

**Evaluation of the Florida Quitline
Spanish Language and Prenatal
Smoking Cessation Campaigns**

May and June 2005

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Submitted by:

Christopher B. Sullivan, Ph.D.
Image Research
912 Shadowlawn Drive
Tallahassee, FL 32312
850-591-2821
sullivan@imageresearch.com
www.imageresearch.com

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Executive Summary

Introduction to the Smoking Cessation Media Campaigns

In May 2005, The Florida Department of Health, Division of Health Access and Tobacco, Tobacco Prevention Program conducted a smoking cessation media campaign targeting Spanish-speaking smokers in Miami, Orlando and Tampa. Prior media campaigns for the Florida Quitline have been conducted in English, bypassing numerous Hispanic households. The Spanish language media campaign conducted in May 2005 was aimed at a Hispanic language population, with advertising aired over popular Spanish language radio stations. The ad campaign ran for four weeks, from May 2 to May 29, 2005. The goal of the media campaign was to motivate Hispanic smokers to seek smoking cessation counseling from the Florida Quitline. During May 2005, 210 Hispanic smokers called the Florida Quitline - ten times the average number of calls in other months of the year.

In June 2005, the Florida Department of Health, Division of Health Access and Tobacco, Tobacco Prevention Program and the Maternal and Child Health Program, Division of Family Health Services conducted a smoking cessation media campaign targeting pregnant smokers. The goal of the media campaign was to motivate pregnant women who smoke cigarettes to seek smoking cessation counseling from the Florida Quitline. The campaign was originally targeted to pregnant women in nine counties in Florida with the highest percent of births to smokers, but the television and radio broadcast "footprints" cover 38 counties in Florida. In June 2005, a total of 60 pregnant women called the Florida Quitline, over ten times the average number of calls from pregnant women during the rest of 2005.

I. Target Audience of the Spanish Language Smoking Cessation Media Campaign

The campaign targeted Spanish speaking Floridians in Miami, Orlando and Tampa using Spanish language advertising over Spanish radio stations. The "footprints" of the three Spanish radio stations cover twenty counties surrounding these cities. The advertising reached more than 148,900 Spanish speaking Floridians in the Miami and Orlando DMA areas. The three Spanish language radio stations played 800 advertising spots between May 3 and May 29, 2005. During May 2005, 213 Hispanic callers contacted the Florida Quitline, ten times the average number in other months.

- The campaign was targeted to Hispanic smokers in three Designated Market Areas: Miami (three counties), Orlando (seven counties) and Tampa.(ten counties).
- There are 420,272 Hispanic smokers in the twenty counties of the Designated Market Areas.
- The campaign aired thirty second spots over three Spanish radio stations: WCMQ-FM in Miami, WRUM-FM in Orlando and WRMD-AM in Tampa.

- Advertising reached more than 148,900 Spanish speaking Floridians in the Miami and Orlando DMA areas.
- 87.7% of Hispanic callers in the Designated Market Areas cited radio as their source of information about the Quitline.
- The Spanish language media campaign cost \$340 per Hispanic smoker who called the Quitline.

Patterns of Calls to the Quitline During the 2005 Spanish Language Media Campaign

Calls to the Florida Quitline reached their highest annual volume in 2005, with a total of 4,493 calls. One contributing factor for the 2005 call volume is the Department of Health Spanish language smoking cessation media campaign conducted in May, 2005. During May, 2005:

- 213 Hispanic callers contacted the Florida Quitline, an increase ten times the average monthly call rate of 23.
- 98.6% of Hispanic smokers called the Quitline to personally quit smoking.
- 95.8% of all Quitline Calls from Hispanic smokers came from the three Designated Market Areas.
- 60.1% of Quitline calls in the target Designated Market Areas were made by Hispanic smokers, compared to their 6.2% average monthly call rate during the rest of 2005. ‘
- 75.7% of Hispanic callers were in the 25 to 54 targeted age group.
- More Hispanic men, 57.9%, called the Quitline than women, 41%.
- 114 of the Hispanic callers lived with children under 18 in the household, for a total of 211 children at risk of second hand smoke.
- 66% of Hispanic smokers calling the Quitline requested smoking cessation counseling.

II. Target Audience of the Prenatal Smoking Cessation Media Campaign

The prenatal smoking cessation media campaign chose its target populations based on the prevalence of smoking among pregnant women in many of Florida’s counties. The original nine counties targeted for the campaign included another 29 counties included in the broadcast “footprints.” The television advertising reached 510,747 women and radio advertising reached 253,651 adults in the targeted counties. In June of 2005, 92% of all pregnant women calling the Quitline came from Florida counties in the targeted areas.

- There are an estimated 582,334 women smokers in the 38 target counties.
- There were 8,151 smoking births per year in 2001-2003, which amounted to 11.9% of the 68,485 births in the 38 target counties

- Radio stations aired 2,830 60-second spots versus 2,038 30-second spots for television stations.
- The media buyer estimated that the television advertising reached 510,747 women across the 38 counties.
- In June of 2005, 92% of all pregnant women called the Quitline came from one of the Designated Market Areas.
- 61% of all calls to the Quitline came from the five Designated Market Areas.
- The media campaign cost \$704 per person calling the Quitline in June 2005 from one of the Designated Market Areas.

Patterns of Calls to the Quitline During the 2005 Prenatal Media Campaign

Calls to the Florida Quitline reached their highest annual volume in 2005, almost twice as many calls in June as the average number of calls per month in all of 2005. The prenatal media campaign in that month appears to be the catalyst for many of the calls.

- 625 people called the Quitline in June, 2005, compared to an average of 351 per month over the rest of 2005.
- 60 pregnant women called the Quitline, seven times more than the average number of pregnant women calling per month in 2005.
- 78.6% of the pregnant women called from one of the Designated Market Areas.
- 97.5% of all pregnant women calling the Quitline wanted to personally quit smoking.
- 51.1% of pregnant women calling the Quitline from the Designated Market Areas had children under 18 in the household, for a total of 37 children. These children have a chance to avoid the risk of second hand smoke if their mother quits smoking.
- 41.8% of all Quitline calls from the Designated Market Areas came from the targeted 18-34 age group.
- 8.5% of pregnant women calling the Quitline from the Designated Market Areas cite the radio as their source of their knowledge about the Quitline.
- 78.7% of pregnant women calling the Quitline from the Designated Market Areas cite television as their source of their knowledge about the Quitline and 70% could remember the television ad well enough to describe it.
- 79.6% of all pregnant women calling the Quitline from the Designated Market Areas requested counseling to quit smoking.

Evaluation of the Florida Quitline Spanish Language and Prenatal Smoking Cessation Campaigns, May and June 2005

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Evaluation of the Florida Quitline Spanish Language and Prenatal Smoking Cessation Campaigns, May and June 2005

I. Spanish Language Smoking Cessation Media Campaign

The Florida Department of Health, Division of Health Access and Tobacco, Tobacco Prevention Program conducted a smoking cessation media campaign targeting Spanish speaking smokers in May 2005. The goal of the media campaign was to motivate Hispanic smokers to seek smoking cessation counseling from the Florida Quitline.

The campaign targeted Spanish speaking Floridians (operationally identified with Hispanic) in three cities in Florida, using Spanish language advertising over Spanish radio stations: in Miami over WCMQ-FM, Orlando over WRUM-FM and Tampa over WRMD-AM . The footprints of the three Spanish radio stations cover twenty counties surrounding these cities, in what are known as Designated Market Areas (DMAs). The analysis therefore counts all Hispanic listeners in each DMA as potentially being among the targeted audience. Indeed, the majority of Hispanic callers in May 2005 called from one of the targeted counties.

According to the media buyer, the advertising reached more than 148,900 Spanish speaking Floridians in the Miami and Orlando DMA areas, for an overall media reach of 23% of the target audiences. There were no recorded numbers for population reached in the Tampa DMA. The three Spanish language radio stations played 800 advertising spots between May 3 and May 29, 2005, for a total cost of \$68,060. During May 2005, 213 Hispanic callers contacted the Florida Quitline., an increase of 7.6 times as many Hispanic callers from the Miami DMA and over 14 times as many Hispanic callers in the Tampa and Orlando DMAs as normally call the Quitline.

Target Audience of the Spanish Language Media Campaign

Table 1.1 identifies the Hispanic population in the three DMAs and presents data on smoking prevalence among this population. The Spanish language smoking cessation media campaign was initiated to target a disadvantaged population of smokers in Florida, those who spoke Spanish., identified in general as Hispanic. The three populations of Spanish speaking Floridians in Miami, Tampa and Orlando do not necessarily comprise the same ethnic or national backgrounds. However, a large number of people called the Quitline during May 2005 who identified themselves as Hispanic.

Census data for target populations come from the 2000 US Census,¹ the Florida Legislature and the Office of Economic and Demographic Research, estimating conference, updated 4/2004.² Information on the smoking prevalence of ethnic groups comes from the Department of Health CHARTS database and the 2002 Behavioral Risk Factor Surveillance Survey.³

¹ US Census (2000). Retrieved on June 3, 2004 from <http://www.census.gov/census2000/states/fl.html>.

² Florida Legislature, Office of Economic and Demographic Research (2004). Retrieved on July 2, 2004 from <http://www.state.fl.us/edr/>

³ Behavioral Risk Factor Surveillance Survey (2002). Retrieved on May 17, 2004 from <http://www.floridacharts.com/charts/chart.aspx>.

Table 1.1 Hispanic Smoking Populations in the Florida Quitline Spanish Language Smoking Cessation DMA Target Counties

Target DMA County	Total Population Florida 2000	Smoking Prevalence	Total Smokers	Total Hispanic Population 2004	Total Hispanic Smoking Prevalence 2002	Total Estimated Hispanic Smoking Population
State Total	15,982,824	22.3%	7,165,385	2,682,715	19.5	523,129
Miami DMA						
Broward	1,623,018	22.3%	361,529	271,652	13.5%	36,673
Miami-Dade	2,253,779	22.3%	502,094	1,291,737	20.6%	266,098
Monroe	79,589	22.5%	17,899	12,553	23.9%	3,000
Total Miami DMA	3,956,386	22.3%	881,522	1,575,942	19.3%	304,682
Orlando DMA						
Brevard	476,230	22.3%	106,225	21,970		
Flagler	49,832	22.3%	11,093	268		
Lake	210,527	22.3%	46,907	42,042		
Orange	896,344	22.3%	200,141	168,361	22.2%	37,376
Osceola	172,493	22.3%	38,500	50,727	18.8%	9,537
Seminole	365,199	22.3%	81,458	40,731	5.6%	2,281
Sumter	53,345	22.5%	11,993	3,356		
Total Orlando DMA	2,223,970	22.3%	496,317	299,490	15.5%	49,194
Tampa DMA						
Citrus	118,085	22.3%	26,291	3,141		
Hardee	26,938	22.5%	6,071	9,611	17.0%	1,634
Hernando	130,802	22.2%	29,094	6,587		
Highlands	87,366	22.3%	19,480	10,542		
Hillsborough	998,948	22.3%	222,805	179,692	21.4%	38,454
Manatee	264,002	22.3%	58,813	24,540		
Pasco	344,768	22.3%	76,756	19,603	21.8%	4,273
Pinellas	921,495	22.2%	205,017	42,760		
Polk	483,924	22.3%	107,959	45,933	45.6%	20,945
Sarasota	325,961	22.2%	72,484	14,142		
Total Tampa DMA	3,702,289	22.3%	824,770	356,551	26.5%	65,307
Total from the DMA Target Counties	9,882,645	22.3%	2,202,610	2,231,983	21.0%	420,272
Total from the Rest of Florida Counties	6,100,179	22.3%	4,962,775	450,732	20.4%	102,858

The three Designated Market Areas selected for the advertising campaign include a large number of Hispanics in the target areas, a total of 2,231,983 people in 20 counties. The Miami DMA, comprised of only Broward, **Miami-Dade** and Monroe Counties has the fewest counties, but the largest population in the state, with a total of 3,956,386 people, according to the 2000 US Census. There are 1,575,942 Hispanics in the three counties that make up the Miami DMA. The smoking prevalence of Hispanics in these three counties averages 19.3%, with an estimated Hispanic smoking audience of 304,682 in the Miami DMA, as shown in Table 1.

The Orlando DMA includes seven counties: Flagler, Volusia, Lake, Seminole, **Orange**, Osceola and Brevard. Orlando is in Orange county. There are 2,223,970 people in these seven counties of whom 496,317 are of Hispanic origin. The estimated smoking prevalence among Hispanic smokers fluctuates between 5.6% and 22.2%, with an average of 12.2% for the reporting counties. There are an estimated 49,194 Hispanic smokers in the Orlando DMA.

The Tampa/St. Petersburg DMA consists of ten counties: Citrus, Hardee, Hernando, Highlands, **Hillsborough**, Manatee, Pasco, Pinellas, Polk and Sarasota. Tampa is in Hillsborough county. The Tampa DMA population consists of 3,702,289 people, with 824,770 residents of Hispanic origin. The smoking prevalence among Hispanic smokers averages a high level at 26.5%. There are an estimated 65,307 Hispanic smokers in the Tampa/St. Petersburg DMA.

Spanish Language Smoking Cessation Media Campaign Goals

There is a large Hispanic smoking population in Florida, but prior media campaigns for the Florida Quitline have been conducted in English, bypassing many Hispanic households. The Spanish language media campaign conducted in May 2005 was aimed at a Hispanic language population, with advertising aired over popular Spanish language radio stations in Miami, Orlando and Tampa. The ad campaign ran for four weeks, from May 2 to May 29, 2005. The media campaign targeted Spanish speaking Floridians between the ages of 25 and 55. The purpose of the advertising was to encourage Hispanic adults in Florida who smoke and want to quit to call the Quitline; and to explain that the Quitline is a toll-free telephone-based tobacco cessation service.

The radio ads consisted of a sixty-second spots that played out a scenario of quitting smoking, suggested the Florida Quitline and provided the Quitline telephone number. The goal of the media campaign was to inform and motivate the target audience to call the Quitline. The ads must provide enough information to members of the attending audience that they remember the basic message in the ad. The ad message should offer an emotional appeal that moves the viewer to action; this is the motivational appeal. The final element of a successful ad is to give the audience a behavioral step, which offers a pathway to resolution, for example a number to call. In the case of the smoking cessation campaign, the number was to the Florida Quitline.

