Si usted y su niño están de acuerdo en participar, este proyecto sólo utilizará la información de salud que se enumeran a continuación.

LA INFORMACION ESPECIFICA DE SALUD PARA SU USO O COMPARTIDA:

- Resultados de la evaluación dental (incluyendo el número de dientes y el número de caries y empastes)

Las leyes federales requieren que el investigador protega la privacidad de la informacion de salud. El lo compartirá sólo con las personas del grupo descritos aquí.

PERSONAS Y ORGANIZACIONES QUE SE USO O COMPARTIO ESTA INFORMACION:

- Dr. Mark D. Macek y su equipo de investigación
- Enfermera de la Escuela de su niño

ESTA AUTORIZACION NO EXPIRA. PERO SE PUEDE REVOCAR EN CUALQUIER MOMENTO
Para revocar esta autorización, envíe una carta al investigador indicando su decisión. El detendrá la recopilación de información de la salud acerca de su niño. El investigador no permitirá que su niño continúe en el proyecto. El investigador puede usar o compartir la información de salud que ya se reunieron.

ADICIONAL INFORMACION:

- Usted puede negarse a firmar este formulario. Si usted no firma el formulario, usted y su niño no pueden participar en este proyecto. Si no lo firma, no causa ninguna pérdida de prestaciones a las que usted y su niño tienen derecho.
- El investigador tomará las medidas razonables para proteger la informacion de la salud de su niño.
- Usted y su niño tienen el derecho a una copia de la información médica de su niño recogida durante este proyecto. Una copia de los resultados del examen dental será enviado a usted a su domicilio.

Mi firma indica que autorizo el uso e intercambio de información de la salud de mi niño protegida para los fines antes descritos.

Firma: _____ Fecha: _____

Su Nombre (Letra Imprenta): _____

Oral Health Survey of Maryland School Children, 2011-2012

Sponsored by the Maryland Department of Health and Mental Hygiene
Project Director: Ms. Susan Coller; 410-706-3051

ID Number (*please leave blank*) __ __ - __ __ __ __

HEALTH QUESTIONNAIRE

This questionnaire will ask you some questions about your child's dental health. The questionnaire should take about 5 minutes to complete. If there is a question that you do not want to answer, you can skip that question and go on. Remember that all of your answers will be kept completely confidential.

1. When was your child born?

__ __ (*Month*) __ __ (*Day*) __ __ __ __ (*Year*)

2. What is your child's gender?

__ Male __ Female

3. When was the last time your child went to the dentist? When you answer, please include all types of dentists, such as orthodontists, oral surgeons, and dental hygienists.
   - ☐ a. Less than 6 months ago
   - ☐ b. 6 months to less than 1 year ago
   - ☐ c. 1 year to less than 2 years ago
   - ☐ d. 2 years ago or more
   - ☐ e. My child has never gone to a dentist (SKIP TO QUESTION #6)
   - ☐ f. I don't know

4. What was the **MAIN REASON** that your child went to the dentist the **LAST TIME**?
   - ☐ a. Went in on own for a check-up, examination, or cleaning
   - ☐ b. Was called in by the dentist for a check-up, examination, or cleaning
   - ☐ c. Something was wrong, bothering, or hurting
   - ☐ d. Went in for treatment of a condition that the dentist discovered at earlier check-up or examination
   - ☐ e. I don't know

5. Is there **ONE** dentist or dental clinic that your child **USUALLY** goes to when he/she needs dental care?
   - ☐ a. Yes
   - ☐ b. No
   - ☐ c. I don't know

6. In the last **12 MONTHS**, did your child have a toothache **BECAUSE OF A CAVITY**?
   - ☐ a. Yes
   - ☐ b. No (SKIP TO QUESTION #8)
   - ☐ c. I don't know (SKIP TO QUESTION #8)

PLEASE GO TO THE BACK OF THIS PAGE

7. If your child had a toothache in the last 12 months, how did you know?
- ☐ a. My child cried
- ☐ b. My child complained about the toothache but did not cry
- ☐ c. I saw a cavity and asked my child about it
- ☐ d. I don't know

