# Oral Health Perceptions and Behaviors Among Latina Mothers of Young Children in Maryland 



> Assessment of Media Campaign Impact

MARYLAND DENTAL ACTION COALITION

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# Oral Health Perceptions and Behaviors of Latina Mothers of Young Children in Maryland 

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## Executive Summary

## Description of Sample and Adult Understanding of Oral disease prevention

Two types of data were collected from Latina mothers of young children who live in Maryland. Results of analyses of the first set of data revealed that the respondents were mostly Latina mothers from El Salvador who have been in the United States for less than 10 years. These respondents presented numerous strengths related to oral health practices:

- Healthy eating and dental health are concerns for them;
- Nearly all respondents report they brush their own teeth at least once per day with toothpaste;
- The majority of women reported taking their oldest child to the dentist between the ages of 1 and 2 .
- Most either brush their children's teeth or have taught their children to brush their teeth on their own.

However, results also revealed a need for educating Latina mothers. Almost half of Latina mothers are not getting their children to the dentist at the recommended time, before their first birthday. Almost three quarters of Latina mothers were unfamiliar with fluoride varnish, and even fewer had children who had been treated with fluoride varnish. The vast majority of respondents did not use tap water, reducing their children's exposure to fluoride.

## Effects of Oral Health Campaign on Knowledge, Understanding and Behaviors

After the "Healthy Teeth, Healthy Kids" campaign was implemented, a second set of data was collected from a new group of Latina mothers to assess the campaign's impact. Results indicated that the campaign was highly successful. Almost all mothers (90.6\%) had heard at least one of the campaign's messages and could recall the message without being aided. Most mothers had heard of each of the four campaign messages. Further, after the campaign, significantly more mothers believed that children should go to the dentist before their first birthday. Additionally, after the campaign, significantly more mothers had heard of fluoride and understood its purpose, twice as many mothers had heard of fluoride varnish and many more had their children receive it, and significantly more drank fluoridated tap water. Based on these results and their statistical significance, it is evident that the campaign effectively reached the target population and had a substantial positive effect on Latina mother's attitudes and behaviors regarding oral health. Latino families in the state of Maryland benefitted significantly from this campaign.

# Oral Health Perceptions and Behaviors among Latina Mothers of Young Children in Maryland 

## Assessment of Media Campaign Impact

## Introduction

Dental Caries (tooth decay) is the most common chronic disease among US children. It impacts two out of every five children by kindergarten. Fifty two million school hours are lost annually to oral disease. Low income and minority children, primarily Hispanic and African American, are disproportionately affected by poor oral health and have a greater number of untreated cavities than do middle class white children. In Maryland, Hispanic children are also less likely to visit the dentist and more likely to lack dental insurance than are white children, according to the Maryland Oral Health Survey of School Children, 2011-2012.

Believing that poor oral health literacy is at the root of this problem, the Maryland Dental Action Coalition (MDAC) reached out to Maryland's Spanish speaking population with its Spanish language oral health literacy social marketing campaign, Healthy Teeth, Healthy Kids (Dientes Sanos, Niños Sanos). The campaign targeted Hispanic mothers between 18 and 34 years of age who reside in Anne Arundel County, Baltimore City or County, Montgomery County, or Prince George's County in Maryland who had at least one child under 6 years of age. This comprehensive social marketing initiative provided Hispanic mothers of at-risk infants and children with information designed to reduce oral disease by increasing healthy behaviors and access to critically needed oral health care. MDAC conducted the Spanish language Healthy Teeth, Healthy Kids social marketing campaign, consisting of radio, transit, and brochure public service messaging, to create awareness of the importance of proper oral health, help establish preventative oral health habits, and inform the target audience of how to access oral health care. The campaign ran from September 15 to November 23, 2014.

Before launching the Spanish language Healthy Teeth, Healthy Kids Campaign, MDAC conducted a precampaign survey to provide statistically-valid baseline data on awareness and self-reported oral health behaviors. A post-campaign survey was also conducted, to allow MDAC to measure any changes generated as a result of hearing, seeing or reading campaign messages against these two metrics (awareness and selfreported behavior). The pre- and post-campaign surveys utilized the same survey questions. The data obtained from this assessment will be used to allow MDAC to better evaluate the campaign and potentially revise the messages so that the campaign can provide a more valuable and informed service to the public.

Both the pre- and post-campaign surveys helped MDAC to determine the respondents' awareness and practice of proper oral health habits both for their children and themselves. The surveys asked respondents if they practice oral hygiene behaviors, along with follow-up questions regarding specific techniques used. The survey then assessed respondents' understanding and application of the best practices in caring for the oral health of their children. Finally, both surveys asked respondents if they had encountered specific campaign messages and where they may have encountered them. This report compares data gathered during the pre- and post-campaign surveys in order to determine if the campaign was effective in communicating oral health messages to the target audience.

## Survey Methodology

Both the pre- and post-campaign surveys were conducted through intercept interviews, i.e., intercepting and engaging persons who appear to meet participant criteria in public locations and conducting the survey in shopping malls, grocery stores, laundromats, etc. The survey lasted 10 to 15 minutes per individual surveyed.

The survey instrument was pretested in the field with nine pretest respondents by the project director and the field director. They followed the protocols established in the survey instrument to approach and engage potential respondents and administered the pre-campaign survey. During each pretest, respondents were asked if they understood the question or needed any clarification of the question, and if any question made them uncomfortable. All nine pretests were similar in length and had positive outcomes. This led the project director and the senior interviewer to conclude that the survey instrument did not require major changes, as it was culturally appropriate for the target population and none of the questions appeared to require any further explanation for respondents. The major complaint of pretest respondents was the length of the survey, but all of them were able to complete the survey within the time allotted at the outset.

Eight interviewers administered the pre-campaign survey and four of the initial eight interviewers administered the post-campaign survey. All the interviewers were native Spanish speakers originally from El Salvador. Five of the interviewers, including the research project director, were experienced community health interviewers with significant field research experience. Two of the interviewers were new to community health surveys.

The interviewers were initially provided a brief orientation about the Maryland Dental Action Coalition, the purpose of the pre- and post-campaign surveys, the target population, the nature of the planned educational campaign, and the procedures to be followed in conducting the pre- and post-campaign surveys. To familiarize them with the survey contents, they were asked to read the survey twice and then administer the survey to two of their fellow interviewers under the supervision of the project director and the field director. Tips for approaching potential respondents, making them feel at ease, and conducting the survey were discussed during these interviewer practice sessions. At the outset of the pre-campaign survey, the project director and field director were also able to supervise the interviewers closely and tailor additional suggestions for conducting the surveys to each interviewer's needs.

A total of 424 mothers were surveyed during the pre-campaign survey and 418 mothers during the postcampaign survey. Both surveys were conducted in Baltimore City and Maryland's Anne Arundel, Baltimore, Montgomery, and Prince George's Counties. The pre-campaign survey was conducted from August 18 through August 29, 2014. The post-campaign survey was conducted from November 23, 2014 through December 28, 2014.

To conduct the pre- and post-campaign surveys, interviewers followed the instructions presented in the Survey Form and Instructions (attached). They first approached women who appeared to meet the study criteria and engaged them in a conversation to assess their overall eligibility and willingness to participate. If they seemed to qualify and agreed to participate, the interviewers asked them several screening questions to confirm their eligibility. If they clearly qualified, the interviewers read the study's informed consent to them, provided them with a copy of the informed consent language, obtained their verbal consent to participate, and administered the survey. At the end of the survey, the interviewers provided each
respondent with a $\$ 5$ gift card as compensation for their participation in the survey and asked each respondent to place her initials on a log that contained the gift card serial number to acknowledge receipt.

Online survey software (www.surveymonkey.com) on computer tablets was used to conduct each survey and enter the data. The data collected was then exported to statistical software (IBM SPSS Statistics 22) for analysis.

## Survey Risk

We believe that there was minimal risk and significant potential benefit from pre- and post-campaign survey participation. Some individuals may have felt uncomfortable when asked to speak openly about their oral health experiences and practices. In order to put respondents at ease, they were given the option to opt out of any questions that made them feel uncomfortable. The data gathered from this survey will be used for internal purposes. The individuals were exposed only to evidence-based oral health information of a noncontroversial nature that can only benefit them on a personal level. On a public health scale, the benefits of obtaining qualitative information from these groups allows MDAC to more appropriately focus the message of its Spanish language Healthy Teeth, Healthy Kids campaign, reach its intended audience and potentially change the behavior of at-risk individuals, thereby increasing healthy behaviors and access to critically needed oral health care. The pre- and post-campaign surveys will allow MDAC to determine whether the campaign has reached its target audience and communicated its message.