The goals of this analysis are threefold. The first goal is to assess whether the media campaign reached its targeted Hispanic audience in each county by analyzing the demographic characteristics of Floridians who call the Quitline during that period of the media campaign. The second goal is to determine whether the media campaign was successful in motivating members of the target audiences to call the Florida Quitline. The third goal is to assess the effectiveness of the media campaign in supporting the overall Florida Quitline goals of increasing smoking cessation, reducing second-hand smoke and reducing tobacco use in the general population. The expected outcome of the media campaign was for Spanish-speaking smokers to call the Florida Quitline for counseling in smoking cessation. The major source of

measurement for the outcome of calls is from the American Cancer Society intake surveys, delivered to every person who calls the Florida Quitline.

Media Strategy for the Spanish Language Smoking Cessation Media Campaign

The media buying company for the media campaign focused on Spanish radio advertising as the primary medium for its Spanish language smoking cessation message. In the Orlando DMA it used WRUM-FM, a Clear Channel station. The music style is Spanish Tropical Format radio, with an audience between 25 and 54. WRUM-FM aired 202 advertising spots between May 3 and May 29, 2005. The estimated target audience for the radio station was 92,500, with an estimated net reach of 32,300 people, or 35% of the Hispanic target population. The total cost for the advertising was \$18,300, for a cost per person estimated at \$24.93.

The Miami DMA advertising spots were aired over WCMQ-FM, a Spanish Broadcasting Systems radio station. Its format is Spanish Classic Hits 70s & 80s, with an audience profile of 25 to 54. Between May 5 and May 29, 2005, the station aired 88 spots, at a total cost of \$24,800. The station reaches an estimated 554,100 Spanish language speakers, and it is estimated that the spots reached 116,600 for a cost of \$95.11 per person.

The radio station for the Tampa/St. Petersburg DMA was WRMD-AM, located in St. Petersburg. This station belongs to the ZGS Broadcasting Group, and plays a Spanish Tropical format to an age group from 25 to 54. WRMD-AM aired 510 advertising spots between May 3 and May 29, 2005, for a total cost of \$24,800. Because it is an AM station, no record was kept of its target audience reach.

Methodology for Evaluating the Media Campaign

The methodology for evaluating the Spanish language smoking cessation campaign in May 2005 is based on two datasets, an input dataset that summarizes the important elements of the advertising campaign and an output dataset based on the ACS intake survey which collects demographic data on the target audience taking calling the Quitline. The first is composed of the data provided by the media buyer concerning media play during the campaign. These data include only the target audiences for each DMA in the campaign, the total number of ads broadcast during the campaign, the target audience reach of radio ads in two of DMAs and the total and per capita cost of the campaign.

The second dataset provides measures for assessing the behavior of the target audiences based on the American Cancer Society Quitline intake survey that is administered to each client who calls the Quitline number prior to setting up a counseling session. Quitline intake survey data for the entire twelve months of 2005 are used to provide a comparison of the calling patterns during the media campaign versus all other months of the year. Data categories include demographic data, service data related to the Quitline, personal and social data, communication-related data, and behavioral data relevant to smoking and smoking cessation. This study uses data fields from a subset of the data categories:

- a) Demographic data: Gender, Age, Ethnicity, Florida County of Caller.
- b) Personal and Social data: Pregnant Caller, Number of Children in Household, and Children Under 18 in Household.

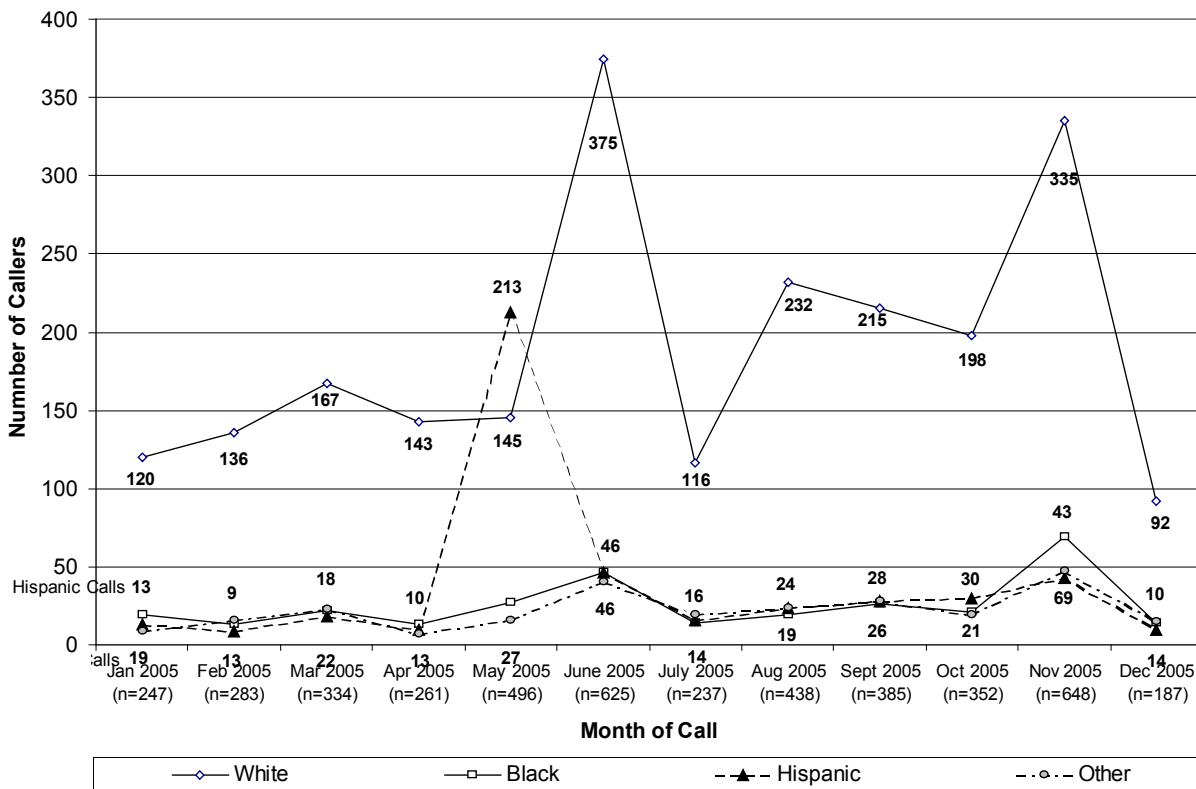
- c) Service data related to the Quitline: Reason for Call, Service Requested by Client.
- d) Communication-related data: How Client Heard About the Quitline

Other sets of data from the 2000 US Census and the 2002 Florida Behavioral Risk Factor Surveillance Survey (BRFSS) are used as a background to the study.

Patterns of Calls to the Quitline During the 2005 Prenatal Media Campaign

Calls to the Florida Quitline reached their highest annual volume in 2005, with a total of 4,493 calls. The average number of calls in 2005 was 374.4 per month, 151 more calls per month on average than monthly calls in the first three years of the Quitline, 2002-2004. One explanation for the 2005 call volume is that the Department of Health conducted several smoking cessation media campaigns in May and June. Also, media publicity about the Great American Smokeout in November appears to have precipitated a greater number of calls than normal. A display of the monthly call volume in 2005 is shown in Figure 1.1 which compares the number of calls per month by the ethnicity of the caller.

Figure 1.1 Comparison of 2005 Quitline Calls by Ethnicity



In Figure 1.1 it is clear that, in terms of numbers, there are two groups of people who call the Quitline: White callers and everyone else. White callers average 189 calls per month for the entire year, while Blacks average only 25 and Hispanics average 38. (but only 23 per month if calls in May 2005 are not included in the average). The Other category, made up of Asians, American Indians and Native Americans and Other designations, average 22 calls per month. Looking at the chart it is obvious that something motivated Hispanic callers to call the Quitline in

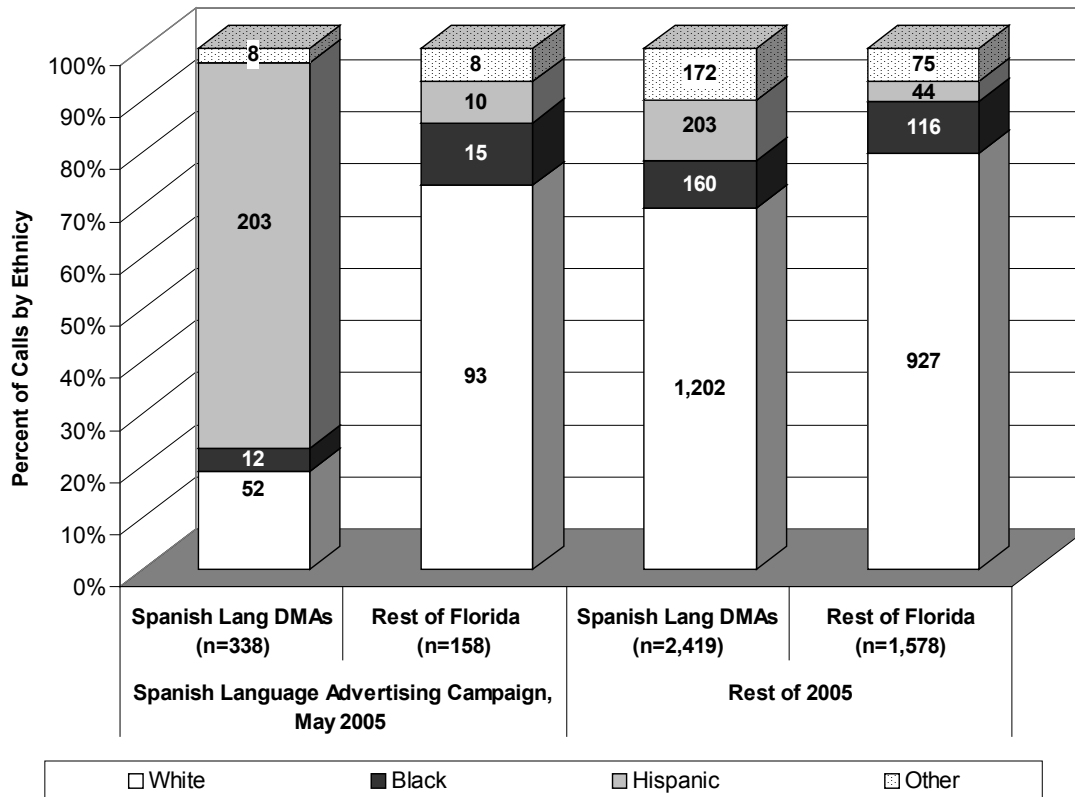
May 2005. From an average of 23 for all other months of 2005, the number of calls from Hispanics jumped to 213 in May 2005, the same month as the Spanish language advertising campaign.

Table 1.2 Number and Percentage of Calls to Quit Smoking, by Ethnicity and Time of Year

Personally Quitting	Ethnicity							
	White		Black		Hispanic		Other Ethnicity	
	n	%	n	%	n	%	n	%
May 2005 Spanish Ad	134	92.4%	25	92.6%	210	98.6%	14	87.5%
Average Calls per Month, Rest of 2005	177	91.7%	24	96.4%	20	90.7%	21	95.1%
Total Calls for Year	2,086	91.7%	291	96.0%	434	94.3%	249	94.7%

Almost all of the Hispanic callers in May 2005, 98.6% of them, called to personally quit smoking, as shown in Table 1.2. This is somewhat higher than the 90.7% of Hispanics who called to quit smoking during the rest of the year. It is also of interest to note the difference in the number of Hispanics calling in May to quit smoking, 210, which is ten times the average number of 20 calls monthly. A lower percentage of White callers, 92.4% and Black callers, 92.6% called to quit smoking in May 2005, and those percentages remain fairly similar during the entire year.

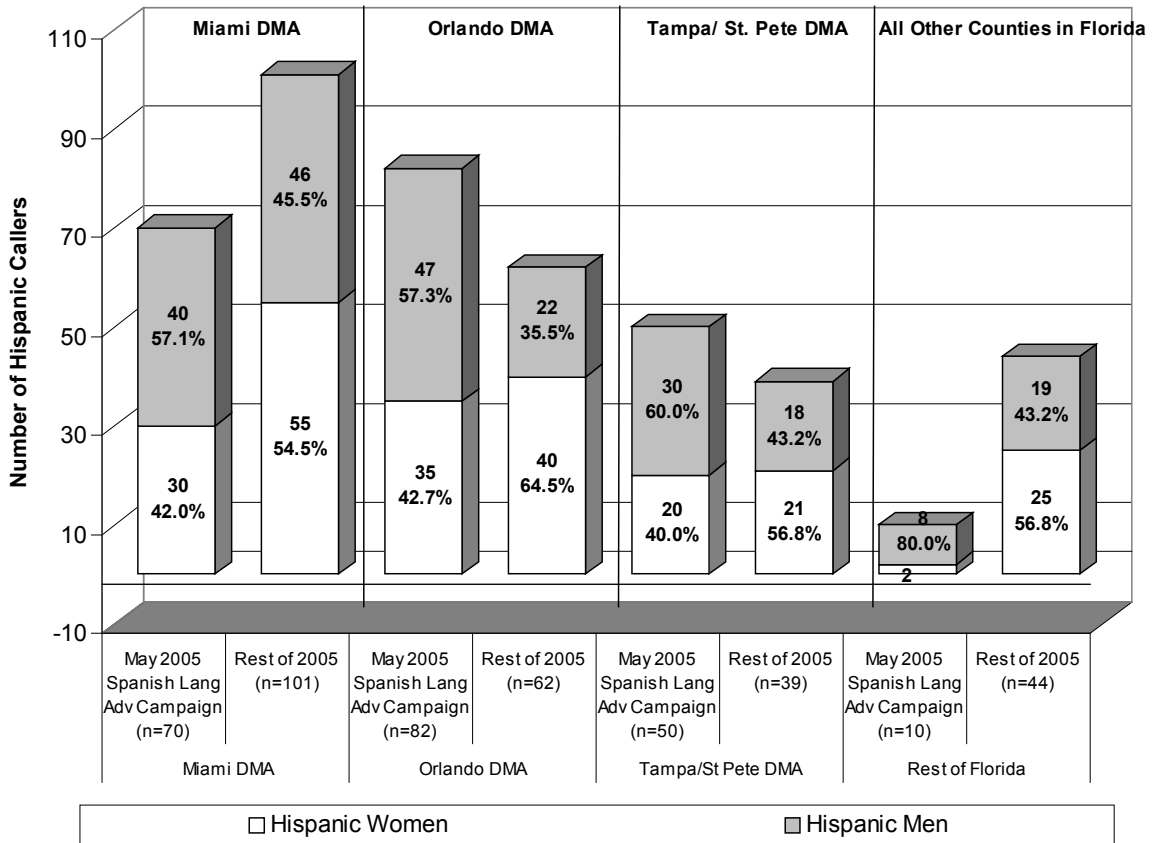
Figure 1.2 Comparison of Quitline Calls from the DMA Target Counties and from the Rest of Florida During the Rest of 2005



Comparing calls from the three target DMAs and the rest of Florida, as shown in Figure 2.1, it is clear that during the Spanish language campaign in May 2005, the overwhelming majority of Quitline calls were placed by Hispanic callers. In May, in the target county DMAs, 203 (60.1%) of the Quitline calls were made by Hispanics, compared to a Quitline calling average of 6.2% for Hispanics across Florida during the rest of 2005. The number of Hispanic calls in these months shows a proportionately larger volume of Quitline calls coming from the target county DMAs, 203 – the same number of calls as in May.