8. As far as you know, does your child have any cavities that need to be treated **NOW**?
- ☐ a. Yes
- ☐ b. No
- ☐ c. I don't know

9. Does your child have dental insurance?
- ☐ a. Yes, my child has Medicaid or Medical Assistance (also called *Maryland Healthy Smiles*)
- ☐ b. Yes, my child has dental insurance **OTHER THAN** Medicaid or Medical Assistance (also called *Maryland Healthy Smiles*)
- ☐ c. No, I pay for **ALL** of my child's dental care myself
- ☐ d. I don't know

10. In the last **12 MONTHS**, did you put off any dental care for your child because you couldn't afford it?
- ☐ a. Yes
- ☐ b. No
- ☐ c. I don't know

*Please answer **BOTH** questions #11 and #12.*

11. Is your child Hispanic/Latino?
- ☐ a. Yes
- ☐ b. No
- ☐ c. I don't know

12. What is your child's race?
- ☐ a. Asian or Pacific Islander
- ☐ b. Black or African American
- ☐ c. Native American or American Indian or Alaska Native
- ☐ d. White or Caucasian
- ☐ e. Other (*please explain*) _____
- ☐ f. I don't know

13. Does your child **QUALIFY** for free or reduced-cost lunch at school?
- ☐ a. Yes
- ☐ b. No
- ☐ c. I don't know

14. What is **YOUR** (*PARENT/GUARDIAN*) level of education?
- ☐ a. Less than 12th grade
- ☐ b. High school graduate
- ☐ c. Some college
- ☐ d. College graduate

Thank you for completing this health questionnaire. Please put the questionnaire and the signed copy of the consent form in the envelope and return it to your child's teacher as soon as possible.

If you have any questions about the project, please contact the Project Director, **Ms. Susan Coller**, at **410-706-3051**.

Encuesta de Salud Oral de Maryland
Niños de la Escuela, 2011-2012

Patrocinado por el Departmanento de Salud e Higiene Mental de Maryland
Director de Proyecto: Srta. Susan Coller; 410-706-3051

Número de Identificación (por favor dejar en blanco) ___-__ __ __ __

CUESTIONARIO DE SALUD

Este cuestionario le hará algunas preguntas sobre la salud dental de su niño. El cuestionario le tomará alrededor de 5 minutos para completarlo. Si hay una pregunta que no desea contestar, puede omitir esa pregunta y continuar con la siguiente. Recuerde que todas sus respuestas se mantendrán en estricta confidencialidad.

1. Cuando nació su niño?

__ __ (Mes) __ __ (*Día*) __ __ __ __ (Año)

2. Cuál es el sexo de su niño?

__ Masculino __ Femenino

3. Cuándo fue la última vez que su niño fue al dentista? Cuando conteste, por favor incluya todos los tipos de dentistas, ortodoncistas, cirujanos orales, e higienistas dentales.

- ☐ a. Menos de 6 meses
- ☐ b. 6 meses y menos de 1 año
- ☐ c. 1 año y menos de 2 años
- ☐ d. 2 años o más
- ☐ e. Mi niño nunca ha ido a un dentista (PASE A LA PREGUNTA # 6)
- ☐ f. No se

4. Cuál fue la **RAZON PRINCIPAL** que su niño fue al dentista la **ULTIMA VEZ**?
   - ☐ a. Examen rutinario o limpieza
   - ☐ b. Fue citado por el dentista para un examen, o limpieza
   - ☐ c. Algo estaba mal, tenía molestia o dolor
   - ☐ d. Fue por tratamiento de algo que el dentista encontró en el anterior examen
   - ☐ e. No se

5. Hay **UN** dentista o **UNA** clínica dental que su niño **SUELE** ir cuando el/ella necesitan atención dental?
   - ☐ a. Si
   - ☐ b. No
   - ☐ c. No se

6. En los últimos **12 MESES,** ¿su niño ha tenido dolor de muelas **POR ALGUNA CARIE**?
   - ☐ a. Si
   - ☐ b. No (PASE A LA PREGUNTA #8)
   - ☐ c. No se (PASE A LA PREGUNTA #8)