## Results

## Description of Sample and Adult Oral Hygiene Practices

## Sample Size

In the pre-campaign survey, a total of 424 Maryland residents completed the survey, including one who reported that she did not know which Maryland county she lived in. A total of 423 respondents knew the county that they lived in, and a little more than 100 surveys were collected from residents of each county. Baltimore surveys include nine respondents who lived in Baltimore County and the remaining living in the city. The majority of the surveys were complete, with only $2-4 \%$ of responses missing for each question.

In the post-campaign survey, a total of 418 Maryland residents completed the survey, including two who did not know which Maryland County they lived in. At least 100 respondents from each locality completed the survey. Of the Baltimore surveys, 52 were conducted in the city and 48 in the county. The majority of the surveys were complete, with only $2-4 \%$ of responses missing for most questions.
Table 1: Distribution of Respondents by County per Survey

|  | Anne <br> Arundel | Baltimore | Montgomery | Prince <br> George's | Unknown <br> County | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre- <br> Campaign | 102 | 112 | 104 | 105 | 1 | 424 |
| Post- <br> Campaign | 104 | 100 | 108 | 104 | 2 | 418 |

## Demographic Characteristics of Sample

Most mothers were younger than 35 , had at least two children, did not have a high school diploma, and had lived in the United States for less than 10 years.

## Age

Table 2: Distribution of Respondents by Age Range per Survey

|  | Pre-Campaign |  | Post-Campaign |  |  |
| :---: | :---: | :---: | :---: | :---: | :--- |
| Age Range | Percent | $\boldsymbol{n}$ | Percent | $\boldsymbol{n}$ |  |
| $18-25$ | $14.3 \%$ | 59 | $12.2 \%$ | 49 |  |
| $26-34$ | $51.0 \%$ | 211 | $49.0 \%$ | 197 |  |
| $35-49$ | $32.9 \%$ | 136 | $36.6 \%$ | 147 |  |
| $50-64$ | $1.4 \%$ | 6 | $2.2 \%$ | 9 |  |
| $65+$ | $.2 \%$ | 1 | - | - |  |

## Education

Table 3: Distribution of Respondents by Educational Attainment per Survey

|  | Pre-Campaign |  | Post-Campaign |  |
| :---: | :---: | :---: | :---: | :---: |
| Educational Attainment | Percent | $\boldsymbol{n}$ | Percent | $\boldsymbol{n}$ |
| Less than High School | $55.0 \%$ | 227 | $66.2 \%$ | 263 |
| High School Graduate | $32.9 \%$ | 136 | $25.7 \%$ | 102 |
| Some college | $7.0 \%$ | 29 | $7.1 \%$ | 28 |
| College graduate | $4.1 \%$ | 17 | $1.1 \%$ | 4 |

## Length of Time Living in the United States

Table 4: Distribution of Respondents by Time Living in the U.S.A.per Survey

|  | Pre-Campaign |  | Post-Campaign |  |
| :--- | :---: | :---: | :---: | :---: |
| Years | Percent | $\boldsymbol{n}$ | Percent | $\boldsymbol{n}$ |
| Less than 10 years | $68.4 \%$ | 288 | $55.7 \%$ | 229 |
| More than 10 years | $31.6 \%$ | 133 | $44.3 \%$ | 182 |

Number of Children

Table 5: Distribution of Respondents by Number of Children per Survey

|  | Pre-Campaign | Post-Campaign |
| :--- | :---: | :---: |


| Children | Percent | $\boldsymbol{n}$ | Percent | $\boldsymbol{n}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1 | $24.9 \%$ | 100 | $17.1 \%$ | 68 |
| 2 | $36.4 \%$ | 146 | $37.9 \%$ | 151 |
| 3 | $23.2 \%$ | 93 | $33.4 \%$ | 133 |
| 4 | $10.2 \%$ | 41 | $8.3 \%$ | 33 |
| 5 or more | $5.0 \%$ | 21 | $3.4 \%$ | 9 |

## Country of Origin by County

Pre-Campaign Survey. Most respondents were from El Salvador. While Montgomery County had more people from El Salvador, Baltimore City and Anne Arundel County had more peoplefrom Mexico and Honduras. Prince George's County had the largest proportion of people from Guatemala. A number of respondents did not report their country of origin $(n=15)$, and one did not know the county she lived in.

Table 6: Pre-Campaign Survey Distribution of Respondents by Country of Origin and City/County

| Country of origin | City/ County |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Anne Arundel $n=$ <br> 99 | Baltimore <br> $n=110$ | Montgomery <br> $n=96$ | Prince George's <br> $n=103$ | Total <br> $n=399$ |
| El Salvador | $40.4 \%(40)$ | $27.7 \%(28)$ | $61.5 \%(59)$ | $45.6 \%(47)$ | $43.6 \%(174)$ |
| Mexico | $29.3 \%(29)$ | $29.7 \%(30)$ | $5.2 \%(5)$ | $3.9 \%(4)$ | $17.0 \%(68)$ |
| Honduras | $17.2 \%(17)$ | $17.8 \%(18)$ | $8.3 \%(8)$ | $6.8 \%(7)$ | $12.5 \%(50)$ |
| Guatemala | $7.1 \%(7)$ | $12.9 \%(13)$ | $12.5 \%(12)$ | $37.9 \%(39)$ | $17.8 \%(71)$ |
| Ecuador | $3.0 \%(3)$ | $7.9 \%(8)$ | $1.0 \%(1)$ | -- | $3.0 \%(12)$ |
| Other* | $2.0 \%(2)$ | $4 \%(4)$ | $10.4 \%(10)$ | $5.8 \%(6)$ | $5.7 \%(22)$ |

* From Nicaragua, Peru, or the Dominican Republic.

Post-Campaign Survey. The distribution of country of origin by county did not change substantially. Abouthalf of the sample was El Salvadorian, with the remaining sample mostly Mexican, Honduran, and Guatemalan. Just 16 respondents did not report their country of origin and two did not report county.

Table 7: Post-Campaign Survey Distribution of Respondents by Country of Origin and City / County

| Country of Origin | Anne Arundel <br> $n=102$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Baltimore <br> $n=100$ | Montgomery <br> $n=97$ | Prince <br> George's <br> $n=101$ | Total <br> $n=400$ |  |
|  | $84.6 \%(88)$ | $46.0 \%(46)$ | $42.6 \%(46)$ | $49.0 \%(51)$ | $55.5 \%(231)$ |


| Country of Origin | City/ County |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Anne Arundel <br> $n=102$ | Baltimore <br> $n=100$ | Montgomery <br> $n=97$ | Prince <br> George's <br> $n=101$ | Total <br> $n=400$ |
| Mexico | $10.6 \%(11)$ | $17.0 \%(17)$ | $4.6 \%(5)$ | $9.6 \%(10)$ | $10.5 \%(4)$ |
| Honduras | $1.0 \%(1)$ | $24.0 \%(24)$ | $13.0 \%(14)$ | $13.5 \%(14)$ | $12.7 \%(53)$ |
| Guatemala | $1.0 \%(1)$ | $1.0 \%(1)$ | $20.4 \%(22)$ | $19.2 \%(20)$ | $10.5 \%(44)$ |
| Ecuador | - | $9.0 \%(9)$ | $.9 \%(1)$ | - | $2.4 \%(10)$ |
| Other* | $1.0 \%(1)$ | $3.0 \%(3)$ | $8.3 \%(9)$ | $5.8 \%(6)$ | $4.4 \%(19)$ |

* From Nicaragua, Peru, or the Dominican Republic.


## Health Issues Important to Latino Families <br> Important Health Issues - Open-Ended

Pre-Campaign Survey. When asked as an open-ended question, the primary health issue most important to Latino families was by far healthy eating - nearly half of the sample indicated that this was the most important issue to their family. Other important issues included maintaining good health, hygiene and cleanliness, and dental health.

## What is the most important health issue to your family?



Post-Campaign Survey. Post-campaign survey answers were surprisingly different - rather than the majority of respondents saying that healthy eating was their primary concern, most mothers were concerned about obtaining affordable healthcare. Other important issues included healthy eating, avoiding the flu and viruses, and dental health. One possible reason for this difference was that precampaign surveys were conducted in the summer of 2014, while post-campaign surveys were conducted in the winter of 2014, during a particularly bad flu season. It is possible that many respondents were
concerned about medical care for themselves or their children in the winter season, making finding affordable healthcare more salient. It is also possible that publicity surrounding the Affordable Care Act's Open Enrollment period prior to the post-campaign survey made finding affordable health care more salient among Post Survey respondents. The ACA's Open Enrollment period began on on November 15, 2014, about a week prior to beginning the Post Campaign Survey.