The columns representing calls to the Quitline from all ethnic groups during the eleven months outside of May 2005 show the typical proportion of Quitline calls, with White callers taking up the major percentage at 53.3% of calls, followed by Black callers with 6.9% of calls and both Hispanic and Other callers with 6.2% of calls. From the evidence of Figure 1.2, the Spanish language media campaign appears to have reached its intended Hispanic audience – and motivated it to call the Quitline – during the Spanish language campaign month of May 2005. The larger number of calls from the target county DMAs reflects the higher population of Florida residents in these counties.

Figure 1.3 Comparison of Quitline Calls from Hispanic Men and Women in the DMA Target Counties and from the Rest of Florida During the Rest of 2005

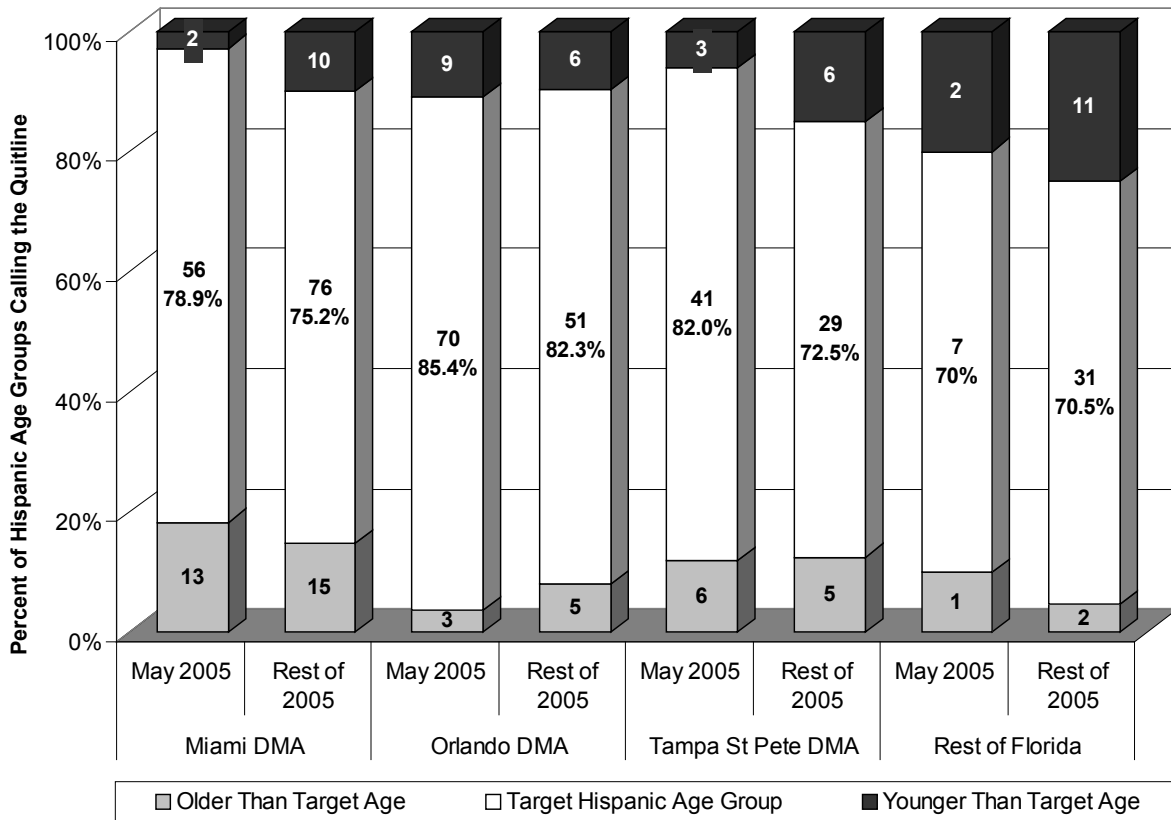


If we compare the distribution of calls from Hispanic men and women, from the target county DMAs and from the rest of Florida, as shown in Figure 1.3, it can be seen that more Hispanic men called the Quitline in May 2005 than Hispanic women. This call volume reverses the typical proportion of calls, in which a majority of calls are from women, which can be seen in the

Quitline call volumes from the rest of 2005, in all counties of Florida. During May 2005, men accounted for 57.1% of all Hispanic Quitline calls in the Miami DMA. This can be compared to the 57.3% and 60% of Hispanic calls coming from the Orlando and Tampa/St. Pete DMAs. These percentages are more likely to reflect the number of women calling the Quitline, which shows up during the rest of 2005.

During the Spanish language media campaign in May, only one pregnant Hispanic woman from the Orlando DMA called the Quitline.

Figure 1.4 Hispanic Calls to the Quitline by Target Age Group, in the DMA Target Counties and From the Rest of Florida During the Rest of 2005

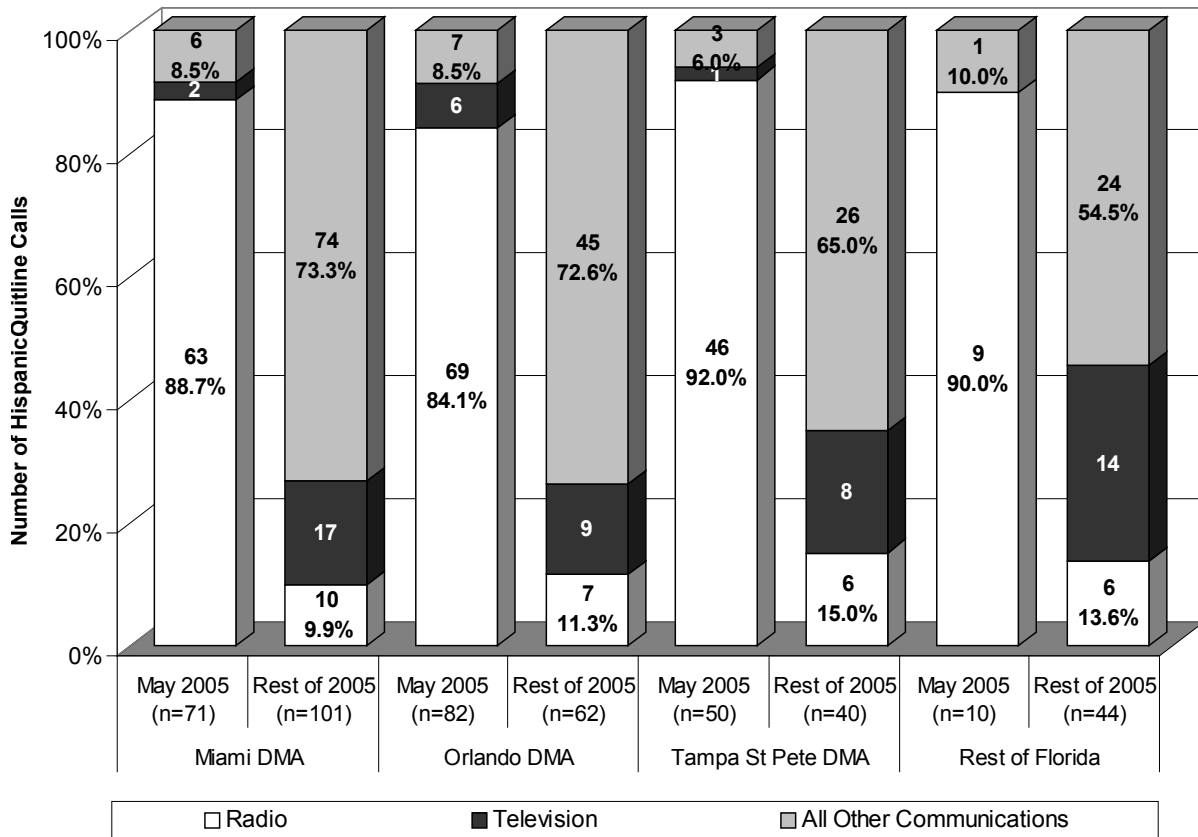


The three radio stations that aired the smoking cessation spots all played to an audience of 25 to 54 year olds, which accord with the age group targeted by the media campaign. Figure 1.4 presents a breakdown of Hispanic callers by age group, comparing the 25-54 target age group with those who are under 25 and older than 54. It is clear that the majority of Hispanic callers fall within the target age group, ranging from 78.9% of callers in the Miami DMA to 85.4% in the Orlando DMA. It is interesting to note that these high percentages of age groups are consistent in the non-targeted counties and in the rest of 2005. From the evidence of this chart, it appears that the media campaign did accurately reach the target age group.

The Spanish language advertising campaign was carried solely over radio stations. When Hispanic callers were asked to identify how they heard about the Florida Quitline when they called during May 2005, a successful indicator of the media campaign would be if they identified radio as a prime source. This is precisely the case, as can be seen in Figure 1.5, which shows

the source of information about the Quitline for Hispanic callers during May 2005, and the rest of 2005, in both the target county DMAs and the rest of Florida. It is clear that in May 2005 the majority of Hispanic callers identify radio as how they heard about the Quitline. In the Miami DMA, 88.7% of Hispanic callers cite radio, in between the 84.1% of callers citing radio in the Orlando DMA and 92.0% in the Tampa DMA.

Figure 1.5 Comparison of How Hispanic Callers Heard About the Quitline During May 2005 and the rest of the year, in the Target DMAs and the Rest of Florida



The patterns that appear in the rest of 2005 are more typical of how callers hear about the Quitline, for Hispanics and all other ethnic groups. Radio as an information source is cited only between 10% and 15% of the time for Hispanics, compared to a larger proportion of television citations, about 30%, and other forms of communications account for about 60% of citations. Most callers during the year cite information from a medical professional as the primary source of information about the Quitline. This is followed by citations for other sources of information, television, print, then radio. Significantly, radio is cited as the primary source of information about the Quitline by nine out of ten Hispanic callers in May 2005. This strongly suggests that the Spanish language smoking cessation advertising was successful in motivating Hispanic smokers to call the Florida Quitline.

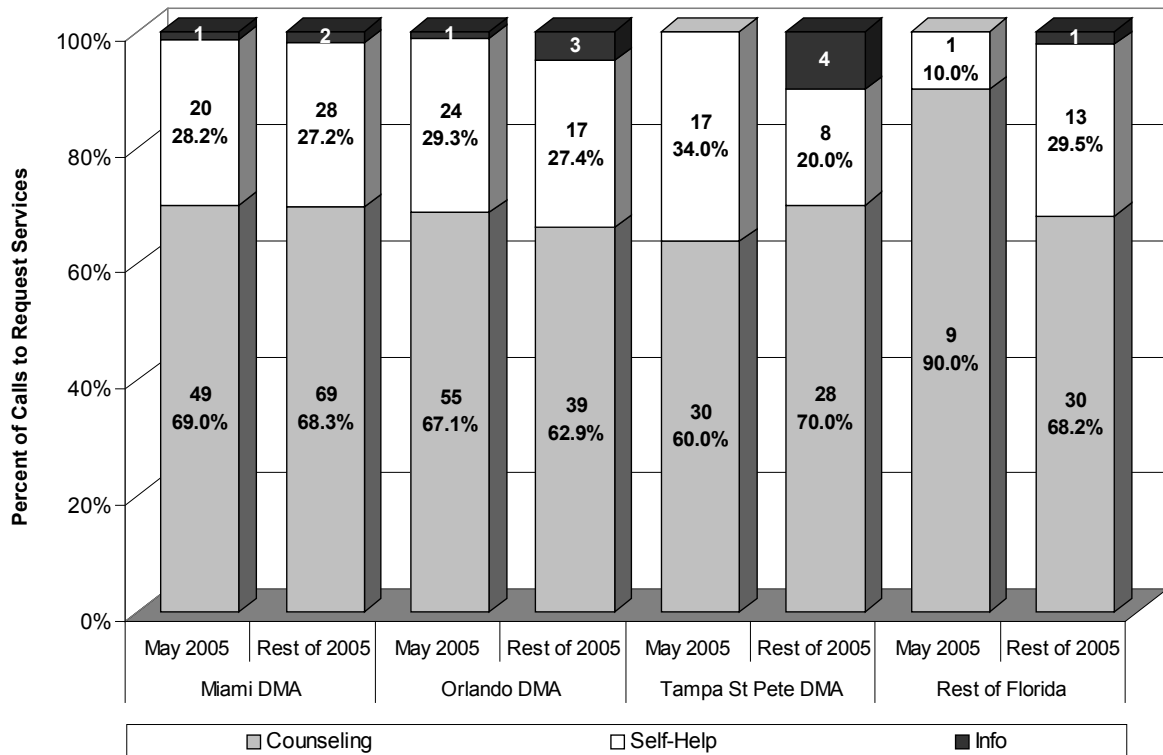
While the major goal of the Spanish language advertising campaign was to promote smoking cessation, a second goal of the Quitline is to reduce the incidence of second-hand smoke. In Table 1.4 the number of Hispanic callers with children under 18 is compared to the total number of children in the callers' households, the average number of children per household, the

average number of cigarettes smoked and the average age of the caller. In May 2005, 114 Hispanic callers from the three target DMAs indicated that they had children in the house, with an average of 1.9 children per household and a total of 211 children. This represents the children at risk of second hand smoke in these homes. The average number of cigarettes smoked by callers was 18, almost a pack a day, and their average age was 40. About 60% of Hispanic callers were male. During the rest of 2005, there were only 73 Hispanic callers with children under 18, for a total of 135 at-risk children .