POR FAVOR VAYA A LA PARTE POSTERIOR DE ESTA PAGINA

7. Si su niño tuvo un dolor de muelas en los últimos 12 meses, ¿Cómo usted sabía?
   - □ a. Mi niño lloraba
   - □ b. Mi niño se quejaba de dolor de muelas, pero no lloraba
   - □ c. Vi una carie y pregunte a mi niño
   - □ d. No se

8. Por lo que usted sabe, ¿su niño tiene caries que necesitan ser tratadas **AHORA?**
   - □ b. No
   - □ c. No se

9. Su niño tiene seguro dental?
   - □ a. Si, mi niño tiene Medicaid o Asistencia Médica (también llamado Sonrisas Saludables de Maryland)
   - □ b. Si, mi niño tiene seguro dental **QUE NO ES** Medicaid o Asistencia Médica (también llamado Sonrisas Saludables de Maryland)
   - □ c. No, Yo tengo que pagar por **TODO** el cuidado dental de mi niño
   - □ d. No se

10. En los últimos **12 MESES,** usted pospuso cualquier tipo de atención dental para su niño porque no podía pagar?

    - □ a. Si
    - □ b. No
    - □ c. No se

Por favor responda la pregunta #11 y #12

11. Su niño es Hispano/Latino?
    - □ a. Si
    - □ b. No
    - □ c. No se

12. Cuál es la raza de su niño?
    - □ a. Asiáticos o Islas del Pacífico
    - □ b. Negro o Afro-Americano
    - □ c. Nativo Americano or Indio Americano o Nativo de Alaska
    - □ d. Blanco o Caucásico
    - □ e. Otros (por favor explique) _____
    - □ f. No se

13. Su niño **CALIFICA** para el almuerzo de costo reducido o gratis en la escuela?
    - □ a. Si
    - □ b. No
    - □ c. No se

14. Cuál es **SU** nivel de educación del (PADRE/TUTOR)
    - □ a. Menos del 12th grado
    - □ b. Graduado de la escuela
    - □ c. Algo de Universidad
    - □ d. Graduado de la Universidad

Gracias por completar el cuestionario de salud. **Por favor devolver el cuestionario y la copia del consentimiento firmada en el sobre al profesor de su niño tan pronto como sea posible.**

Si usted tiene alguna pregunta sobre el proyecto, póngase en contacto con el Director del Proyecto, **Sra. Susan Coller, al 410-706-3051**

APPENDIX I: List of selected equipment and supplies

INVENTORY LIST

2X2 Gauze

Bibs

Blue plastic folders

Chair - dental

Cheat sheets

Crayons

Extension cords

Face masks – earloop

Face masks – molded

Garbage bags

Gloves – all sizes

Hand sanitizer

Headrest covers

Headlamp

Kleenex

Lab coats

Laptop/mouse/power cord

Listerine

Masking tape

Mirrors

Nurses' letters

Paper towels

Pencils

Pens

Perio probes

Plastic bags

Power strip

Puzzles – for K and third grades

Report cards – English

Report cards - Spanish

Resource guides by county

Rubber bands

Safety glasses

Sealant stickers - English

Sealant stickers – Spanish

Spray cleaner

Staple remover

Tongue blades

Toothbrushes

Wipes

APPENDIX J: Report of findings (“report card”)

Oral Health Survey of Maryland School Children, 2011-2012

Sponsored by the Maryland Department of Health and Mental Hygiene
Project Director: Ms. Susan Coller; 410-706-3051

RESULTS OF DENTAL SCREENING

Dear Parent/Guardian:

Thank you for letting your child take part in the *Oral Health Survey of Maryland School Children, 2011-2012*. Your help was greatly appreciated. Your participation will help Maryland plan dental programs and services for all children in the future.