## What is the most important health issue to your family?

Figure 2: Post-Campaign Important Health Issues


## Important Health Issues - Importance Ratings

In both the pre-campaign and post-campaign surveys, mothers rated dental health, heart health, obesity, cancer, and diabetes prevention as equally important when asked to rate the importance of each health issue on a zero to five scale, five indicating greater importance. As can be seen in the figure below, responses did not substantially differ between pre- and post-campaign respondents.

Importance ratings of five health issues, 1 (not at all important) to 6 (very important)

Figure 3: Importance Ratings of Five Health Issues


Error bars represent $95 \%$ confidence intervals.

## Adult Oral Hygiene

## Tooth brushing

In both the Pre- and Post Campaign Surveys, over 98\% of respondents said they had brushed their teeth the day of the survey. Combining both sets of respondents, $98.5 \%$ said they had brushed their teeth that day. All respondents said that they had used toothpaste when they brushed their teeth.

## Type of toothpaste

When asked what type of toothpaste, a large portion of both

Figure 4: Combined Pre- and Post-Campaign Respondents who had Brushed their Teeth the Day of the Survey
 samples indicated that they used Colgate. The rest of the sample either described the brand that they used, or whether they used a gel or a paste. A small number of respondents said they used other types of toothpaste, such as Arm and Hammer or Oral B. Some respondents ( $n=28$, across both sets of respondents) failed to specify any details about the type of toothpaste they used.

Table 8: Pre- and Post Campaign and Overall Toothpaste Preferences by Brand and Type

|  | Pre-Campaign Survey <br> Percent (n) | Post-Campaign <br> Survey <br> Percent (n) | Overall <br> Percent (n) |
| :--- | :---: | :---: | :---: |
| Brands |  |  |  |


| Colgate | $57.0 \%(236)$ | $39.5 \%(160)$ | $48.4 \%(396)$ |
| :--- | :---: | :---: | :---: |
| Crest | $12.1 \%(52)$ | $1.2 \%(5)$ | $7.0 \%(57)$ |
| Sensodyne | $1.9 \%(8)$ | $4.0 \%(16)$ | $2.9 \%(24)$ |
| Types |  |  |  |
| Gel | $5.1 \%(21)$ | $14.3 \%(58)$ | $9.6 \%(79)$ |
| Paste | $19.8 \%(82)$ | $40.0 \%(162)$ | $29.8 \%(244)$ |
| Other | $2.2 \%(9)$ | $1 \%(4)$ | $2.3 \%(19)$ |

## When did mothers take their first child to the dentist?

Across Pre- and Post Campaign respondents, about half of mothers took their first child to the dentist when they were between the ages of one and two, with less than a third of mothers taking their child before their first birthday.

Table 9: When Pre-and Post-Campaign Mothers took their First Child to the Dentist

|  | Pre-Campaign <br> Survey <br> Percent (n) | Post-Campaign <br> Survey <br> Percent (n) | Overall <br> Percent (n) |
| :--- | :---: | :---: | :---: |
| Before 1st birthday | $27.1 \%(112)$ | $38.3 \%(155)$ | $32.6 \%(267)$ |
| Between 1 and 2 years old | $57.4 \%(237)$ | $48.9 \%(198)$ | $53.2 \%(435)$ |
| Between 2 and 3 years old | $10.7 \%(44)$ | $12.8 \%(52)$ | $11.7 \%(96)$ |
| After they are 3 years old | $4.9 \%(20)$ | - | $2.5 \%(20)$ |

## Effects of Oral Health Campaign on Attitudes and Behaviors

## Recall of Dental Health Ads

## What dental media campaigns have you heard in the past year? (Unaided recall)

Significantly more respondents had heard a Spanish-language dental hygiene message in the past year after the campaign compared to before the campaign, $\chi^{2}(1)=205.69, p<.001$. Prior to the campaign, less than half of respondents had seen a dental hygiene advertisement ( $43.5 \%$ ), while after the campaign, almost all respondents had heard one of the messages ( $90.6 \%$ ).
Unaided recall involved asking respondents to recall the message that they remembered and recording their responses, without reading the options. Significantly more respondents heard of most of the messages after the campaign compared to before the campaign with unaided recall, $\chi 2(6)=116.11, \mathrm{p}<.001$. The message with the largest increase in recall was "Give your baby a healthy mouth for life," with $8.8 \%$ recalling it prior to the campaign and $40.6 \%$ recalling it after the campaign. Both before and after the campaign, only 3 respondents had heard of the message "Thanks, mom, for helping me brush my teeth."

In the past year, what advertisements or messages about dental health have you heard?

Figure 5: Advertisements or Messages heard by Respondents per Survey


Where did you hear the advertisement or message?
Most mothers reported they heard the messages on TV. More mothers had heard the ads on the radio after the campaign compared to before the campaign.

Table 10: Where Respondents Heard Advertisements or Messages per Survey

|  | TV | Radio | Pamphlet | Clinic | Dentist | Friend/Family | Child's School | Bus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre- <br> Campaign <br> Survey | $61.8 \%(107)$ | $17.3 \%(30)$ | $6.4 \%(11)$ | $4.0 \%(7)$ | $1 / 2 \%(2)$ | $3.5 \%(6)$ | $2.3 \%(4)$ | $3.5 \%(6)$ |
| Post- <br> Campaign <br> Survey | $53.6 \%(196)$ | $28.4 \%(104)$ | $11.5 \%(42)$ | $1.1 \%(4)$ | $3 \%(1)$ | $.3 \%(1)$ |  | $3.3 \%(12)$ |

## Which dental media campaigns have you heard in the past year? (Aided recall)

Give your child a healthy mouth for the rest of their life. Significantly more respondents had heard of this message after the campaign as compared to before the campaign, $\chi^{2}(1)=210.52, p<.001$. The vast majority of respondents said that they heard this message after the campaign, (87.3\%). Post-Campaign respondents said they heard or read this message primarily on TV, radio, and in a pamphlet.

Have you heard this message?

Table 11: Respondents who Heard the "Give your child a healthy mouth for life" Message per Survey

|  | Pre-Campaign Survey <br> Percent $(\boldsymbol{n})$ | Post-Campaign Survey <br> Percent $(\boldsymbol{n})$ |
| :--- | :---: | :---: |
| Yes | $38.2 \%(159)$ | $\mathbf{8 7 . 3 \% ( 3 5 2 )}$ |
| No | $61.8 \%(257)$ | $12.7 \%(51)$ |

Where did you hear this message?

Table 12: Where Respondents Heard the Message "Give your child a healthy mouth for life" Per Survey
TABLE 12: WHERE RESPONDENTS HEARD THE MESSAGE "GIVE YOUR CHILD A HEALTHY MOUTH FOR LIFE" PER SUR VEY

| TV | Radio | Pamphlet | Clinic | Dentist | Friend/ <br> Family | Child's <br> school | Bus |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-Campaign Survey | $44.6 \%$ <br> $(70)$ | $16.6 \%$ <br> $(26)$ | $7.6 \%(12)$ | $12.7 \%$ <br> $(20)$ | $6.4 \%$ <br> $(10)$ | $4.5 \%(7)$ | $1.3 \%(2)$ | $3.2 \%(5)$ |
| Post-Campaign |  |  |  |  |  |  |  |  |
| Survey | $\mathbf{5 6 . 3 \%}$ <br> $\mathbf{( 1 9 8 )}$ | $\mathbf{2 2 . 4 \%}$ <br> $\mathbf{( 7 9 )}$ | $\mathbf{1 5 . 6 \%}$ <br> $\mathbf{( 5 5 )}$ | $1.4 \%(5)$ | $.6 \%(2)$ | $5.1 \%(4)$ | $.3 \%(1)$ | $1.1 \%(4)$ |

Take your child to the dentist before their first birthday. Significantly more respondents had heard of this message after the campaign compared to prior to the campaign, $\chi^{2}(1)=152.14 p<.001$. The vast majority of respondents said that they heard this message after the campaign, (85.9\%). Post-campaign survey respondents said they heard or read this message primarily on TV, radio, and in a pamphlet. Have you heard this message?

Table 13: Respondents who Heard the Message "Take your child to the dentist before their first birthday" per Survey

|  | Pre-Campaign Survey <br> Percent (n) | Post-Campaign Survey <br> Percent $(n)$ |
| :--- | :---: | :---: |
| Yes | $44.7 \%(185)$ | $\mathbf{8 5 . 9 \%}(\mathbf{3 4 6})$ |
| No | $55.3 \%(229)$ | $14.1 \%(57)$ |

Where did you hear this message?