Table 1.4 Children Under 18 in Households of Hispanic Clients by Cigarettes Smoked and Average Age of Client in the Target County DMAs and the Rest of Florida

	Location of Hispanic Calls to the Quitline	Children Under 18 in Household	Total Number of Children	Average Number of Children in Household	Average Number of Cigarettes Smoked per Day	Average Age of Hispanic Clients
May 2005	Spanish Language Target DMAs	114	211	1.9	18.1	40.4
	Rest of Florida	6	13	2.2	19.8	36.9
Rest of 2005	Spanish Language Target DMAs	73	135	1.4	15.4	40.3
	Rest of Florida	20	33	1.4	15.0	34.1

Figure 1.6 Comparison of Services Requested by Hispanic Clients During May 2005 and the rest of the year, in the Target County DMAs and the Rest of Florida



Evaluation of the 2005 Florida Quitline Smoking Cessation Media Campaigns

When Hispanic callers telephoned the Quitline in May of 2005, the majority in the target DMAs asked for counseling to quit smoking - between 60% and 69% as shown in Figure 1.6. This percentage of Hispanics requesting counseling is fairly consistent with the number requesting counseling during the rest of the year, which runs at a similar percentage. In comparison, 68% of Hispanics also requested counseling in the rest of Florida. This proportion of callers requesting counseling is similar for the other ethnic groups calling the Florida Quitline through the year.

Table 1.5 Cost and Reach of the Spanish Language Media Campaign in May 2005

County in DMA	Hispanic Smokers	May 2005	Rest of 2005	Cost of Radio Ads	Cost per Hispanic Client Calling the Quitline
Miami DMA					
Broward	36,673	10	13		
Miami-Dade	266,098	61	87		
Monroe	3,000	0	1		
Total Miami DMA	304,682	71	101	\$24,800	\$349.30
Orlando DMA					
Brevard		1	5		
Flagler		0	0		
Lake		1	0		
Orange	37,376	58	32		
Osceola	9,537	16	15		
Seminole	2,281	4	6		
Sumter		0	0		
Total Orlando DMA	49,194	80	58	\$18,300	\$228.75
Tampa DMA					
Citrus		0	0		
Hardee	1,634	0	0		
Hernando		0	1		
Highlands		1	1		
Hillsborough	38,454	33	20		
Manatee		1	0		
Pasco	4,273	2	3		
Pinellas		4	7		
Polk	20,945	8	5		
Sarasota		0	0		
Total Tampa DMA	65,307	49	37	\$24,800	\$506.12

The cost per Hispanic person reached during the Spanish language is shown in Table 1.5. The least cost per caller was in the Orlando DMA, which had a cost of \$229 per person and the most number of Hispanic callers during May 2005, at 80. The Miami DMA was more expensive, at \$349 per person and 71 Hispanic callers in May. The Tampa DMA was the most expensive at \$506 per person, with only 49 Hispanic callers to the Quitline. The total average cost per Hispanic caller was \$340 for the media campaign.

Conclusions from Spanish Language Media Campaign

From the data presented in the analysis of calls to the Florida Quitline during May 2005, it is clear that the Spanish language smoking cessation campaign successfully communicated its motivating message to Hispanic smokers in Florida. During May 2005, 213 Hispanic callers contacted the Florida Quitline, an increase ten times the average monthly call rate of 20 for the other months of 2005. Of these 213, 210, or 98.6% of the Hispanic smokers called the Quitline to personally quit smoking. This percentage is higher than any other ethnic group, and higher than Hispanic calls during the rest of the year.

In May 2005, the majority of Quitline calls from Hispanic smokers, 95.8%, came from the three DMAs in which the Spanish language media campaign aired smoking cessation ads. Hispanic callers further accounted for 60.1% of all Quitline calls from the DMAs in May. This is ten times the average monthly call rate of 6.2% that prevails during the rest of the year. Three quarters, or 75.7%, of all Hispanic calls were from smokers in the 25 to 54 target age range of the campaign. When Hispanic smokers were asked what service they would like, 66% requested smoking cessation counseling, which is the most beneficial service to help a smoker quit. The Hispanic callers not only helped themselves, but their children, because 114 of the Hispanic callers lived with children under 18 in the household, for a total of 211 children at risk of second hand smoke. Having their parent(s) quit smoking is the most effective way to reduce their risk.

From the high numbers of Hispanic smokers calling the Quitline during May 2005, the month of the Spanish language media campaign, it seems clear that the media campaign was successful in communicating the fact of the Florida Quitline and motivating Hispanic smokers to call the Quitline telephone number. The very high numbers of Hispanic smokers who called to quit smoking and their interest in counseling point to a smoking population that wants to quit smoking and acted on the opportunity to get help. Of interest is to note that the high call volume during the media campaign lasted only as long as the advertising spots aired. Once the media presence disappeared, so to did the call volume. One conclusion may be that to maintain high Quitline call volumes, smoking cessation campaigns must be aired frequently.

II. Prenatal Smoking Cessation Media Campaign

The Florida Department of Health, Division of Health Access and Tobacco, Tobacco Prevention Program and the Maternal and Child Health Program, Division of Family Health Services conducted a smoking cessation media campaign targeting pregnant smokers in June 2005. The goal of the media campaign was to motivate pregnant women who smoke cigarettes to seek smoking cessation counseling from the Florida Quitline. The campaign was targeted to pregnant women in nine counties in Florida with the highest percent of births to smokers, using television and radio broadcasts. Because the footprints of these two broadcast media covers more than the nine targeted counties, the media campaign message was actually delivered to 38 counties along the Gulf Coast of Florida.

Based on statistics compiled by Anson-Stoner Media Buying Services, the television advertising reached 510,747 women across the 38 counties⁴ with a total of 2,038 30-second spots and 265 ten second promotional spots. Radio advertising was projected to reach 253,651 adults in the targeted counties. There was a total of 2,830 60-second spots, and 294 ten second promotional spots. During June 2005, a total of 60 pregnant women called the Florida Quitline, compared to an average of nine pregnant callers during the rest of 2005. In June of 2005, 92% of all pregnant women calling the Quitline came from Florida counties in the targeted areas.

Target Audience of the Media Campaign

The prenatal smoking cessation media campaign was initiated based on the high prevalence of smoking among pregnant women in many of Florida's counties. Nine counties were originally targeted due to the relatively large percentage of female smokers who were giving birth. These counties are predominantly rural, are all on the Gulf Coast of Florida and include Dixie, Holmes, Franklin, Citrus, Gulf, Walton, Wakulla, Calhoun, and Charlotte. In each of the counties, between 22.2% and 28.8% of new mothers were smokers, compared to a prevalence rate of 20.2% for women in Florida. It should be noted that seven of the nine counties have relatively small populations, and thus have fewer smoking births. Gulf County, for example, had 113 births and 26 smoking births per year in the 2001-2003 period, with a smoking percentage of 23.0%. The county immediately to the west, Bay County, had 1,987 births with 413 smoking births per year in the same period, for a percentage of 21.2%. Bay County is below the cut-off for targeting, but has 16 times more pregnant smokers giving birth. Each of the target counties is listed below in Table 2.1, with the number and percent of smoking births between 2001 and 2003.⁵ Women included in the target audience were between 18 and 34.

⁴ Anson-Stoner Media Buying Services (2005). Department of Health Request for Proposal (RFP) for Media Buying Services RFP DOH 04-165, Media Buying Report.

⁵ Anson-Stoner Media Buying Services (2005). Department of Health Request for Proposal (RFP) for Media Buying Services RFP DOH 04-165, Media Buying Report. Appendix A. Citing: Florida Department of Health, Office of Vital Statistics, <http://www.floridacharts.com/charts/Domain2.aspx?Domain='03'>.

Table 1. Florida County Breakdown of Women Who Smoke During Pregnancy 2001-2003, Ranked by Percent of Smoking Births per year

County	Total Births per year	Smoking Births per year	Percent Smoking Births
Dixie	163	47	28.8%
Holmes	223	56	25.1%
Franklin	105	25	23.8%
Citrus	862	201	23.3%
Gulf	113	26	23.0%
Walton	493	112	22.7%
Wakulla	285	64	22.5%
Calhoun	147	33	22.4%
Charlotte	1,026	228	22.2%
Total	3,417	792	23.2%

The media buying company employed by the Department of Health, Anson Stoner, proposed a way to increase the number of pregnant women targeted in the media campaign, by using the broadcast “footprint” surrounding each county to reach women in adjacent counties. The Designated Market Areas (DMA) in Florida map out media coverage areas in the state based around major metropolitan areas. By taking advantage of the DMAs that cover the nine target counties, Anson Stoner was able to increase the target area by another 29 counties, for a total of 38 Florida counties. A map of the DMA coverage area is shown in Figure 2.1, below, covering most of the Gulf Coast counties in Florida.⁶

The media buying plan purchased programming on radio and television stations in Fort Myers, Gainesville, Panama City, Tallahassee and Tampa–St. Petersburg to provide coverage across the 38 counties. Each of these metropolitan areas included one or more target counties, plus a number of other surrounding counties.

The Fort Myers DMA includes **Charlotte**, Collier, DeSoto, Glades, Hendry and Lee counties, with an estimated population of 85,540 women ages 18 to 34. In this group of counties there were 11,296 births per year in 2001-2003, of which 1,228 were smoking births, for a smoking percentage of 10.9% among new mothers.

⁶ Anson-Stoner Media Buying Services (2005). Department of Health Request for Proposal (RFP) for Media Buying Services RFP DOH 04-165, Media Buying Report. Appendix A.

Figure 2.1 Designated Market Areas Covering Thirty-eight Counties in the Prenatal Smoking Cessation Media Campaign



The Gainesville DMA includes Alachua, **Dixie**, Gilchrist and Levy counties, with an estimated population of 45,100 women between the ages of 18 and 34. In these counties there were 3,192 births per year in 2001-2003, of which 366 were smoking births, for a smoking percentage of 11.5% among new mothers.

The Panama City DMA includes Bay, **Calhoun**, **Franklin**, **Gulf**, **Holmes**, Jackson, Liberty, **Walton** and Washington counties. Note that this group includes over half of the original target counties, all of which are predominantly rural. There is an estimated population of 33,327 women between 18 and 34 in this DMA, with a total of 3,899 births per year in 2001-2003. Of these births, 813 were to mothers who smoked, for a percentage of 20.9%, the highest in any of the DMAs.

The Tallahassee DMA is comprised of nine counties: Gadsden, Hamilton, Jefferson, Lafayette, Leon, Madison, Suwannee, Taylor and **Wakulla**. There are an estimated 86,062 women

between 18 and 34 in these nine counties, and there were a total of 5,333 births per year in 2001-2003. Of all births, 533 were to women smokers, for a prevalence rate of 10.5% births to smokers.

The Tampa/St. Petersburg DMA covers ten counties in its area: **Citrus**, Hardee, Hernando, Highlands, Hillsborough, Manatee, Pasco, Pinellas, Polk and Sarasota. This area had the largest population of women between 18 and 34, at 612,017. There was a total of 44,765 births per year in 2001-2003, with 5,184 of the new mothers also smoking, for a percentage rate of 11.6%.

In all, the number of births in the 38 county area totaled 67,656 per year during the 2001-2003 period, with 8,372 of them smoking births. The percentage of pregnant smokers in this 38 county area was 12.4%. This increased the potential media coverage to pregnant smokers by about ten times as many women as in the original nine county area. It should also be noted that Figure 1 shows media overlap in Marion and Sumter Counties, which could also increase the number of calls from those counties.

Prenatal Smoking Cessation Media Campaign Goals

The problems associated with smoking during pregnancy are well-documented. For example, one study conducted by the Department of Health, Healthy Start Prenatal Screening program found that smokers have statistically significantly more low birth weight babies, 12.2% of all births, than non-smokers at 10.1% of all births.⁷ In addition to the child in utero, small children in the household are also at risk of second-hand smoke. From an analysis of pregnant women who called the Florida Quitline between 2003 and 2006, 48% of them had children under 18 in the household, with an average of 1.5 children in each household.

The media campaign targeted women between 18 and 34 as the age group most likely to be pregnant. All women in the target DMAs were presented with smoking cessation advertisements that discouraged smoking while pregnant and encouraged them to call the Florida Quitline. The ads provided the Quitline telephone number. Television ads consisted of a thirty-second spot and radio ads consisted of a sixty-second spot. In addition the broadcast station ran ten second promotional ads just before World No Tobacco Day on May 31. The ad campaign ran for four weeks, from May 30 to June 26, 2006.

The goal of the media campaign is to inform and motivate the target audience to act in a certain way. The ad must provide enough information to members of the attending audience that they remember the basic message in the ad. The ad message should offer an emotional appeal that moves the viewer to action; this is the motivational appeal. The final element of a successful ad is to give the audience a behavioral step, which offers to a pathway to resolution, for example a number to call. In the case of the smoking cessation campaign, the number to the Florida Quitline was 1-877-UCan-Now (1-877-822-6669).

⁷ Melanie Simmons (2003). An Analysis of Healthy Start Prenatal Screening Data: Women Who Choose to Be Screened Versus Those Who Do Not An Analysis of Healthy Start Prenatal Screening Data. Retrieved from http://www.doh.state.fl.us/rw_webmaster/news/abstracts/smoke.html on April 13, 2006.

The expected outcome of the media campaign was for pregnant smokers to call the Florida Quitline for counseling in smoking cessation. There was a clear expectation that women from the nine original high smoking birth counties would call the Quitline, with pregnant women from surrounding counties an added bonus. There was no estimated number of pregnant women projected to call the Quitline. It was expected, however, that the media campaign would encourage more pregnant women to call the Quitline than the average of 7.4 women per month between January and May 2005. The major source of measurement for the outcome of calls is from the American Cancer Society intake surveys, delivered to every person who calls the Florida Quitline.

The goals of this analysis are threefold. The first goal is to assess whether the media campaign reached its targeted audiences in each county by analyzing the demographic characteristics of Floridians who call the Quitline during that period of the media campaign. The second goal is to determine whether the media campaign was successful in motivating members of the target audiences to call the Florida Quitline. The third goal is to assess the effectiveness of the media campaign in supporting the overall Florida Quitline goals of increasing smoking cessation, reducing second-hand smoke and reducing tobacco use in the general population.

Media Strategy for the Prenatal Smoking Cessation Media Campaign

The media buying company, Anson-Stoner, focused on television as the primary medium for its smoking cessation message, because the time period for the media campaign was just four weeks. The company argued that “television is superior to radio when it comes to reaching a large number of people in a short period of time.”⁸ As a result of this strategy, Anson-Stoner purchased television time across a number of TV shows that allowed it to reach 90% or more of the target audience in four of the five DMAs, and 74.5% in the remaining DMA, Tampa/ St. Petersburg. Across the 38-county area, a total of 2,038 thirty-second television ads were aired over 19 television stations. Because Anson-Stoner was able to negotiate a 100% match for paid television ads, the DOH had to pay for only half of the ads aired.