A licensed dentist gave your child, _____, a dental screening at his/her school on ____ / ____ / ____. The dentist looked at your child's teeth with a dental mirror and a light, but **did not** take x-rays. The dentist found:

____ **A dental infection or abscess.** Please take your child to a dentist immediately.

____ **Tooth decay.** Please take your child to a dentist in the next 4-6 weeks.

____ **Need for a dental cleaning.** Please take your child to a dentist in the next 4-6 weeks.

____ **No obvious dental problems.** Please take your child to a dentist for regular check-ups every 6 months.

Remember that this dental screening examination was not a replacement for a full examination, conducted in a dental office. Since the dentist did not take x-rays during the dental screening, our results may not agree with the results of a full dental examination.

If you need help finding a dentist, we provided a list of dental clinics in your area. These dental clinics see children and accept Medicaid dental insurance (*Maryland Healthy Smiles Program – DentaQuest*). Please let us know if you have any questions.

Sincerely,

Susan Coller

Project Director
(410) 706-3051

Encuesta de Salud Oral de Maryland
Niños de la Escuela, 2011-2012

Patrocinado por el Departamento de Salud e Higiene Mental de Maryland
Director de Proyecto: Sra. Susan Coller; 410-706-3051

RESULTADOS DEL EXAMEN DENTAL

Estimado Padre/Tutor:

Gracias por permitir que su niño participe en la Encuesta de Salud Oral de las Escuelas de Maryland, 2011-2012. Su ayuda fue muy apreciada. Su participación ayudará a los programas dentales y servicios de Maryland para todos los niños en el futuro.

Un dentista licenciado dio a su niño, _____, un examen dental en su escuela el ____ / ____ / ____. El dentista miró los dientes de su niño con un espejo dental y una luz, pero no le tomarón radiografías. El dentista encontró:

____ **Una infección dental o absceso.** Por favor lleve a su niño a un dentista inmediatamente.

____ **Caries dental.** Por favor lleve a su niño a un dentista en las próximas 4-6 semanas.

____ **Necesita de una limpieza dental.** Por favor lleve a su niño a un dentista en las próximas 4-6 semanas.

____ **No hay problemas dentales.** Por favor lleve a su niño a un dentista para chequeos regulares cada 6 meses..

Recuerde que este examen dental no reemplaza un examen completo, llevado a cabo en un consultorio dental. Dado que el dentista no tomó radiografías durante el examen dental, nuestros resultados pueden no estar de acuerdo con los resultados de un examen completo dental.

Si necesita ayuda para encontrar un dentista, nosotros le proporcionaremos una lista de clínicas dentales en su área. Estas clínicas dentales pueden ver a los niños y aceptar seguro dental de Medicaid (*Programa Sonrisas Saludables de Maryland – DentaQuest*). Por favor háganos saber si usted tiene alguna pregunta.

Atentamente,

Susan Coller

Director de Proyecto
(410) 706-3051

APPENDIX K: Puzzle activities for the children

DENTAL WORD SEARCH

C	J	D	U	R	S	D	T	P	C	Z	R	I	R	D
E	A	G	Y	P	O	C	L	Y	E	A	O	O	M	A
M	D	A	C	P	T	A	N	Y	G	M	V	P	O	H
T	T	E	R	G	Q	Y	M	F	G	U	T	I	Q	T
Q	O	Y	N	U	L	O	L	U	C	O	P	B	T	A
S	U	O	E	T	L	Y	N	E	S	J	R	P	B	Y
W	B	A	T	A	I	D	E	N	A	M	E	L	O	J
F	K	O	R	H	G	S	B	Q	S	I	K	W	I	Q
C	F	S	N	C	P	F	T	Z	I	I	M	J	S	W
G	Z	B	J	K	X	A	P	F	O	S	T	J	Q	D
Q	K	R	R	C	G	X	S	V	P	T	A	M	F	Z
N	E	B	L	B	I	U	N	T	N	U	G	L	L	X
D	Z	L	N	P	U	N	M	Z	E	S	O	H	U	G
T	O	O	T	H	B	R	U	S	H	S	U	N	S	S
C	W	D	G	F	Q	Z	U	R	S	E	V	Z	X	H