Table 14: Where Respondents Heard the Message "Take your child to the dentist before their first birthday" per

| Survey |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TV | Radio | Pamphlet | Clinic | Dentist | Friend/ <br> Family | Child's school | Bus |
| Pre-Campaign Survey | 35.3\% (66) | 15.5\% (29) | 8.6\% (16) | 21.9\% (41) | 2.7\% (5) | 11.2\% (21) | - | 2.1\% (4) |
| Post-Campaign Survey | $\begin{gathered} 51.7 \% \\ (179) \end{gathered}$ | 24.9\% (86) | 13.9\% (48) | 3.5\% (12) | .6\% (2) | 2.0\% (7) | - | 2.9\% (10) |

Thank you Mom, for helping me brush my teeth. Significantly more respondents had heard of this message after the campaign compared to prior to the campaign, $\chi^{2}(1)=181.84, p<.001$. Most respondents said that they heard this message in the post-campaign survey ( $77.2 \%$ ). Post-Campaign Survey respondents said they heard or read this message primarily on TV, radio, and in a pamphlet.

Have you heard this message?

Table 15: Respondents who Heard the Message "Thank you Mom, for helping me brush my teeth" per Survey

|  | Pre-Campaign Survey <br> Percent (n) | Post-Campaign Survey <br> Percent (n) |
| :---: | :---: | :---: |
| Yes | $30.1 \%(125)$ | $\mathbf{7 7 . 2 \%}(311)$ |
| No | $69.9 \%(290)$ | $22.8 \%(92)$ |

Where did you hear this message?

Table 16: Where Respondents Heard the Message "Thank you Mom, for helping me brush my teeth" per Survey

|  | TV | Radio | Pamphlet | Clinic | Dentist | Friend/ <br> Family | Child's <br> school | Bus |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-Campaign <br> Survey | $45.0 \%(54)$ | $15.0 \%(18)$ | $14.2 \%(17)$ | $3.3 \%(4)$ | $1.7 \%(2)$ | $15 \%(18)$ | $1.7 \%(2)$ | $4.2 \%(5)$ |


|  | TV | Radio | Pamphlet | Clinic | Dentist | Friend/ <br> Family | Child's <br> school | Bus |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Post-Campaign <br> Survey | $\mathbf{5 2 . 7 \%}$ <br> $\mathbf{( 1 6 4 )}$ | $\mathbf{1 8 . 0 \% ( 5 6 )}$ | $\mathbf{2 1 . 9 \% ( \mathbf { 6 8 } )}$ | $.6 \%$ <br> $(2)$ | $.6 \%$ <br> $(2)$ | $1.9 \%$ <br> $(6)$ | - | $3.2 \%$ <br> $(10)$ |

Dental health is important for overall health. Significantly more Post-Campaign respondents had heard of this message as compared to Pre-Campaign respondents, $\chi^{2}(1)=198.05, p<.001$. Almost all respondents said that they heard this message in the Post Campaign Survey (92.8\%). Post Campaign Survey respondents said they heard/read this message primarily on TV, radio, and in a pamphlet.

Have you heard this message?

Table 17: Respondents who Heard the Message "Dental health is important for overall health" per Survey

|  | Pre-Campaign Survey <br> Percent $(\boldsymbol{n})$ | Post-Campaign Survey <br> Percent (n) |
| :---: | :---: | :---: |
| Yes | $47.6 \%(195)$ | $\mathbf{9 2 . 8 \%}(374)$ |
| No | $52.4 \%(215)$ | $7.2 \%(29)$ |

Where did you hear this message?

|  | TV | Radio | Pamphlet | Clinic | Dentist | Friend/ <br> Family | Child's <br> school | Bus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pre-Campaign Survey | 42.3\% (82) | 15.5\% (30) | 7.7\% (15) | 10.3\% (20) | 3.1\% (6) | 14.9\% (29) | . 5 (1) | 4.1\% (8) |
| Post-Campaign Survey | $\begin{gathered} 46.9 \% \\ (175) \end{gathered}$ | 19.3\% (72) | 18.0\% (67) | $\begin{gathered} 6.2 \% \\ (23) \end{gathered}$ | 1.3\% <br> (5) | $\begin{gathered} 4.8 \% \\ (18) \end{gathered}$ | - | 1.1\% <br> (4) |

Healthy Teeth, Healthy Kids. Significantly more respondents had heard of this message in the postcampaign survey as compared to the pre-campaign survey, $\chi^{2}(1)=181.41, p<.001$. Almost all respondents in the post-campaign survey stated that they heard this message ( $91.5 \%$ ).

While more Post-Campaign respondents said they had received the Healthy Teeth, Healthy Kids pamphlet compared to Pre-Campaign respondents, this difference was not statistically significant, $\chi^{2}(1)=1.43, p=$ .23. Most people received the pamphlet at a clinic or doctor's office. The "Other" pamphlet source category includes health fairs, child's school, and insurance companies. In both the pre- and post-campaign surveys, the respondents found the pamphlet very helpful and rated it highly on the 1 (not at all helpful) to 6 (very helpful) scale ( $M=5.56, S D=.79$ ).

Have you heard this message?

Table 19: Respondents who Heard the Message "Healthy Teeth, Healthy Kids" per Survey

|  | Pre-Campaign Survey <br> Percent $(\boldsymbol{n})$ | Post-Campaign Survey <br> Percent $(\boldsymbol{n})$ |
| :---: | :---: | :---: |
| Yes | $48.0 \%(197)$ | $\mathbf{9 1 . 5 \%}(\mathbf{3 6 8})$ |
| No | $52.0 \%(213)$ | $8.5 \%(34)$ |

Have you received the pamphlet about Healthy Teeth, Healthy kids?
Table 20: Received "Healthy Teeth, Healthy Kids" Pamphlet

| TABLE 20: Received "HEALTHY TEETH, HEALTHY Kids" PAMPHLET |  |  |
| :---: | :---: | :---: |
|  | Pre-Campaign Survey <br> Percent $(\boldsymbol{n})$ | Post-Campaign Survey <br> Percent $(\boldsymbol{n})$ |
| Yes | $\mathbf{5 2 . 8 \%} \mathbf{( 1 0 7 )}$ | $\mathbf{5 9 . 0 \%}(\mathbf{2 1 7})$ |
| No | $46.2 \%(92)$ | $41.0 \%(151)$ |

Where did you receive this pamphlet?
Table 21: Where "Healthy Teeth, Healthy Kids" Pamphlet was Received

|  | Clinic | Mail | Dentist's Office | WIC | Other |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Pre-Campaign <br> Survey | $\mathbf{4 5 . 7 \% ( 4 3 )}$ | $17.0 \%(16)$ | $16.0 \%(15)$ | $4.3 \%(4)$ | $17 \%(16)$ |
| Post-Campaign <br> Survey | $\mathbf{7 9 . 3 \% ( 1 7 2 )}$ | $10.6 \%(23)$ | $2.8 \%(6)$ | $2.8 \%(6)$ | $4.6 \%(10)$ |

## Latinas' Beliefs about Dental Appointments

## In general, when should children go to the dentist?

While only $38.2 \%$ of mothers knew that children should go to the dentist before they were 1 year old prior to the campaign, the majority of mothers knew this after the campaign (59.0\%). This difference reached statistical significance, $\chi^{2}(1)=53.93, p<.001$.

When should a child first go to the dentist?

Figure 6: Respondent Perceptions of When a Child Should First Go to the Dentist per Survey


## Latinas' Understanding of Caries Prevention

## Perceptions of Fluoride

Significantly more respondents had heard of fluoride after the campaign compared to before the campaign, $\chi^{2}(1)=11.72, p=.001$. Significantly more respondents knew that fluoride prevented cavities after the campaign compared to before the campaign, $\chi^{2}(5)=47.95, p<.001$.

Have you heard offluoride?
Table 22: Pre- and Post Campaign Respondents who had Heard of Fluoride

|  | Pre-Campaign Survey <br> $\boldsymbol{P e r c e n t}(\boldsymbol{n})$ | Post-Campaign Survey <br> Percent $(\boldsymbol{n})$ |
| :---: | :---: | :---: |
| Yes | $60.3 \%(252)$ | $\mathbf{7 1 . 6 \%} \mathbf{( 2 9 0})$ |
| No | $39.7 \%(166)$ | $28.4 \%(115)$ |

What is the purpose of fluoride?