Radio ads were used to supplement the television ads in four of the five market areas, with Tampa/St. Petersburg DMA the only market area not to receive radio ads. The radio component of the media campaign reached 50% of women between 18-34 in the four market areas in which the ads were played, with an average frequency of 11 times. A total of 2,830 sixty-second radio ads were aired over 18 radio stations. Because Anson-Stoner was able to negotiate a 100% match for paid radio ads, the DOH had to pay for only half of the ads aired.⁹

Anson Stoner was also able to negotiate extra media time during the campaign with the use of free ten-second radio and television promos that it produced as a lead up to “World No Tobacco Day,” observed annually on May 31. Anson Stoner also negotiated an Internet banner advertising campaign that ran on 32 television and radio station Web sites and developed press releases for distribution to major Florida newspapers.

⁸ Anson-Stoner Media Buying Services (2005). Department of Health Request for Proposal (RFP) for Media Buying Services RFP DOH 04-165, Media Buying Report. p. 4.

⁹ All information on media buys for this campaign comes from: Anson-Stoner Media Buying Services (2005). Department of Health Request for Proposal (RFP) for Media Buying Services RFP DOH 04-165, Media Buying Report.

Fort Myers DMA Media Activity

The Fort Myers DMA, comprising six counties, has a total population of 368,458 people,¹⁰ with an estimated population of 85,540 women between the ages of 18 and 34. Anson-Stoner placed TV ads in all five of the network television affiliates in Fort Myers, WBBH-TV (NBC), WFTX-TV (FOX), WINK-TV (CBS), WTVK-TV (WB) and WZN-TV (ABC). Thirty-second ads were placed in programs such as *Oprah*, *Ellen*, *Everybody Loves Raymond*, *Seinfeld*, *Friends*, *Gilmore Girls*, *Charmed*, and *I Want To Be a Hilton*. Approximately seven percent of the viewing time fell in primetime during the day. The number of TV ads aired per station varied between a low of 56 total spots for the CBS affiliate, 60 spots for the NBC station and 66 spots for the ABC station to 124 spots for the WB affiliate and 126 spots for the FOX affiliate. In addition to the sixty-second ads, each TV station aired 15 promotional spots, for a total of 75 spots. In all, there were 507 spots aired in the Fort Myers DMA. Anson-Stoner estimates that the TV ads reached 98.9% of the target audience of 18 to 34 year old women, with an average of 13.5 viewings per woman. Banner ads were also placed on each of the TV station web sites, but there are no data on web visits. The total amount budgeted for TV advertising the Fort Myers DMA was \$69,205.

Radio advertising in the Fort Myers DMA was placed on four stations, WINK-FM, WXKB-FM, WXX-FM and WJBX-FM. The music genres played on these four stations included Hot AC, Pop Hits, Classic Rock and Alternative music. The number of sixty-second spots aired varied by station, with a low of 120 on WINK-FM and 136 on WRXK-FM to a high of 200 on WXKB-FM and 216 on WJBX-FM. Radio ads were played throughout the day and each radio station aired 15 promotional spots, for a total of 732 radio spots during the four week period. Anson-Stoner estimates that the radio ads reached 56.5% of the target audience and were heard 14.4 times each. Each of the four radio stations carried banner ads on their web sites. The radio budget for advertising in the Fort Myers DMA was \$21,360.

Gainesville DMA Media Activity

The Gainesville DMA covers four counties, with a population of 280,669, an estimated 45,100 of whom are women in the 18 to 34 target market. Anson-Stoner placed ads in the top two television stations in the area, WCJB-TV (ABC) and WOGX-TV (FOX). Thirty-second ads were placed in programs such as *Oprah*, *The View*, *Extreme Home Makeover*, *The OC*, *Nanny 911*, *Seinfeld*, *Friends*, and *The Simpsons*. About 16 percent of the programming occurred in prime time hours during the day. WGJB-TV aired 180 of the ads and WOGX-TV aired 304 ads; each TV station also aired 15 promotional spots for a total of 514 spots. Anson-Stoner estimates that the ads reached 90.2% of the target audience, with an average viewing frequency of 14.1 times per woman. Banner ads were also placed on both of the television web sites. The total budget for the Gainesville television campaign was \$37,560.

Radio spots were placed on five radio stations in the Gainesville DMA, WYKS-FM, WTMG-FM, WOGK-FM, WTRS-FM and WYGC-FM. These stations play Pop Hits, Urban Contemporary and Country music genres. The majority of ads, 208, were aired on the Pop Hit station, WYKS-FM, followed by 184 ads on WOGK-FM, 162 ads on WTMG-FM and 120 ads each for the country stations WTRS-FM and WYGC-FM. Each radio station also aired ten-second bonus promos, for a total of 90 promo spots. The total number of radio spots aired came to 874 in the Gainesville DMA. Anson-Stoner estimates that the radio ads reached 50.7% of the target audience and that each spot was heard an average of 15.6 times. Banner ads were placed on the web sites of each radio station. A total of \$21,740 was budgeted for this radio campaign.

¹⁰ All county population estimates are taken from US Census 2000 figures.

Panama City DMA Media Strategy

The Panama City DMA is made up of nine counties, with five of them the original high smoking birth counties. The DMA has a total population of 385,729, with 33,327 women in the 18 to 34 target audience. The TV ads were placed on three affiliate stations. WJHG-TV (ABC) aired 96 ads, WMBB-TV (ABC) aired 128 ads, and WPGX-TV (FOX) aired only 104 ads. Advertising was placed on programs such as *Fear Factor*, *Vegas*, *Tonight Show*, *Wheel of Fortune*, and *Everybody Loves Raymond*. Fifteen percent of the ads were aired during day time prime time hours. Anson-Stoner estimates that the ads reached 97.7% of the target audience, with an average viewing frequency of 13.5 times per woman. Banner ads were placed on the NBC and ABC affiliate websites. The total budget for the Panama City television campaign was \$15,910.

Radio spots were placed on three radio stations in the Panama City DMA, WILN-FM, WYYX-FM and WPFM-FM. These stations played Pop Hits and Active Rock genres. WILN-FM played the most ads, at 192, and WYYX-FM and WPFM-FM aired 152 ads each. Each radio station also aired promotional spots for a total of 54. There were 550 total spots aired in the Panama City DMA. Each of the radio stations also carried banner ads on its web site. Anson-Stoner estimates that the radio campaign reached 68% of the target audience, with each woman hearing an ad 11.9 times on average. The total budget for the Panama City radio campaign was \$7,328.

Tallahassee DMA Media Strategy

The Tallahassee DMA consists of a nine county area, only one of which is in the original target counties, Wakulla County. There are 453,219 people in the Tallahassee DMA, with 86,082 of them in the 18 to 34 target audience. TV ads were placed in five TV stations. WCTV-TV (CBS), aired 88 thirty-second ads, WTLH-TV (FOX) aired 62 ads, WTWC-TV (NBC) aired 130 spots, WTXL-TV (ABC) played 136 ads and there were 44 ads placed on WBXT-TV (UPN). Each of the TV stations also aired 15 ten-second promotional spots, for a total of 535 spots over the four week period. The ads were placed on programs such as *Oprah*, *Wheel of Fortune*, *Jeopardy*, *The OC*, *The Gilmore Girls*, and *7th Heaven*. About fourteen percent of the ads aired during the day time prime time hours. Anson-Stoner estimates that the advertising reached 96.7% of the 18 to 34 year old target audience and each woman viewed the ads an average of 13.6 times. Each of the TV stations also carried banners on their web sites. A total of \$27,395 was expended on television advertising in the Tallahassee DMA.

Ads were placed in six radio stations in the Tallahassee DMA with music genres that included Classic Rock, Pop Hits, Urban Contemporary and Country. These stations included WVTL-FM and WHTF-FM, which both aired 160 sixty-second ads, WAIB-FM with 192 ads, WHBX-FM with 96 ads, WWLD-FM with 128 spots and WBZE-FM, which aired 142 spots. Each radio station also aired 15 ten-second promotional spots, for a total of 968 spots. The radio stations also ran banner ads on their web sites. Anson-Stoner estimates that the radio ads reached 66.6% of the target audience in the Tallahassee DMA, and each woman heard an ad 12.4 times on average. A total of \$15,290 was spent on the radio campaign in the Tallahassee DMA.

Tampa/St. Petersburg DMA

The largest DMA targeted was the Tampa/St. Petersburg DMA, which covers ten counties with a total population of 3,702,269. Only one county, Citrus, is in the original nine target counties. There are an estimated 361,968 women in the 18 to 34 target audience range in this DMA. TV ads were placed on four TV stations in the Tampa/St. Petersburg DMA. WTTA-TV (WB) aired

112 thirty-second ads, WTVT-TV (FOX) aired 88 ads, WTOG-TV (UPN) played 74 ads and WTSP-TV showed 56 ads. Each of the stations also aired ten promotional spots, for a total of 370 spots over the four week period. About seven percent of the ads were placed in day time prime time. Ads were placed in programs such as *Britney & Kevin*, *Bad Girls Guide*, and *Dr. Phil*. None of the TV stations carried an advertising banner on their web sites. Anson-Stoner estimates that it reached 74.5% of the target audience of 18 to 34 year olds, the lowest reach of the media campaign. Viewers watched each ad an average of 7.2 times, again the lowest frequency in the campaign. The Tampa/St. Petersburg DMA media campaign cost \$55,200. Because of cost constraints, there was no radio campaign in Tampa/St. Petersburg.

Methodology for Evaluating the Media Campaign

The methodology for evaluating the prenatal smoking cessation campaign in June 2005 is based on two datasets, an input dataset that summarizes the important elements of the advertising campaign and an output dataset based on the ACS intake survey which collects demographic data on the target audience taking calling the Quitline. The first is composed of the data provided by the media buyer, Anson-Stoner, concerning media play during the campaign. These data include the target audiences for each DMA in the campaign, the airtime logs of radio and TV ads for each DMA, the frequency with which ads were broadcast per day, the times when ads were aired, the target audience reach of TV and radio ads in each DMA and viewing frequency of ads. These data were available for the entire prenatal smoking cessation campaign.

The second dataset provides measures for assessing the behavior of the target audiences based on the American Cancer Society Quitline intake survey that is administered to each client who calls the Quitline number prior to setting up a counseling session. Quitline intake survey data for the entire twelve months of 2005 are used to provide a comparison of the calling patterns during the media campaign versus all other months of the year. Data categories include demographic data, service data related to the Quitline, personal and social data, communication-related data, and behavioral data relevant to smoking and smoking cessation. This study uses data fields from a subset of the data categories:

- e) Demographic data: Gender, Age, Ethnicity, and County of Caller.
- f) Personal and Social data: Pregnant Caller, Number of Children in Household, and Children Under 18 in Household.
- g) Service data related to the Quitline: Reason for Call, Service Requested by Client.
- h) Communication-related data: How Client Heard About the Quitline, Recall of TV Ad?

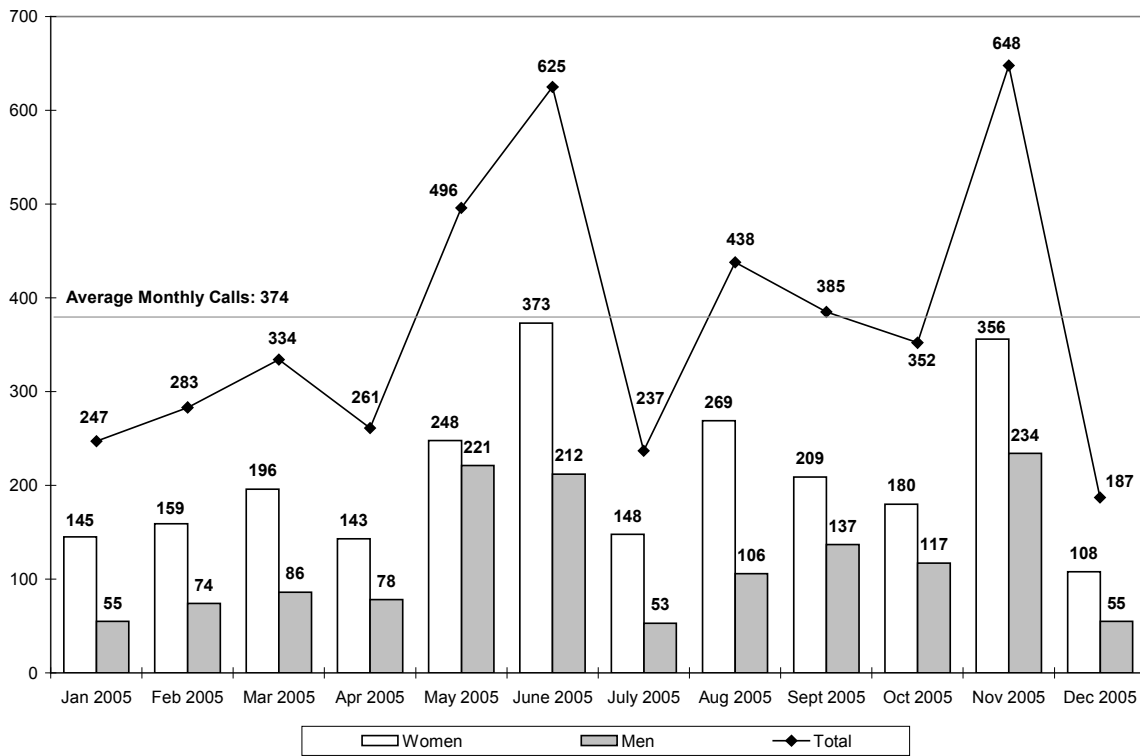
Other sets of data from the 2000 US Census and the 2002 Florida Behavioral Risk Factor Surveillance Survey (BRFSS) are used as a background to the study.

Patterns of Calls to the Quitline During the 2005 Prenatal Media Campaign

Calls to the Florida Quitline reached their highest annual volume in 2005, with a total of 4,493 calls. The average number of calls in 2005 was 374.4 per month, 151 more calls per month on average than monthly calls in the first three years of the Quitline, 2002-2004. One explanation for the 2005 call volume is that the Department of Health conducted smoking cessation media

campaigns in May and June. Also, media publicity about the Great American Smokeout in November appears to have precipitated a greater number of calls than normal. The section of the media campaign evaluation focuses on the prenatal campaign, but there are some spillover effects from the other campaigns. A display of the monthly call volume in 2005 is shown in Figure 2.2, which presents the total number of calls, and calls separated by the gender of the client.