Root Gums	Enamel Cavity Toothpaste	Molars Floss Toothbrush	Plaque Dentist

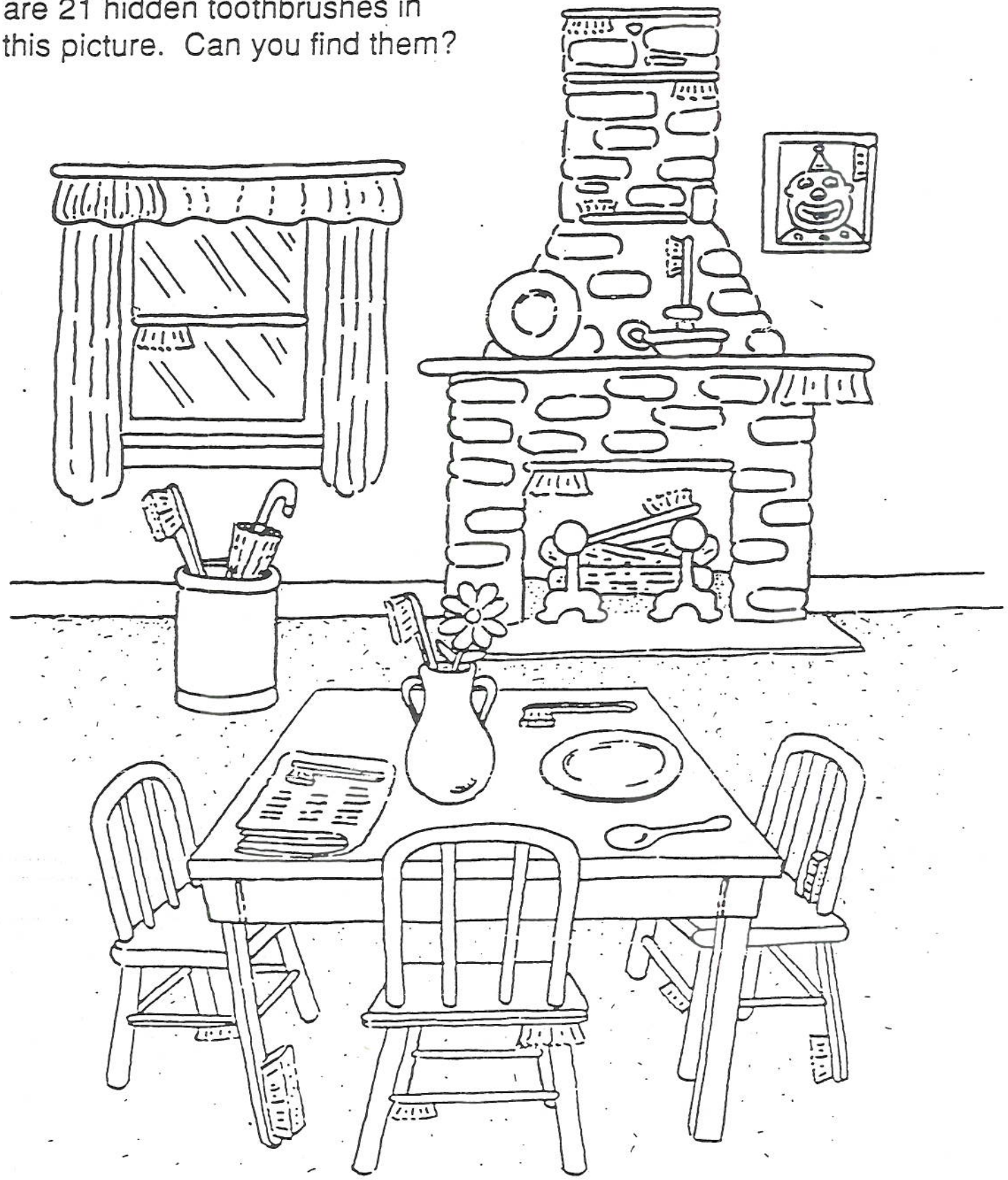
DENTAL WORD SCRAMBLE

hwec _____ ipsl _____ btei _____

lesim _____ hmuot _____ cratros _____

ehtet _____ lepap _____ hypap _____

It is important to brush every tooth to remove plaque. There are 21 hidden toothbrushes in this picture. Can you find them?