Figure 7: Respondent Beliefs about the Purpose of Fluoride


## Perceptions of Fluoride Varnish

Almost twice as many mothers had heard of fluoride varnish after the campaign compared to before the campaign, $\chi^{2}(1)=41.92, p<.001$. Further, of the mothers who had heard of varnish, significantly more had had the treatment for their child after the campaign compared to before the campaign, $\chi^{2}(1)=16.99, p<$ .001 .

## Have you heard offluoride varnish?

Table 23: Pre- and Post-Campaign Respondents who had Heard of Fluoride

|  | Pre-Campaign Survey <br> Percent $(\boldsymbol{n})$ | Post-Campaign Survey <br> Percent $(\boldsymbol{n})$ |
| :---: | :---: | :---: |
| Yes | $28.1 \%(68)$ | $\mathbf{5 6 . 1 \%}(\mathbf{1 6 0})$ |
| No | $71.9 \%(174)$ | $43.9 \%(125)$ |

Has your child received fluoride varnish?
\(\left.$$
\begin{array}{l}\text { Table 24: Pre-and Post-Campaign Respondents whose Child had Received Fluoride Varnish } \\
\begin{array}{|c|c|c|}\hline \text { Pre-Campaign Survey } \\
\text { Percent }(\boldsymbol{n})\end{array}
$$ <br>
\hline Post-Campaign Survey <br>

\boldsymbol{P e r c e n t}(\boldsymbol{n})\end{array}\right]\)| $\mathbf{9 4 . 3} \%(\mathbf{1 4 9})$ |
| :---: |
| Yes |
| No |
| $75.0 \%(48)$ |

## Source of water

Significantly more mothers drank tap water after the campaign compared to before the campaign, $\chi^{2}(1)=$ 25.54, $p<.001$, although the majority of mothers still did not drink tap water (62.15\%).

Do you drink tap water?

Table 25: Pre- and Post Campaign Respondents who Drink Tap Water

|  | Pre-Campaign Survey <br> Percent $(\boldsymbol{n})$ | Post-Campaign Survey <br> Percent (n) |
| :---: | :---: | :---: |
| Yes | $21.5 \%(85)$ | $37.9 \%(153)$ |
| No | $\mathbf{7 8 . 5 \%}(\mathbf{3 1 0})$ | $\mathbf{6 2 . 1 5 \% ( 2 5 1 )}$ |

Of those who did not drink tap water, most purchased bottled water to drink (pre-campaign survey: $71.2 \%$, post-campaign survey: $65.7 \%$ ) and almost one-third filtered tap water before drinking it (precampaign survey: $28.5 \%$, post-campaign survey: 33.9 ). These results did not differ significantly between the pre- and post-campaign surveys, $\chi^{2}(1)=3.86, p=.28$.

## Discussion

This study supports MDAT's belief that poor oral health literacy among Latina mothers contributes significantly to the disproportionate incidence of poor oral health among Latino children. It showed that MDAT's "Healthy Teeth, Healthy Kids" campaign was highly successful in teaching Latina mothers that children should go to the dentist before their first birthday, that fluoride prevents cavities, that children should receive fluoride varnish and drink fluoridated tap water, and that proper oral health and preventative oral health habits are important for children's overall health.

The finding that significantly more mothers drank tap water after the campaign compared to before the campaign, and that a majority of mothers still did not drink tap water after the campaign, was an unexpected result. It showed that there is a strong need for community education on this issue and that an educational campaign on the benefits of drinking fluoridated tap water is warranted.

The results of this study generally illustrate the effectiveness of dental health educational campaigns that utilize a combination of Spanish-language radio, transit, and brochure public service messaging to create awareness of the importance of proper oral health, help establish preventative oral health habits, and inform the target audience of how to access oral health care.

## Limitations

Some of the major limitations of this study include the following:

- The results are based on a convenience sample, which presents a risk that the results may not be representative of the general population;
- The researchers were unable to substantiate the reporting of dental visits and other claims made by respondents, which introduces the possibility of social desirability and recall biases;
- The researchers were also unable to assess whether the campaign was the primary driver for changes in knowledge or to determine if there were any other influences on the changes in knowledge. It is certainly possible that individual differences in knowledge of dental hygiene between the two groups, rather than the educational campaign itself, contributed to the differences between the pre-campaign and post-campaign samples.


## Conclusions

The following conclusions can be drawn based on this study's findings:

1. The most important health issues for the respondents appeared to be affordable health care and healthy eating. Other important issues mentioned include maintaining good health, hygiene and cleanliness, and dental health.
2. Less than a third of the respondents take their children to the dentist before their first birthday, and about half of the respondents take their children to the dentist between the ages of one and two.
3. Significantly more respondents had heard a Spanish-language dental hygiene message after the Healthy Teeth, Healthy Kids Campaign compared to before the campaign. The message with the largest increase in recall was "Give your baby a healthy mouth for life."
4. Most respondents reported that they heard the dental hygiene messages on TV.
5. Most of the respondents prefer to use non-fluoridated bottled water rather than fluoridated tap water.

## Attachments: Survey Form and Instructions in English and Spanish

# Hispanic Language Oral Health Survey <br> SURVEY FORM AND INSTRUCTIONS 

Sponsored by: Maryland Dental Action Coalition
Administered by: Rivera Group, Inc.

## SURVEY INSTRUCTIONS

To administer the survey, the interviewers will seek and approach Hispanic women who appear to be between 18 and 34 years of age as follows:

1. If they are walking with children who appear to be 6 years old or younger:

Excuse me. Good [morning, afternoon, evening]. I see that you have small children! We're offering $\$ 5$ gift cards to Hispanic women with small children if they complete a short verbal survey that lasts 10 to 15 minutes. The survey is about dental health and is sponsored by the Maryland Dental Action Coalition. To participate, you must be between 18 and 34 years of age and have at least one child who is 6 years of age or younger. You seem to have the characteristics we're looking for. Would you be interested in helping us with the survey?
2. If they are walking without children in the target age group:

Excuse me. Good [morning, afternoon, evening]. We're offering $\$ 5$ gift cards to Hispanic women if they complete a short verbal survey that lasts 10 to 15 minutes. The survey is about dental health and is sponsored by the Maryland Dental Action Coalition. To participate, you must be between 18 and 34 years of age and have at least one child who is 6 years of age or younger. You seem to have the characteristics we're looking for. Would you be interested in helping us with the survey?

If the potential respondent does not meet the criteria for participation, or does not agree to participate, the interviewer will say,

Thank you anyway. Pardon the interruption. Have a nice day.
If the potential respondent meets the study criteria and agrees to participate, the interviewer will say,

Wonderful! Thank you! Can you do the interview now or should we do it when you finish what you're doing?

If the potential respondent wants to schedule the interview later, such as after an appointment or shopping, the interviewer will indicate that she will wait to conduct the interview at her present location (or other preferred location).

If the potential respondent wants to have the interview conducted immediately, the interviewer will identify a private location or area in the vicinity and utilize her assigned computer tablet to obtain the respondent's verbal informed consent and conduct the interview.

At the end of the interview, the interviewer will provide the respondent with a $\$ 5$ gift card and ask the respondent to place her initials on a log that contains the gift card serial number to acknowledge receipt.

## PARTICIPANT SCREENING

Q1. Do you have children at home who are six years old or younger?
a. Yes (Continue.)
b. No (Thank and terminate: Thank you for your time and cooperation. Unfortunately, your responses do not qualify you to continue with the survey. We appreciate your help. Have a great day.)

Q2. Are you at least 18 years old?
a. Yes (Continue.)
b. No (Thank and terminate. Read language above in Q1.)

Q3. Are you a resident of the state of Maryland?
a. Yes (Continue.)
b. No (Thank and terminate. Read language above in Q1.)

D4. In what county do you live? (Record response)
Counties in Maryland:
Anne Arundel County
Baltimore City
Baltimore County
Montgomery County
Prince George's County
If she does not live in any of these counties, thank and terminate. Read language above in Q1.

Q4. How long have you been living in the United States?
a. 10 years or less (Continue.)
b. Over 10 years (Thank and terminate. Read language above in Q1.)

## INFORMED CONSENT

Before we start the survey, I need to read go through the formality of reading a description of the study and of your role in the study, and after reading it, to ask you again if you agree to participate in the study. Here it goes:

The purpose of this survey is to determine perceptions and practices around the topic of oral health. You are being asked to participate in this project because you're a Hispanic woman between the age of $18-34$ and a caregiver of a child or children.