Figure 2.2 Comparison of 2005 Calls to the Quitline from Women and Men

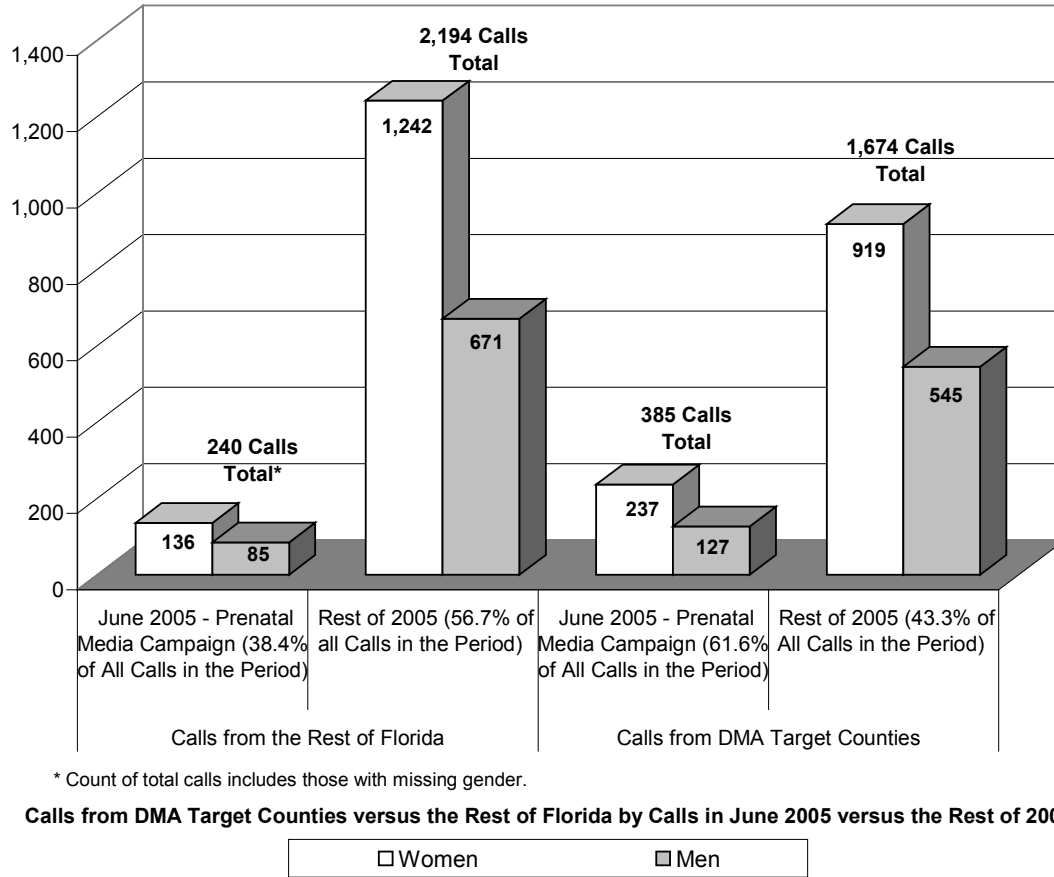


Clearly, the three anti-smoking media events appear to have an influence on the number of people calling the Quitline in 2005, as shown in Figure 2.2. June 2005, the month of the prenatal media campaign, has the second largest number of callers, at 625, a 66.9% increase over the monthly average. More women called in June than in any other month, almost double the average of 211 calling the Quitline per month for the year. In addition, more men called than in most months, almost one hundred more than the average of 119 men calling per month. If there is an effect from the prenatal media campaign, then it appears to have motivated both men and women to call in greater numbers than normal.

When Quitline calls during the June prenatal media campaign period are compared with calls from the rest of the year, some interesting differences become apparent. Figure 2.5 shows the volume of calls from men and women during the prenatal media campaign and during all other months of the year, comparing calls from the DMA target counties and calls from the rest of Florida. The first comparison is that there are fewer calls from the DMA target counties (43.3% of all calls) than from the rest of Florida during the eleven months outside June 2005 (56.7% of all calls). This is of interest because the DMA target counties contain a population of 5.2 million people, which is 32.5% of Florida's population. However, there are 1.26 million smokers in the DMA counties, who make up 54.4% of the smoking population of Florida, compared to the 2.3

million smokers in the rest of the state.¹¹ If smokers called the Quitline at the same rate in each county, then one would expect more calls from the DMA target counties to be the norm.

Figure 2.3. Comparison of Calls from DMA Target Counties and from the Rest of Florida



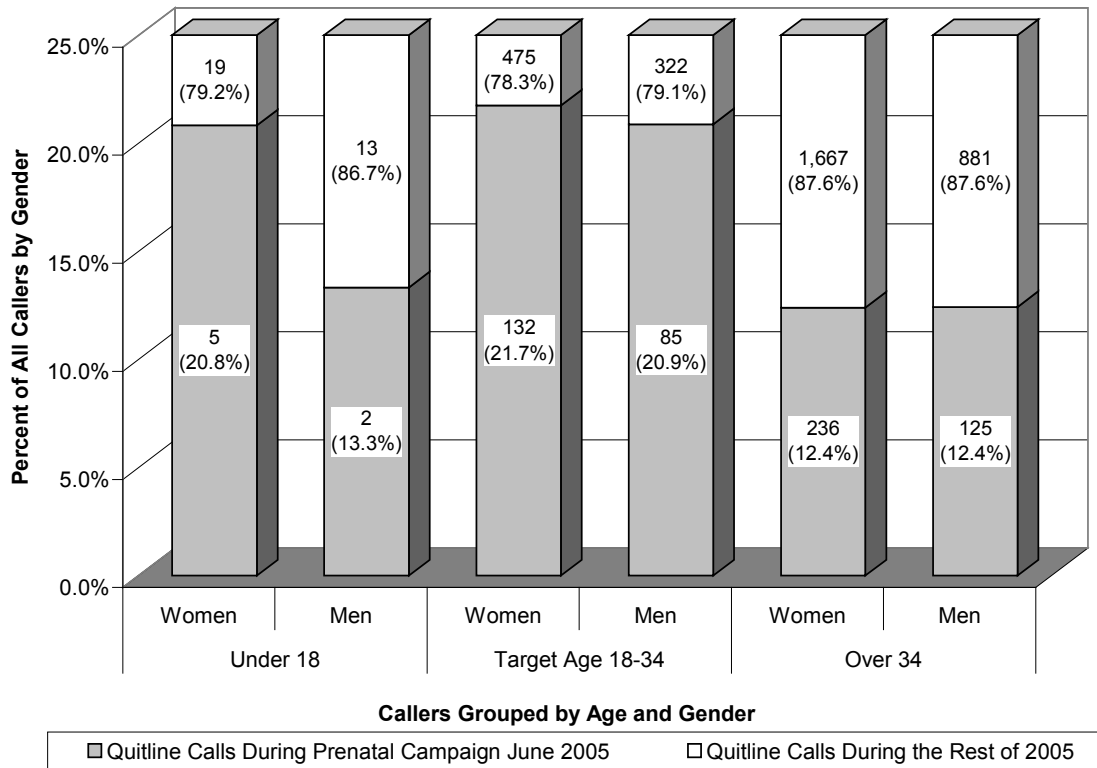
There is an interesting reversal during June 2005, however, in which the majority of Quitline calls are made from the DMA target counties – 385 calls (61.6% of total) versus 240 calls (38.4% of total) from the rest of Florida. A greater proportion of women from the DMA target counties also called the Quitline during June 2005, accounting for 61.6% of all calls from these counties. This can be compared to 54.9% of women calling the Quitline from the DMA target counties during the rest of 2005. Because the prenatal media campaign was targeted to women, there appears to be a relationship between the increased number of women calling the Quitline in June 2005.

The prenatal media campaign specifically targeted pregnant women or women likely to become pregnant in the 18 to 34 age range. Before considering calls from pregnant women, it is of interest to look at calls from this age group, since a higher proportion of men, as well as women in this age group, called the Quitline during June 2005. Figure 2.4 compares calls from three age groupings, Under 18, 18 to 34 and Over 34, during the prenatal media campaign and in the other eleven months of 2005. (Note that the chart is cut off at 25% to make comparisons more visible.) The chart specifically compares the percentage of 18 to 34 year olds who called the Quitline in June, versus the rest of the year. One can note that 21.7% of the 18 to 34 year old

¹¹ 2002 Florida Behavioral Risk Factor Surveillance Survey. Department of Health dataset.

women calling the Quitline in 2005, called in June, as did 20.8% of women Under 18. These percentages can be compared to the 12.4% of women Over 34 who called in June. Finally, 20.9% of the men who called the Quitline in 2005 called in June, perhaps indicative of a spillover effect from the television ads.

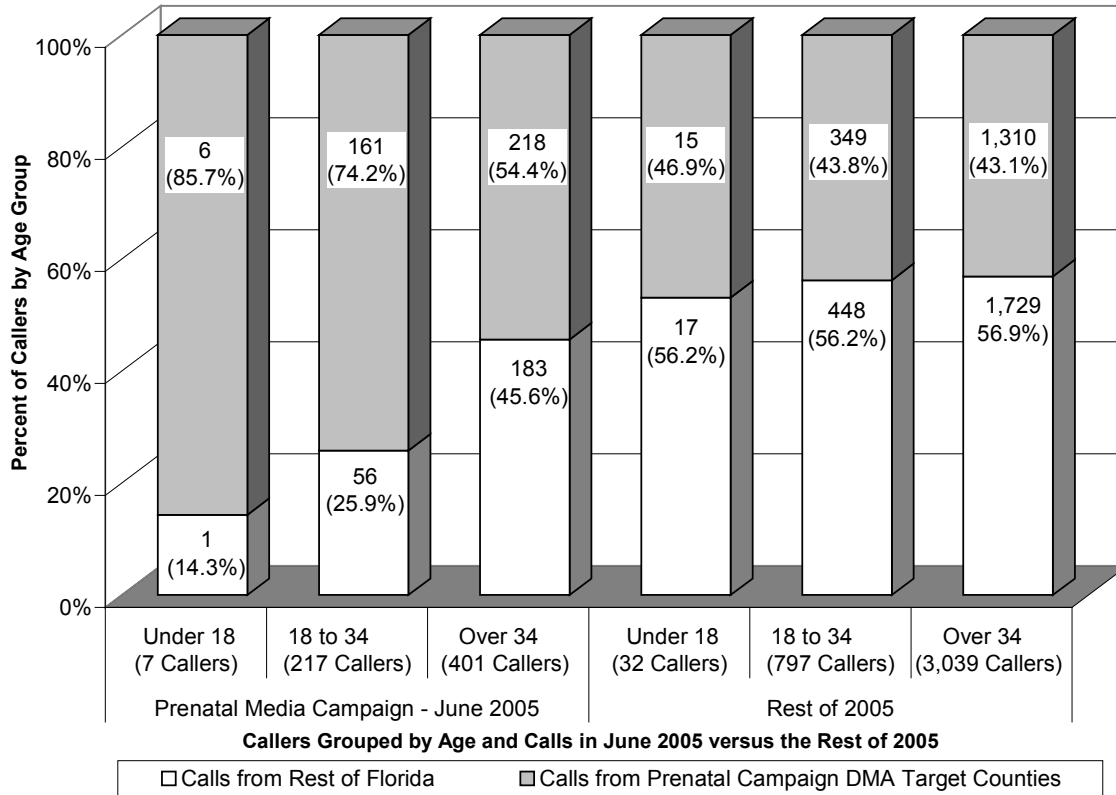
Figure 2.4 Comparison of the Percent of Callers by Age Group and Gender During the 2005 Prenatal Media Campaign and the Rest of 2005



Another way to look at the impact of the media campaign on the target age group is to compare callers in the DMA target counties by age group. In Figure 2.5 calls to the Quitline are broken out by location of caller (DMA county versus all other counties) age group and period of call, whether in June 2005 or some other month in 2005. Looking at the three columns to the right, there is a comparison of calls from age groups for every month in 2005 save June. The percentage of calls from the DMA target counties runs between 43% and 47% of calls across all age groups, compared to 56% to 57% for the rest of the state. (Percentages do not add to 100% because of missing records.) The proportion of calls from each age group is fairly consistent.

Looking at the three columns on the left, there is a comparison of age groups during the period of the prenatal media campaign, June 2005. Of first note is the disparity in the proportion of the calls from the different age groups compared to the rest of the year. Among 18 to 34 year olds, 74.2% of Quitline calls came from the DMA counties, more than 30 percentage points above the rest of the year. The Over 34 age group also had a larger proportion of callers from the DMA target counties, at 54.4%, eleven percentage points over the rest of the year. The number of Under 18 callers is too low for comparison, but all save one called from the target counties.

Figure 2.5 Comparison of the Percentage of Callers from Target Age Groups in the DMA Target Counties and the Rest of Florida During the Media Campaign and the Rest of 2005

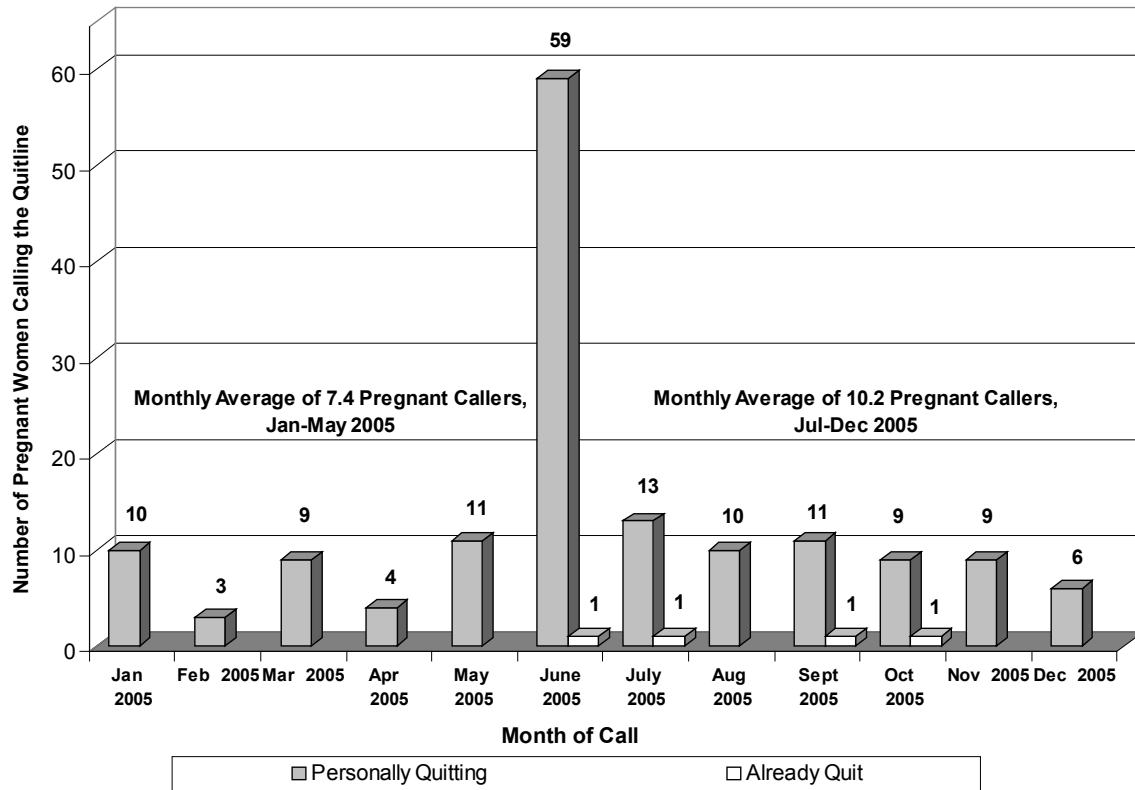


In summary, the data indicate that more men and women called the Quitline during June 2005 than during most other months of the year. More callers hailed from the DMA Target counties in June 2005 than from the rest of Florida, with a greater proportion of women callers than usual. A larger proportion of the callers from the DMA target counties in June 2005 were in the target age group of 18 to 34 than in other age groups. And more 18 to 34 year old clients called the Florida Quitline in June 2005 than in any other month of the year. Given these background demographics, the next step in the evaluation is to look at the data for pregnant women who called the Quitline in 2005.