APPENDIX L: Summary of county-specific dental resources

INFORMATION FOR PARENTS AND GUARDIANS

The purpose of this guide is to inform and assist caregivers, those with children, and those with special health needs in finding affordable and appropriate dental care services in their region. Only those dental public health programs or facilities which provide discounted, low-cost, or special dental services (*e.g.,* homebound/bed bound patients) are listed. There is no intent to advertise or promote any particular dental practitioner, program, or service. This guide was developed in cooperation with the **Maryland Department of Health and Mental Hygiene, Office of Oral Health**.

Maryland is fortunate to have dental public health programs in almost all counties and/or standing arrangements with adjacent counties. In addition, many programs will treat patients from outside their respective city or county. It is important to review the eligibility requirements and services provided for each program before scheduling an appointment. If a program lists a sliding fee-scale payment option, ask about what personal information will be needed to receive the reduced fees.

The **Maryland Healthy Smiles Dental Program** is available to pregnant women and all Maryland Medicaid enrollees under age 21. Adults over age 21 with *Rare and Expensive Medical Coverage* (REM "Red & White Card") are also eligible to participate in the program.

As of July 1, 2009, ***DentaQuest*** (formerly *Doral Dental*) coordinates all dental-related customer service for Maryland Medicaid enrollees participating in the Maryland Healthy Smiles Dental Program. *DentaQuest* customer service can assist members with locating a dental provider, explaining dental benefits, and verifying eligibility.

DentaQuest contact information
Dental Providers: 1-888-696-9598
Maryland Healthy Smiles Dental Program Members: 1-888-696-9596
DentaQuest website: www.dentaquestgov.com

See the Back of This Page for

Resources In and Near Baltimore City

University of Maryland School of Dentistry
650 W. Baltimore Street
Baltimore, MD 21201-1510
Website: www.dental.umaryland.edu/patientinfo

Contact information

- 410-706-7101 - general information and appointments
- 410-706-4213 - children and adolescents
- 410-706-7039 - special medical conditions and disabled patients
- 410-706-8467 - HIV+ adults

Services

- Comprehensive dental services

Eligibility

- Adults and children
- Medicaid and fee-for-service accepted
- Walk-in emergency patients accepted

University of Maryland Medical System
Department of Oral and Maxillofacial Surgery
University Hospital
22 S. Greene Street
Baltimore, MD 21201
Contact: 410-328-5566
Website: www.umms.com

Services

- Oral and maxillofacial surgery and trauma
- Oral cancer treatment
- Transplant screening
- Cardiac screening

Eligibility

- Adults
- Medically compromised

Park West Health Center
3319 W. Belvedere Avenue
Baltimore, MD 21215
Contact: 410-542-7800

Eligibility

- Adults
- Children
- Sliding fee scale with proof of income

Services

- Comprehensive dental services

Baltimore City Health Department
Oral Health Services Program

Druid Dental Clinic
1515 W. North Avenue
Baltimore, MD 21215
Contact: 410-396-0840

Eastern Dental Clinic
620 North Caroline Street
Baltimore, MD 21205
Contacto: 443-984-3548

Eligibility

- Baltimore City resident
- Children
- Adults 21-59 urgent care only

Services

Preventive, emergency, restorative

Chase Brexton Health Services, Inc.
Mt. Vernon Center
10 W. Eager Street
Baltimore, MD 21201
Contact: 410-496-6441
Website: www.chasebrexton.org