The risk to you for participating in this survey is minimal. Any risk for participating in this project is no more than would be expected during any survey. In all surveys 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 and hear your feedback and answers to the survey questionnaire. Loss of confidentiality will also be minimized by storing your data in a secured server. The data collected by this survey will be destroyed by our company - Rivera Group -- after it is reported to the primary investigator, the Maryland Dental Action Coalition.
You may or may not benefit from taking part in this survey. You need to decide if your participation in this survey is in your best interest. It will not cost you anything to take part in this project. The alternative to participation is to not take part. If you chose not to take part, you will not be affected.

This survey does not request confidential health information. Only our client and members of the project team will have access to your survey results. The information generated in the survey will only be used for the purposes of this project which is to create oral health educational materials for Spanish speaking populations. The data from the project may be published. However, you will never be identified by name. Everyone using project information will work to keep your personal information confidential. Your personal information will not be given out unless required by law.

Your participation in this survey is completely voluntary. You do not have to take part in this survey if you do not want to. You are free to withdraw your consent or ask questions at anytime. You are being asked to provide consent for yourself.

Refusal to take part or to stop taking part in the survey 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 please contact the investigator, Ms. Penny Anderson at 410-884-8294. There are no adverse consequences (physical, social, economic, legal, or psychological) of your decision not to participate in this project.

When asked if you agree to participate in this survey, saying yes indicates that you have willingly listened to this information about consent and agree to participate in the project.

Do you agree to participate in this survey? (Please statement Yes or No.)

Here is a copy of the statement I just read for your information.

## Begin: Thank you, again, for agreeing to participate.

## SURVEY

1. What would you say are the most important health issues for your family? (Record responses.)
2. We'd like to better understand how you view several health issues and how important they are to your family. Please tell me how important each of the following health issues are to your family by using a $0-5$ scale, where ' 0 ' means 'Not at all important' and 5 means 'Extremely Important'. Feel free to use any number in between. Let's begin with... (Read. Rotate. As the surveyor reads this question to the participant they should ask the entire question for each option and repeat the formula for the scale each time.)
a. Dental health
(Enter number 0-5 $\qquad$
b. Heart health (Enter number 0-5 $\qquad$
c. Diabetes prevention (Enter number 0-5 $\qquad$
d. Cancer
(Enter number 0-5 $\qquad$
e. Obesity
(Enter number 0-5 $\qquad$
3. Let's talk more about dental health. Can I ask, when did you last brush your teeth? (Record responses.)
4. Did you put anything on the brush?
a. Yes (Skip to question \#5)
a. No (Skip to question \#6)
5. What did you put on the brush?
(If her answer is 'toothpaste', ask: What kind of toothpaste? Record answer.)
6. OK now, let's talk about your child's dental health. At what age do you think a child should have their first visit to the dentist? (Do not read - record.)
a. Within first year
a. At first tooth
b. When permanent teeth start coming in
c. After baby teeth fall out
d. When there is a problem
e. Any age they indicate over the age of one (Record answer.)
7. At what age did your oldest child first visit the dentist?
a. Before first birthday
b. Between $1^{\text {st }}$ and $2^{\text {nd }}$ birthdays
c. Between $2^{\text {nd }}$ and $3^{\text {rd }}$ birthdays
d. Other (Record response - if child has not seen dentist, ask child's age and record response.)
8. Do you clean your child's mouth, gums or brush (his/her) teeth?
a. Yes (Ask if she cleans the child's gums or brushes the child's teeth. If she answers brush teeth, ask: What do you put on the brush? If her answer is toothpaste, ask: What kind?) (Skip to \#10)
b. No
c. Sometimes
9. Why not? (Do not read answer categories. Mark the one that best fits respondents' answer.)
a. Child brushes own teeth
b. No toothbrush
c. Don't have time
d. Child won't let me
e. Not important
f. Other
10. Have you ever heard of fluoride?
a. Yes
b. No (Skip to \#14)
11. What do you think fluoride is used for? (Do not read answer categories. Mark the one that best fits respondent's answer.)
a. Used to clean teeth
b. Used to prevent tooth decay
c. Used to purify water
d. Used to whiten teeth
e. Used to prevent plaque [Pronounced: plāk]
f. Other (Specify: $\qquad$
g. Don't know/not sure
12. Have you ever heard of Fluoride varnish?
a. Yes
b. No (Skip to 13B)
c. Do not know/Do not remember (Skip to 13B)
13. A. Has your child ever had fluoride varnish?
a. Yes
b. No
c. Do not know/Do not remember
B. Fluoride varnish is a protective coating that the doctor or dentist paints on teeth. It strengthens teeth and prevents tooth decay. Has your child ever had fluoride varnish?
a. Yes
b. No
c. Do not know/Do not remember
14. Do you drink water from the tap/sink or faucet?
a. Yes (Skip to\#16)
b. No (Skip to \#15. Then follow-up with: \#15B. Where do you get your drinking water from? Record answers.)
c. Do not know
15. A. Why not? (Do not read answer categories. Mark the one that best fits respondent's answer.)
a. Taste preference
b. Unsafe
c. Other
B. Where do you get your drinking water from?
(Record responses.)
16. In the last year, have you heard, read, or seen any messages or advertisements regarding dental care or oral health in Spanish? (Record responses.)
a. Yes
b. No (Skip to \#19)
c. Do not know (Skip to \#19)
17. What message do you recall hearing, reading, or seeing? (Do not read list. Accept all that apply. Probe for multiple responses. Record message as they describe it.)
a. Healthy Teeth, Healthy Kids
b. Give your child a healthy mouth for life
c. Take your child to the dentist by their first birthday
d. Thanks Mom, for helping me brush my teeth!
e. Oral health is important for overall health
f. Other (Specify): $\qquad$
g. Don't recall/Don't remember
18. Where do you recall hearing, reading, or seeing the message(s)? (Do not read list
but record responses. Mark all that apply.)
a. Radio
b. Bus/transit advertisement
c. Brochure/pamphlet
d. Friend or family member
e. Other: $\qquad$
19. Do you recall hearing, reading, or seeing any messages that included: "Give your child a healthy mouth for life"?
a. Yes
b. No (Skip to \#21)
20. Where do you recall hearing, reading, or seeing the message? (Do not read list but record responses - mark all that apply.)
a. Radio
b. Bus/transit advertisement
c. Brochure/pamphlet
d. Friend or family member
e. Other: $\qquad$
21. Do you recall hearing, reading, or seeing any messages that included: "Take your child to the dentist by their first birthday"?
a. Yes
b. No (Skip to \#23)
22. Where do you recall hearing, reading, or seeing the message? (Do not read list but record responses - mark all that apply.)
a. Radio
b. Bus/transit advertisement
c. Brochure/pamphlet
d. Friend or family member
e. Other: $\qquad$
23. Do you recall hearing, reading, or seeing any messages that included: "Thanks, Mom, for helping me brush my teeth!"?
a. Yes
b. No (Skip to \#25)
24. Where do you recall hearing, reading, or seeing the message? (Do not read list but record responses - mark all that apply.)
a. Radio
b. Bus/transit advertisement
c. Brochure/pamphlet
d. Friend or family member
e. Other: $\qquad$
25. Do you recall hearing, reading, or seeing any messages that included: "Oral health is important for overall health"?
a. Yes
b. No (Skip to \#27)
26. Where do you recall hearing, reading, or seeing the message? (Do not read list but record responses - mark all that apply.)
a. Radio
b. Bus/transit advertisement
c. Brochure/pamphlet
d. Friend or family member
e. Other: $\qquad$
27. Have you ever heard of Healthy Teeth, Healthy Kids?
a. Yes
b. No (Skip to D1)
28. Do you recall receiving a Healthy Teeth, Healthy Kids brochure?
a. Yes (Ask: Where did you get the brochure?)
a. No (Skip to D1)
29. On a scale of 0 to 5 , where 0 means 'Not at all helpful' and 5 means 'Extremely helpful', how helpful was the information in the brochure? (Record response.)
a. 0
b. 1
c. 2
d. 3
e. 4
f. 5
(Continue: We have just a few more questions. These questions are optional.)

D1. How old are you?
a. 18-25
b. 26-34
c. $35-49$
d. 50-64
e. 65 or over
f. Refused

D2. What is the highest level of education you have completed?
a. Less than high school
b. High school graduate
c. Some college/technical
d. 4-year college degree
e. Some post graduate
f. Graduate degree
g. Refused

D3. How many children do you have? (Record response)
D5. What is your country of origin? (Record response)
Those are all the questions I have. Thank you very much for your time. Have a nice evening/day. If you have questions, feel free to contact the person who is listed on the Informed Consent sheet I gave you.