Pregnant Callers and Reason for Calling the Quitline

Because the prenatal media campaign was targeted at pregnant women, the volume of calls from this audience is clearly important, especially when comparing calls in June 2005 with other all months, DMA target counties versus the other counties, age groups, children under 18 in the household (second-hand smoke risks), and how the callers heard about the Quitline. The analysis starts with the calling patterns across the year. The number of pregnant women calling the Florida Quitline in 2005 is shown in Figure 2.6, which displays the number of pregnant women calling across Florida by month, and the reason for their call. It is immediately evident that significantly more pregnant women called the Quitline in June 2005 than in any other month of the year, and all but one called to quit smoking. The monthly average of calls after June 2005 is three percentage points higher than the monthly average before June; indicative, perhaps, of a greater sensitivity to the Quitline among pregnant women.

Figure 2.6 Comparison of the Percentage of Quitline Calls from Pregnant Women Who Are Smokers, January 2005 to December 2005



When pregnant callers are separated out by DMA target county, it is clear that the greatest number of pregnant women, 48.3% of pregnant clients (n=29), called from the Tampa/St. Petersburg DMA, as shown in Figure 2.7. Hillsborough County has the largest number of female smokers than any other county in the media campaign target counties, 103,056.¹² The next largest number of pregnant callers, 10, are from the Fort Myers DMA. The rest of the counties in the DMA market area demonstrate a very low volume of calls from pregnant women, in general less than the average number of calls from pregnant women through the year.

A total of 47 pregnant women called from these DMAs during June 2005, which is more than half, 52%, of all the pregnant women who called from those counties in the rest of the year (n=43). When compared to the relatively small percentage of pregnant women calling the Quitline from the other counties in June 2005, 19% (n=13), the proportion of pregnant callers in the DMA target counties indicates that the media campaign was influential in getting the women to call.

¹² 2002 Florida Behavioral Risk Factor Surveillance Survey. Department of Health dataset.

Figure 2.7 Comparison of Quitline Calls from Pregnant Women, from the DMA Target Counties versus the Rest of Florida During June 2005 and the Rest of 2005, by Age Group

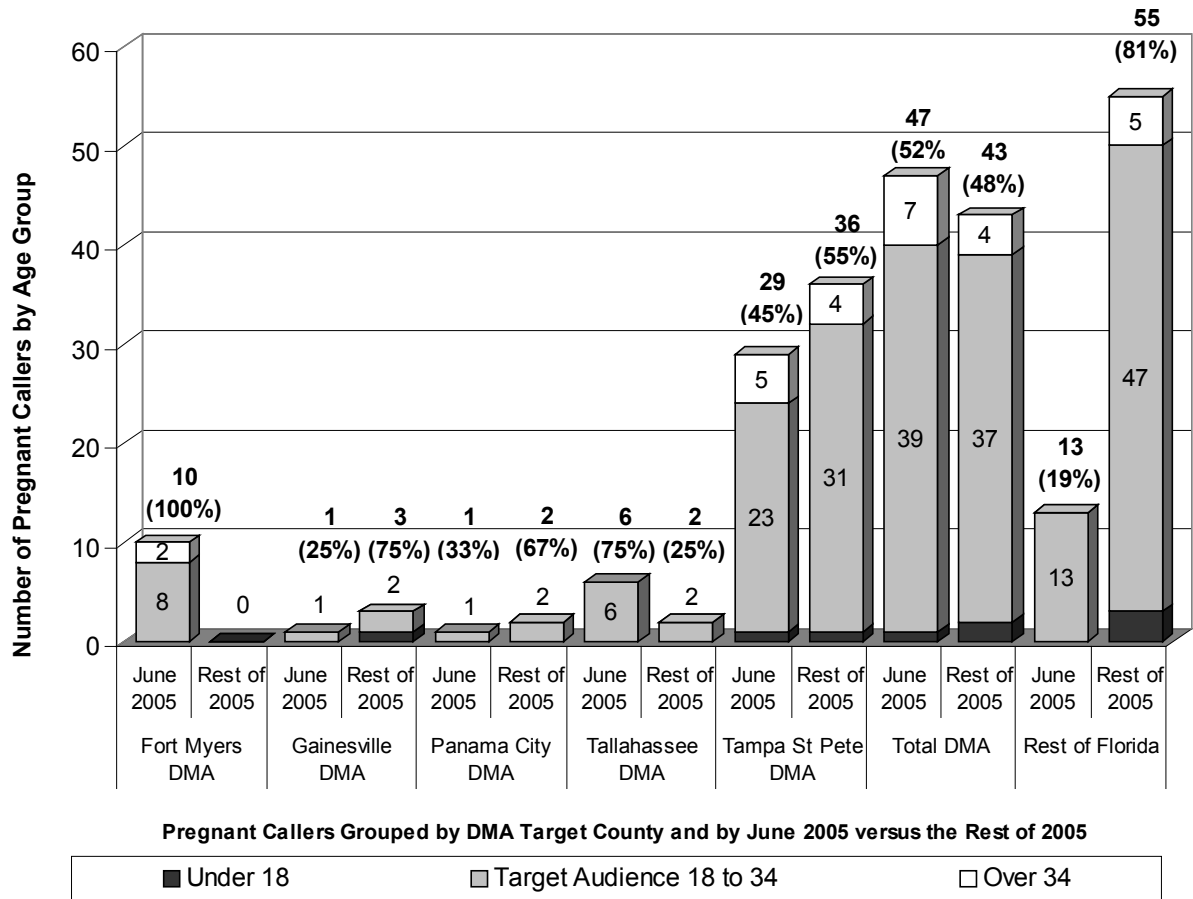


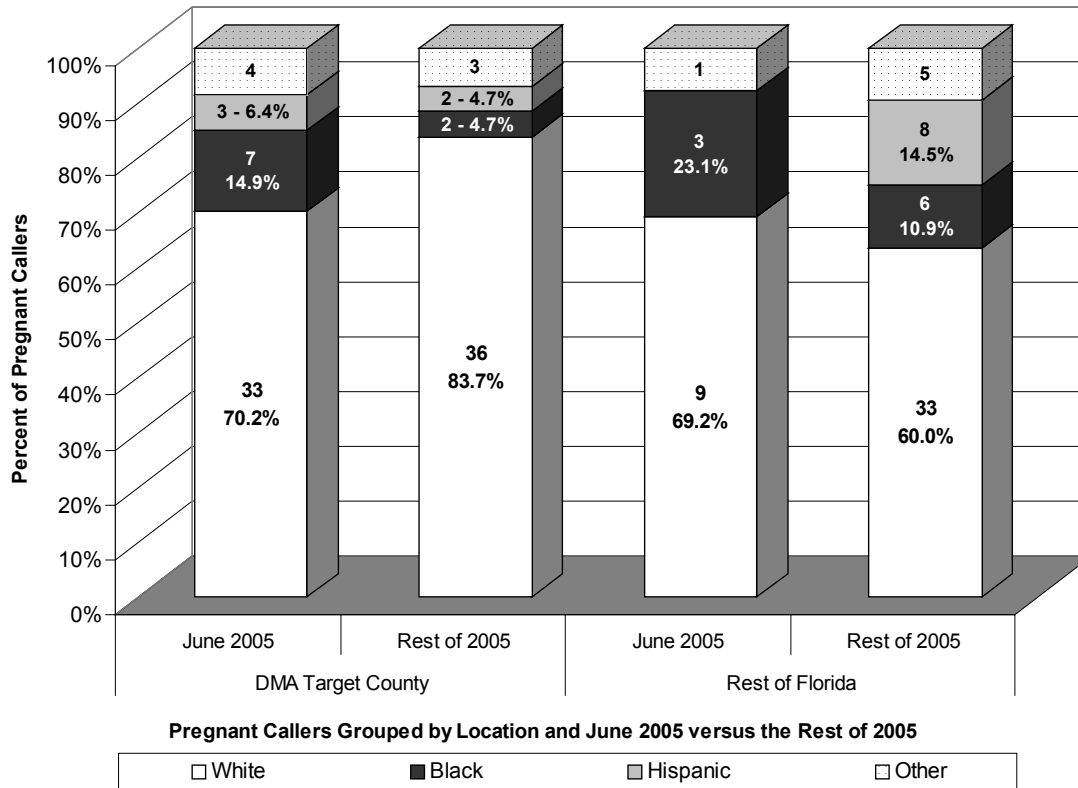
Figure 2.7 also separates out callers by age group. It is clear from the chart that the greatest proportion of pregnant callers, 83%, are between the ages of 18 and 34, targeted through the media campaign (n=39). A small number of pregnant smokers are under 18, and a slightly higher number are above 34. This finding suggests that the media campaign was successful in motivating women in this age group to call the Quitline. It could also indicate that the majority of pregnant women are between 18 and 34.

When calls from pregnant women during the prenatal media campaign are compared based on ethnicity, it appears that more African American women called the Quitline from the DMA target counties during the campaign, than in the rest of the year, as shown in Figure 2.8. A total of seven pregnant African American women called the Quitline in June, accounting for 14.9% of all calls from pregnant women in the DMA target counties. This number can be compared to just two pregnant African American women calling in the rest of the year, accounting for only 4.7% of all calls.

One cannot conclude that the media campaign induced more pregnant African American women to call the Quitline to quit smoking, but the relatively low numbers make any conclusions difficult. Only three pregnant Hispanic women, called the Quitline from the DMA target counties

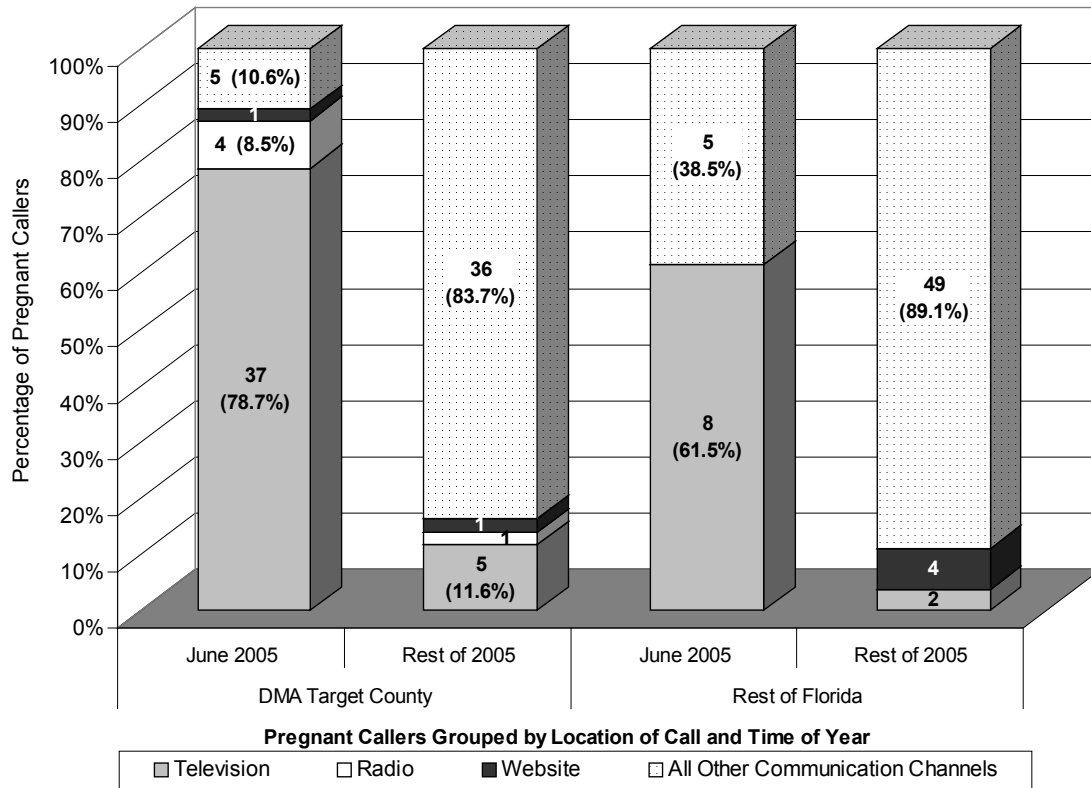
during the prenatal media campaign (6.4% of all calls), compared to only two pregnant Hispanic women calling during the rest of the year (4.7% of all calls). Again, the numbers suggest that the media campaign was successful, but are too low to draw conclusions.

Figure 2.8 Comparison of Quitline Calls from Pregnant Women, from the Target DMAs versus the Rest of Florida During June 2005 and the Rest of 2005, by Age Group



One of the final indicators of the media campaign is the role of the media in encouraging pregnant women to call the Quitline. Figure 2.9 compares the number and percent of pregnant women citing how they heard about the Florida Quitline. For ease of comparison all of the DMA target counties are grouped and compared with the rest of Florida during June 2005 and the rest of the year. From the chart it is clear that more pregnant women cited television during June 2005 than during the rest of the year. In the DMA target counties, 78.7% of the pregnant women (n=37) stated that they learned about the Quitline from television, versus 8.5% who heard about the Quitline from the radio (n=4). Only 5 pregnant women (10.8%) heard about the Quitline from another communication channel, typically a physician. Comparing the DMA target counties during the rest of the year, it is clear that very few pregnant women cite the television (11.6%, n=5) or the radio (2.3%, n=1) as sources of information about the Quitline, compared to the majority of pregnant women, 83.7%, who cite another communication source (n=36).