Services

- Comprehensive dental services

Eligibility

- Adults and children
- Medicaid accepted
  Maryland resident

People's Community Health Center
Contact: 410-467-6040

Main Office
3011 Greenmount Avenue
Baltimore, MD 21218

Brooklyn Park Center
5517 Ritchie Highway
Baltimore, MD 21225

Services

- Comprehensive dental services

INFORMACIÓN PARA LOS PADRES Y TUTORES

El propósito de esta guía es informar y ayudar a los cuidadores, aquellos con niños y personas con necesdidades especiales de salud e encontrar servicios de cuidado dental adecuada y asequible en su región. Se muestran sólo los programas de salud pública dental o instalaciones que proporcionan servicios dentales con descuento, bajo costo o especiales (por ejemplo, confinados/cama dependiente de los pacientes). No hay ninguna intención de anunciar o promover cualquier odontólogo particular, programa o servicio. Esta guía fue desarrollada en cooperación con el **Departamento de salud de Maryland y la Hygiene Mental, la Oficina de salud oral.**

Maryland es afortunado de tener programas de salud pública dental en casi todos los condados y arreglos permanentes con condados adyacentes. Además, muchos programas tratarán a los pacientes desde fuera de sus respectivos cuidad o condado. Es importante revisar los requisitos de elegibilidad y servicios prestados antes de programar una cita para cada programa. Si un programa muestra una opción de pago de honorarios escala deslizante, pregunte acerca de qué información personal será necesaria para recibir las tarifas reducidas.

El programa del **Maryland Healthy Smiles** está disponible para mujeres embarazadas y a todos los inscriptos de Maryland Medicaid menores de 21. Adultos de más edad de 21 años con *raro y caro cobertura médica* ("rojo y blanco tarjeta") también son elegibles para participar en el programa.

01 De julio de 2009, de ***DentaQuest*** (anteriormente *Doral Dental*) coordina todo el servicio del cliente relacionadas con dental para inscriptos de Maryland Medicaid participan en el programa del Maryland Health Smiles. Servicio al cliente de *DentaQuest* puede ayudar a los miembros con localizar un proveeder dental, explicando los beneficios dentales y verificación de elegibilidad.

Información de contacto de DentaQuest
Los preveedores dentales: 1-888-696-9598
Miembros del programa Maryland Healthy Smiles: 1-888-696-9596
DentaQuest sitio web: www.dentaquestgov.com

Consulte de dorso de esta página para

Recursos en y cerca de Baltimore

University of Maryland School of Dentistry
650 W. Baltimore Street
Baltimore, MD 21201-1510
Sitio web: www.dental.umaryland.edu/patientinfo

Información de contacto

- 410-706-7101 – citas y información general
- 410-706-4213 – niños y adolescentes
- 410-706-7039 – condiciones especiales de médicas y pacientes discapacitados
- 410-706-8467 - VIH+ adultos

Servicios

- Servicios dentales integrales

Elegibilidad

- Adultos y niños
- Acepta Medicaid y tarifa por servicio
- Pacientes de emergencias cámara aceptados

University of Maryland Medical System
Department of Oral and Maxillofacial Surgery
University Hospital
22 S. Greene Street
Baltimore, MD 21201
Contacto: 410-328-5566
Sitio web: www.umms.com

Servicio

- Trauma y cirugía oral y maxilofacial
- Tratamiento contra el cáncer oral
- Trasplante de proyección
- Proyección cardíaca

Elegibilidad

- Adultos
- Médicamente comprometido

Park West Health Center
3319 W. Belvedere Avenue
Baltimore, MD 21215
Contacto: 410-542-7800

Elegibilidad

- Adultos
- Niños
- Escala de honorarios, comprobante de ingresos necesarios de deslizamiento

Servicios

- Servicios dentales integrales

Baltimore City Health Department
Programa de servicios de salud oral

Druid Dental Clinic
1515 W. North Avenue
Baltimore, MD 21215
Contacto: 410-396-0840

Eastern Dental Clinic
620 North Caroline Street
Baltimore, MD 21205
Contacto: 443-984-3548

Servicios

- Restaurador de emergencia, preventivas

Elegibilidad

- Residente de Baltimore
- Niños
- Adultos 21-59 urgente atención sólo

Chase Brexton Health Services, Inc.
Mt. Vernon Center
10 W. Eager Street
Baltimore, MD 21201
Contacto: 410-496-6441
Sitio web: www.chasebrexton.org