# Encuesta sobre la salud dental FORMULARIO PARA LA ENCUESTA E INSTRUCCIONES 

Auspiciada por: Coalición de Acción Dental de Maryland

Administrada por: Rivera Group, Inc.

## INSTRUCCIONES PARA LA ENCUESTA

Para administrar la encuesta, las entrevistadoras buscarán y se acercarán a mujeres hispanas que aparentan tener entre 18 y 34 años de edad de la siguiente manera:

- Si caminan con niños que aparentan tener 6 años de edad o menos:

Con permiso. Buenos días [o buenas tardes, noches]. ¡Veo que tiene niños pequeños! Estamos ofreciendo una tarjeta de regalo de $\$ 5$ a mujeres hispanas que tengan niños pequeños si completan una encuesta verbal corta, que dura de 10 a 15 minutos. La encuesta es sobre la salud dental y la auspicia la Maryland Dental Action Coalition (Coalición de Acción Dental de Maryland). Para participar, tiene que tener entre 18 y 34 años de edad, vivir en Maryland, tener por lo menos un niño o una niña de seis años de edad o menos y haber vivido en los EE.UU. por menos de 10 años. Usted parece que tiene las características que buscamos. ¿Estaría interesada en ayudarnos con la encuesta?

- Si caminan sin niños de 6 años o menores:

Con permiso. Buenos días [o buenas tardes, noches]. Estamos ofreciendo una tarjeta de regalo de $\$ 5$ a mujeres hispanas que tengan niños pequeños si completan una encuesta verbal corta, que dura de 10 a 15 minutos. La encuesta es sobre la salud dental y la auspicia la Coalición de Acción Dental de Maryland. Para participar, tiene que tener entre 18 y 34 años de edad, vivir en Maryland, tener por lo menos un niño o una niña de seis años de edad o menos y haber vivido en los EE.UU. por menos de 10 años. Usted parece que tiene las características que buscamos. ¿Estaría interesada en ayudarnos con la encuesta?

Si la persona a ser encuestada no reúne los criterios para la encuesta, o no está de acuerdo en participar, la entrevistadora dirá:

Gracias de todas maneras. Perdone la interrupción. Que tenga un buen día.
Si la persona a ser encuestada reúne los criterios para la encuesta y está de acuerdo en participar, la entrevistadora dirá:
¡Qué bueno! ¡Gracias! ¿Puede hacer la entrevista ahora o quiere hacerla cuando termine lo está haciendo?

Si la persona a ser encuestada quiere hacer la entrevista más tarde, como después de una cita que tenga o de hacer compras, la entrevistadora le indicará que la esperará en el mismo lugar (u otro lugar que escojan) para hacer la encuesta.

Si la persona a ser encuestada quiere hacer la entrevista inmediatamente, la entrevistadora identificará un lugar o área privada adyacente y usará la computadora tablet que le fue asignada para obtener el consentimiento verbal informado y llevar a cabo la entrevista.

Al final de la entrevista, la entrevistadora le entregará a la encuestada una tarjeta de regalo de $\$ 5$ y le pedirá que ponga sus iniciales en un registro que contiene el número de serie de la tarjeta de regalo para comprobar el haberlo recibido.

## SELECCIÓN DE PERSONAS A ENCUESTAR

P1. ¿Tiene usted niños en su casa de seis años de edad o menores?
a. Sí. (Continúe)
b. No (Dele las gracias y cancele la encuesta: Muchas gracias por su tiempo y su cooperación. Lamentablemente, usted no cumple los requisitos para continuar con la encuesta, pero le agradecemos su tiempo. Que tenga un buen día.)

P2. ¿Tiene usted por lo menos 18 años de edad?
a. Sí. (Continúe)
b. No (Dele las gracias y cancele la encuesta. Lea el lenguaje provisto arriba en la P1.)

P3. ¿Vive usted en el estado de Maryland?
a. Sí. (Continúe)
b. No (Dele las gracias y cancele la encuesta. Lea el lenguaje provisto arriba en la P1.)

D4. ¿En qué condado vive? (Anote la respuesta.)
Condados en Maryland:
Anne Arundel County
Baltimore City
Baltimore County
Montgomery County
Prince George's County
Si no vive en alguno de estos condados, dele las gracias y cancele la encuesta. Lea el lenguaje provisto arriba en la P1.

P4. ¿Cuánto tiempo lleva viviendo en los EE.UU.?
a. 10 años o menos (Continúe.)
b. Más de 10 años (Dele las gracias y cancele la encuesta: Lea el lenguaje provisto arriba en la P1.)

## CONSENTIMIENTO INFORMADO

Antes de comenzar la encuesta, tengo que pasar por la formalidad de leerle una descripción del estudio y del papel suyo en el estudio, y después de leerlo, preguntarle de nuevo si quiere participar. Aquí va:

El propósito de esta encuesta es determinar las percepciones y las prácticas sobre el tema de la salud bucal, o de la boca. L estamos pidiendo participar en este proyecto porque usted es una mujer hispana entre los 18 y 34 años de edad y cuida a uno o varios niños.

El riesgo que usted enfrenta por participar en esta encuesta es mínimo. El riesgo de participar en este proyecto es igual al que se esperaría en cualquier encuesta. En todas las encuestas hay un riesgo potencial de pérdida de confidencialidad. La pérdida de confidencialidad se minimiza en este proyecto al permitir que solo los miembros del equipo del proyecto vean y escuchen sus comentarios y respuestas a la encuesta. La pérdida de confidencialidad también se minimiza al entrar su data a una computadora que solo puede accederse por contraseña. La data que se recolecte en esta encuesta será destruida por nuestra compañía - Rivera Group - después de informarle los resultados a la compañía que la auspicia, la Coalición de Acción Dental de Maryland. Puede que usted se beneficie de participar en la encuesta o no se beneficie. Usted misma tiene que decidir si su participación en la encuesta le va a beneficiar. No le cuesta nada participar en este proyecto. La opción a su participación es no participar. Usted no será afectada si decide no participar.

Esta encuesta no pide información confidencial sobre su salud. Solo nuestro cliente y los miembros del equipo del proyecto tendrán acceso a los resultados de su encuesta. La información que genere la encuesta se usará solamente para los propósitos de este proyecto, los cuales son el desarrollo de materiales educacionales sobe la salud bucal para las poblaciones de habla hispana. Puede que se publique la data del proyecto, pero usted nunca será identificada por nombre. Todos los que usen la información del proyecto trabajarán para mantener su información confidencial. Su información personal no se compartirá a menos que lo requiera la ley.

Su participación en esta encuesta es totalmente voluntaria. Usted no tiene que participar en este proyecto si no quiere. Usted está libre de retirar su consentimiento o hacer preguntas en cualquier momento. Estamos pidiendo su consentimiento para usted solamente.

El rehusar la participación o retirar la participación no tiene ningún castigo o pérdida de
beneficios a los cuales usted tiene derecho. Si usted decide dejar de participar, si tiene preguntas, preocupaciones, o quejas, puede comunicarse con la investigadora principal, la Sra. Penny Anderson, en el 410-884-8294. No hay consecuencias adversas (como físicas, sociales, económicas, legales, o sicológicas) si decide no participar en este proyecto.

Si indica que está de acuerdo con participar en este proyecto, esto implica que usted ha escuchado de manera voluntaria esta información sobre su consentimiento y que está de acuerdo con participar.
¿Está de acuerdo con participar en este proyecto? Por favor, indique sí o no.
Aquí tiene una copia de lo que le acabo de leer para su información.
Comienzo: Muchas gracias, de nuevo, por su participación.