Servicios

- Servicios dentales integrales

Elegibilidad

- Adultos y niños
- Acepta Medicaid
- Residente de Maryland

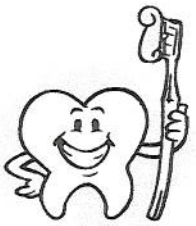
People's Community Health Center
Contacto: 410-467-6040
Oficina principal
3011 Greenmount Avenue
Baltimore, MD 21218

Brooklyn Park Center
5517 Ritchie Highway
Baltimore, MD 21225

Services

- Servicios dentales integrales

APPENDIX M: School nurse letter – summary of day's events



ORAL HEALTH SURVEY OF MARYLAND SCHOOL CHILDREN, 2011-2012

Sponsored by the Maryland Department of Health and Mental Hygiene
Project Director: Ms. Susan Coller: 410-706-3051

Greetings,

Thank you for giving us the opportunity to screen children from your school today. This important project will help your students' parents and guardians know about their children's dental needs. It will also help Maryland understand which children have the highest dental needs and which types of dental programs should be implemented throughout the state.

Today, we screened a total of _____ children. Of these, the following needs were identified:

_____ had emergency treatment needs and should be seen by a dentist immediately

_____ had tooth decay and should be seen by a dentist within the next 4-6 weeks

_____ had significant build up of plaque and should receive a tooth cleaning

_____ had no treatment needs and should continue to see their dentist regularly

In addition, we recommended that _____ children receive dental sealants during their next dental appointment. Note, the "S" symbol on the lower-right corner of the "Summary of Findings" form designates that dental sealants are recommended.

We know that not all children have a dentist at your school, especially some of your low-income students. As such, we provided a resource form to all children listing dental centers in your county/area that accept Medicaid and/or use a sliding-fee scale. We are also providing a copy of the most current *Maryland Oral Health Resource Guide* for your records.

On behalf of our project team, thank you again for your hospitality and assistance. If you have any questions, please do not hesitate to contact me.

Best wishes,

Susan Coller

Project Coordinator (scoller@umaryland.edu; 410-706-3051)

APPENDIX N: “Thank you” note to school administrators

BALTIMORE COLLEGE OF
DENTAL SURGERY, DENTAL SCHOOL

DEPARTMENT OF
HEALTH PROMOTION AND POLICY

UNIVERSITY OF MARYLAND

May 3, 2012

Ms. Deborah Sharpe, Principal
Yorkwood Elementary School
5931 Yorkwood Avenue
Baltimore, Maryland 21239

Dear Ms. Sharpe,

I would like to thank you for allowing our dental team to come to your school to provide dental screening to the children in the kindergarten and third grade classes who returned their signed permission forms.

We were very impressed by the atmosphere of learning and respect at Yorkwood Elementary School, the well-behaved children, their interest in our “portable dental office” and the friendliness of your staff.

Please extend our appreciation to Ms. Robinson. She was very helpful and supportive of the project. Also, she brought the children to and from the screening area, and this enabled us to screen the children in a very efficient way.

Again, we want to thank you for allowing us to come to your school. The participation of your school helped us to further the goals of the study.
We certainly enjoyed our visit!

Sincerely,

Susan Coller

Susan Coller
Project Coordinator

From the desk of SUSAN COLLER
650 West Baltimore Street • Room 2206 • Baltimore, Maryland 21201-1586 • 410 706 3051 • 410 706 4031 *fax* • scoller@umaryland.edu

Appendix O: List of Key Acronyms

List of Key Acronyms

ASTDD - Association of State and Territorial Dental Directors

CDC - Centers for Disease Control and Prevention

DFT - decayed and filled teeth

DMFT - sum of the decayed, missing, and filled teeth

DT - decayed teeth

FT - filled teeth

GED – general educational development (exam)

HIPAA - Health Insurance Portability and Accountability Act

IRB - Institutional Review Board

MCHP – Maryland Children's Health Program

MEPS - Medical Expenditure Panel Survey

MSDE - Maryland State Department of Education

MT – missing teeth

PPS - probability-proportional-to-size

PTA – parent-teacher association

SES - socioeconomic status