## ENCUESTA

1. ¿Qué diría usted que son los asuntos más importantes para su familia con respecto a la salud?
(Anote las respuestas.)
2. Quisiéramos entender mejor la manera en que usted ve varios asuntos de salud y la importancia que tienen para su familia. Por favor, indíqueme cuán importantes son cada uno de los siguientes para su familia usando una escala del 0 al 5 , donde el ' 0 ' significa 'No tiene ninguna importancia' y el 5 significa 'De suma importancia'. Comencemos con... (Lea. Rotación. A medida en que el encuestador lee esta pregunta al participante, debe hacerle la pregunta completa para cada opción y repetir cada vez la fórmula de la escala.)
a. Salud dental (Anote número del 0 al 5 $\qquad$
b. Salud del corazón (Anote número del 0 al 5 $\qquad$
c. Prevención de diabetes (Anote número del 0 al 5 $\qquad$
d. Cáncer (Anote número del 0 al 5 $\qquad$
e. Obesidad (Anote número del 0 al 5 $\qquad$
3. Hablemos un poco sobre la salud dental. Permítame preguntarle, ¿cuándo fue la última vez que se cepilló los dientes?
(Anote las respuestas.)
4. ¿Puso algo en el cepillo?
a. Sí. (Pase a la pregunta \#5)
b. No(Pase a la pregunta \#6)
5. ¿Qué puso en el cepillo? (Si la respuesta es 'pasta de dientes', pregunte: ¿Qué tipo de pasta de dientes? Anote la respuesta.)
6. Bien. Ahora, hablemos de la salud dental de su niño (niña). ¿A qué edad piensa usted que un niño (una niña) debe tener su primera cita con el dentista? (No lea las opciones; sólo anótelas.)
a. Durante su primer año
b. Cuando le sale el primer diente
c. Cuando comienzan a salirle los primeros dientes
d. Después de perder los primeros dientes
e. Cuando surge un problema
f. Cualquier edad que el participante indique que sea mayor a un año (Anote la respuesta.)
7. ¿A qué edad tuvo cita con el dentista su primer niño (niña) por primera vez?
a. Antes de su primer cumpleaños
b. Entre su $1^{\text {er }}$ y $2^{\text {do }}$ cumpleaños
c. Entre su $2^{\mathrm{do}}$ y $3^{\text {er }}$ cumpleaños
d. Otro (Anote la respuesta; si el niño (niña) no ha tenido cita con el dentista, pregunte la edad del niño o niña y anote la respuesta.)
8. ¿Limpia usted la boca, las encías o cepilla los dientes de su niño (niña)?
a. Sí (Pregunte si le limpia las encías o le cepilla los dientes al niño (niña). Si contesta que le cepilla los dientes, pregunte: ¿Qué le pone usted al cepillo? Si contesta pasta de dientes, pregúntele ¿Qué clase? (Pase a la \#10)
b. No
c. A veces
9. ¿Por qué no? (No lea las categorías de respuesta. Marque la que mejor corresponda a la respuesta de la persona encuestada.)
a. El niño (la niña) se cepilla sus propios dientes
b. No tiene cepillo de dientes
c. No tiene tiempo
d. El niño (la niña) no deja que le limpie los dientes
e. No es importante
f. Otro
10. ¿Ha oído usted alguna vez del fluoruro?
a. Sí
b. No (Pase a la \#14)
11. En su opinión, ¿para qué se usa el fluoruro? (No lea las categorías de respuesta. Marque la que mejor corresponda a la respuesta de la persona encuestada.)
a. Para limpiar los dientes
b. Para prevenir las caries
c. Para purificar el agua
d. Para blanquear los dientes
e. Para prevenir la placa dental
f. Otro (Especifique: $\qquad$
g. No sé o No estoy seguro / segura
12. ¿Ha oído usted alguna vez del barniz de fluoruro?
a. Sí
b. No (pase a la 13B)
c. No sé / No recuerdo (Pase a la 13B)
13. A. ¿Le han puesto barniz de fluoruro a su niño (niña) alguna vez?
a. Sí
b. No
c. No sé / No recuerdo
14. B. El barniz de fluoruro es una capa protectora con el que el doctor o el dentista pinta los dientes. Fortalece los dientes y previene las caries. ¿Le han puesto barniz de fluoruro a su niño (niña) alguna vez?
a. Sí
b. No
c. No sé / No recuerdo
15. ¿Toma usted agua del grifo, la pila o la llave de agua?
a. Sí (Pase a la \#16)
b. No (pase a la \#15. Luego, continúe con la 15B. ¿De dónde obtiene usted el agua de beber? Anote las respuestas.)
c. No sé
16. A. ¿Por qué no? (No lea las categorías de respuesta. Marque la que mejor corresponda a la respuesta de la persona encuestada.)
a. Preferencia por el sabor
b. Peligroso
c. Otro $\qquad$
B. ¿De dónde obtiene usted el agua de beber?
(Anote las respuestas.)
17. Durante el año pasado, ¿ha escuchado, leído o visto algún mensaje o anuncio en español sobre la higiene dental o la salud dental?
a. Sí
b. No (Pase a la \#19)
c. No sé (Pase a la \#19)
18. ¿Qué mensaje recuerda usted haber escuchado, leído o visto? (No lea la lista. Acepte todas las que se apliquen. Sondee respuestas múltiples. Anote el mensaje según lo describen.)
a. Dientes sanos, Niños sanos
b. Dele a su niño una boca saludable para toda la vida
c. Lleve a su niño al dentista antes de su primer cumpleaños
d. Gracias, mamá, por ayudarme a cepillarme los dientes
e. La salud dental es importante para la salud en general
f. Otro (Especifique):
g. No recuerdo / No me acuerdo
19. ¿Dónde recuerda haber escuchado, leído, o visto el (los) mensaje(s)? (No lea la lista pero anote las respuestas. Marque todas las que se apliquen.)
a. Radio
b. Anuncio en el autobús o transportación pública
c. Volante o panfleto
d. Amigo o familiar
e. Otro: $\qquad$
20. ¿Recuerda haber escuchado leído o visto algún mensaje que dijera: "Dele a su niño una boca saludable para toda la vida"?
a. Sí
b. No (Pase a la \#21)
21. ¿Dónde recuerda haber escuchado leído o visto el mensaje? (No lea la lista pero anote las respuestas. Marque todas las que se apliquen.)
a. Radio
b. Anuncio en el autobús o transportación pública
c. Volante o panfleto
d. Amigo o familiar
e. Otro: $\qquad$
22. ¿Recuerda haber escuchado leído o visto algún mensaje que dijera: "Lleve a su niño al dentista antes de su primer cumpleaños"?
a. Sí
b. No (Pase a la \#23)
23. ¿Dónde recuerda haber escuchado leído o visto el mensaje? (No lea la lista pero anote las respuestas. Marque todas las que se apliquen.)
a. Radio
b. Anuncio en el autobús o transportación pública
c. Volante o panfleto
d. Amigo o familiar
e. Otro: $\qquad$
24. ¿Recuerda haber escuchado leído o visto algún mensaje que dijera: "Gracias, mamá, por ayudarme a cepillarme los dientes"?
a. Sí
b. No (Pase a la \#25)
25. ¿Dónde recuerda haber escuchado leído o visto el mensaje? (No lea la lista pero anote las respuestas. Marque todas las que se apliquen.)
a. Radio
b. Anuncio en el autobús o transportación pública
c. Volante o panfleto
d. Amigo o familiar
e. Otro: $\qquad$
26. ¿Recuerda haber escuchado leído o visto algún mensaje que dijera: "La salud dental es importante para la salud en general"?
a. Sí
b. No (Pase a la \#27)
27. ¿Dónde recuerda haber escuchado leído o visto el mensaje? (No lea la lista pero anote las respuestas. Marque todas las que se apliquen.)
a. Radio
b. Anuncio en el autobús o transportación pública
c. Volante o panfleto
d. Amigo o familiar
e. Otro:
28. ¿Ha oído de Dientes sanos, Niños sanos alguna vez?
a. Sí
b. No (Pase a la \#27)
29. ¿Recuerda haber recibido un volante o panfleto sobre Dientes sanos, Niños sanos?
c. Sí (Pregunte: ¿Dónde recibió el volante o panfleto?)
d. No (Pase a la D1)
30. En una escala del o al 5 , donde 0 significa 'No ayudó nada' y 5 significa 'Ayudó muchísimo', ¿cuánto le ayudó la información en el volante o panfleto?
a. 0
b. 1
c. 2
d. 3
e. 4
f. 5
(Continúe: Solo tenemos algunas preguntas más. Estas preguntas son opcionales.)

D1. ¿Qué edad tiene usted?
a. 18-25
b. $26-34$
c. $35-49$
d. 50-64
e. 65 o más
f. Rehusó

D2. ¿Cuál es el nivel de educación más alto que usted ha alcanzado?
a. Menos de secundaria (High School)
b. Graduado de secundaria (High School)
c. Un poco de universidad o de formación técnica
d. Graduado o licenciatura universitaria
e. Un poco de posgraduado
f. Diploma de Posgrado
g. Rehusó

D3. ¿Cuántos niños tiene usted? (Anote la respuesta.)
D5. ¿Cuál es su país de origen? (Anote la respuesta)
Esas son todas las preguntas que tengo. Muchas gracias por su tiempo. Que tenga un buen día (o una buena tarde o noche). Si tiene alguna pregunta, puede comunicarse con la persona que aparece en el documento de Consentimiento Informado que le entregué.