Figure 2.9 Comparison of How Pregnant Callers Heard About the Quitline in DMA Target Counties and Rest of Florida



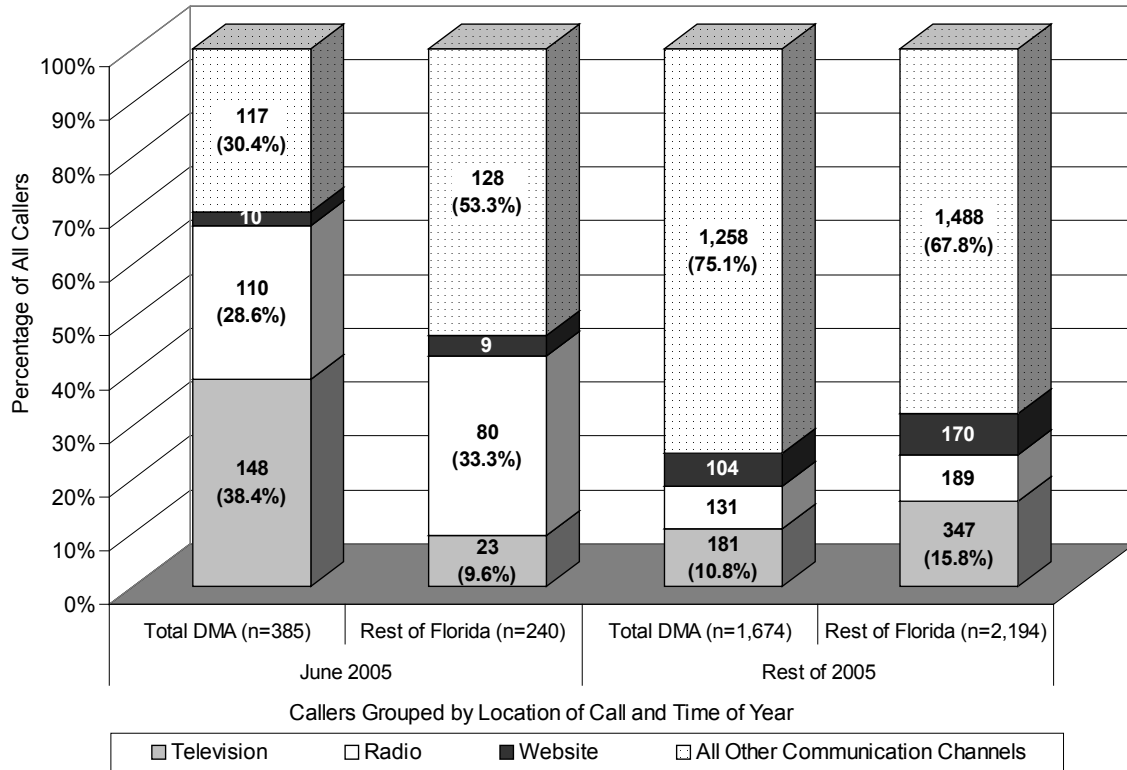
If we compare the DMA target counties with the rest of Florida, a similar pattern appears. In June 2005 61.5% of pregnant callers cited the television as their source of information about the Quitline (n=8), compared to the 38.5% who cite another source (n=5). No one mentions the radio. Of interest here is that six of the citations come from Marion County and one comes from Putnam County, both of which are in the broadcast footprint of the Tampa/St. Petersburg DMA, as shown in Figure 2.1, so these calls could also stem from the prenatal media campaign. When compared to the rest of Florida, only two pregnant women cite television, and none cite radio during the rest of 2005.

As a comparison with the pregnant women who called the Quitline, Figure 2.10 shows the cited sources of information for all people who called the Quitline from the DMA target counties and the rest of Florida. Note that calls from pregnant women are included in these numbers. The percentage of callers who cite television in the DMA target counties is only 38.4% of callers (n=148) but this is four times greater than the 9.8% of people who cite television in the rest of Florida in the same month. More people cite radio in the DMA target counties than among pregnant women, 28.6% (n=110) versus the 18.5% of pregnant women (n=4) who called in June 2005.

A greater percentage of people cite other sources of information about the Quitline in June 2005 than among pregnant women, but a smaller percentage during the rest of the year. In the rest of 2005, television and radio play a smaller role in informing people about the Quitline, while other sources of information play a much larger role. These figures indicate that the airing of television

ads in the DMA target counties did have a positive effect on motivating people to call the Quitline.

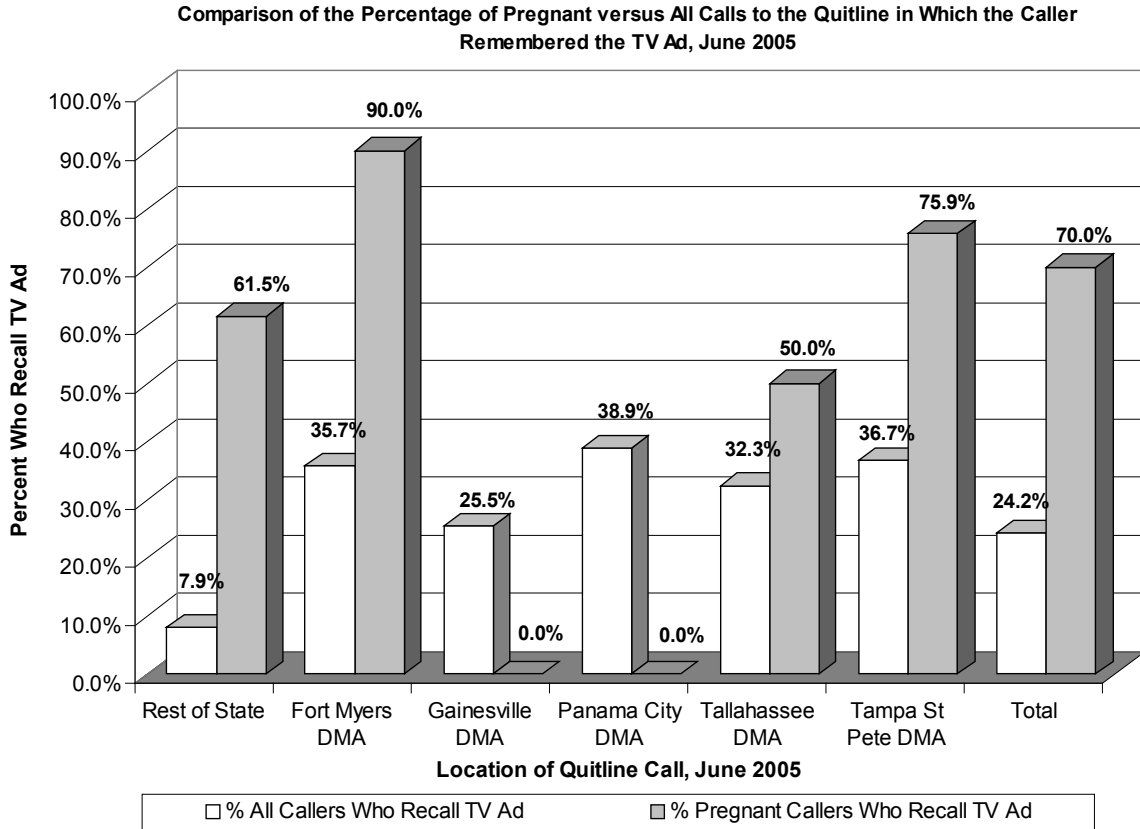
Figure 2.10 Comparison of How All Callers Heard About the Quitline in DMA Target Counties and Rest of Florida



A final indicator of media influence is the ability of callers to remember the advertising that prompted them to call the Quitline. Figure 2.11 compares recall of the television ad between the DMA target counties and the rest of Florida, for pregnant callers and for all callers during June 2005. From the chart, the results are somewhat mixed. In the Fort Myers DMA, 90% of pregnant women recalled the television ad (n=9), compared to 35.7% of all people who called from Fort Myers (n=25). Similarly, 75.9% of pregnant callers recalled the television ad in the Tampa/St. Petersburg DMA (n=22), compared to 36.7% for all callers (n=65). The same pattern holds for the Tallahassee DMA and even for the rest of the state.

It could be noted, once again, that seven of the pregnant women calling from the rest of the state in June 2005 called from Marion and Putnam counties. Curiously, no pregnant women cited the television ad from the Gainesville or Panama City DMAs; of course, only one pregnant woman called from each DMA. The large proportion of pregnant women, and even all callers, who recall the television ad enough to describe it, indicates that the ad content carried some efficacy for motivating people to call the Quitline in June 2005.

Figure 2.11 Comparison of the Percentage of Pregnant Callers versus All Callers to the Quitline During June 2005 Where the Caller Remembered the TV Ad



A final set of tables examines the calling patterns of pregnant women within each county of the target DMA counties. These are shown in Tables 2.2 to 2.7. Each table displays information derived from Quitline calls and from population information taken from the 2002 BRFSS, and the Department of Health CHARTS database. The Quitline information includes all women who called the Quitline in June 2005, all pregnant women, the percent of pregnant women calling, the average age of the pregnant women, whether they have children under 18 in their household and the average number of children.

The population statistics show the number of women smokers in each county, the number of smoking births, the number of smoking births and the percent of smoking births. These data are replicated, in part, from Table 2.1, but compare all counties in the DMA, not just the high smoking birth counties. In addition, a final comparison table is included that lists all of the counties in which pregnant women called the Quitline in June 2005.

The first table, Table 2,2 looks at the Fort Myers DMA, which had one high risk county, Charlotte County, with a 22.2% rate of smoking births. There was only one call from a pregnant woman in Charlotte County, 10% of all calls from pregnant women in the county. Lee County had the most pregnant women, and the most women calling the Quitline with 24. There were no calls to the Quitline from three counties in this DMA, DeSoto, Glades and Hendry. One quarter of the women who called the Quitline were pregnant, with an average age of 27. Seven pregnant women had children in the household, with an average of 1.5 children per household.

Table 2.2 Statistics on Pregnant Women and Smoking Prevalence by County in the Fort Myers DMA, June 2005

Fort Myers DMA										
Florida County of Caller	Quitline Calls, June 2005						Birth and Smoking Statistics, DMA Counties			
	All Women	Pregnant Women	Percent Pregnant Women	Average Age of Pregnant Women	Pregnant with Children < 18	Average Number of Children <18	Women Smokers in County	Smoking Births, 2001-2003 Average	Total Births, 2001-2003 Average	Percent Smoking Births
Charlotte	7	1	14.3%	27	1	2.0	14,944	228	1,026	22.20%
Collier	8	2	25.0%	28	1	1.0	25,355	214	3,605	5.90%
DeSoto							2,849	74	452	16.40%
Glades							965	9	77	11.70%
Hendry							3,250	58	67	8.60%
Lee	24	7	29.2%	26	5	1.6	45,528	645	5,461	11.80%
Total	39	10	25.6%	27	7	1.5	92,891	1,228	11,296	10.90%

Table 2.3 Statistics on Pregnant Women and Smoking Prevalence by County in the Gainesville DMA, June 2005

Gainesville DMA										
Florida County of Caller	Quitline Calls, June 2005						Birth and Smoking Statistics, DMA Counties			
	All Women	Pregnant Women	Percent Pregnant Women	Average Age of Pregnant Women	Pregnant with Children < 18	Average Number of Children <18	Women Smokers in County	Smoking Births, 2001-2003 Average	Total Births, 2001-2003 Average	Percent Smoking Births
Alachua	23		0.0%				22,533	197	2,452	8.00%
Dixie							1,306	47	163	28.80%
Gilchrist	1						1,372	37	179	20.70%
Levy	6	1	16.7%	22			3,588	85	398	21.40%
Total	30	1	3.3%	22			28,799	366	3,192	11.50%

Table 2.3 looks at the Gainesville DMA, which had one high risk county, Dixie County, with one of the highest rates of smoking births at 28.8%. Of some interest is that there were no calls at all from women in Dixie County, which has the smallest population in the DMA, and one of the smallest in the state. The prevalence of smoking for women is 21.5, and for men is 33.2, which is very high. There was only one call from a pregnant woman in the entire DMA, from Levy

County. Alachua County had the most women calling the Quitline with 23. Only one woman who called the Quitline was pregnant, age 22. There were no children under 18 reported in any household.

Table 2.4 Statistics on Pregnant Women and Smoking Prevalence by County in the Panama City DMA, June 2005

Panama City DMA										
Florida County of Caller	Quitline Calls, June 2005					Birth and Smoking Statistics, DMA Counties				
	All Women	Pregnant Women	Percent Pregnant Women	Average Age of Pregnant Women	Pregnant with Children < 18	Average Number of Children <18	Women Smokers in County	Smoking Births, 2001-2003 Average	Total Births, 2001-2003 Average	Percent Smoking Births
Bay	8		0.0%	21			15,112	413	1,987	20.80%
Calhoun	1	1	100.0%				1,211	33	147	22.40%
Franklin							969	25	105	23.80%
Gulf							1,257	26	113	23.00%
Holmes	1		0.0%				1,761	56	223	25.10%
Jackson	1		0.0%				4,489	86	523	16.40%
Liberty							579	19	87	11.80%
Walton							3,997	112	493	22.70%
Washington							2,058	43	221	19.50%
Total	11	1	9.1%	21			31,434	813	3,899	20.90%

The Panama City DMA, shown in Table 2.4 has five of the original high smoking birth counties, Calhoun, Franklin, Gulf, Holmes and Walton counties. From these five counties only one pregnant woman called the Quitline in June 2005. In all, only eleven women called the Quitline, most of them from Bay County, which has the largest smoking population of women. Even though there was over 97% coverage of the pregnant audience by the television ads, there was little response in the Panama City DMA.

Table 2.5 shows calls from the Tallahassee DMA, which had one high risk county, Wakulla County, with a 22.5% rate of smoking births. There were no calls at all from women in Wakulla County, let alone from pregnant women. Leon County had the highest number of women calling at 22, with two of them pregnant. Interestingly, Leon County has one of the lowest smoking birth rates at 7.7%, and a relatively low smoking prevalence of 14.2% for women. The average age of the pregnant women who called the Quitline was 26. Most of the pregnant women who called the Quitline had children under 18 in the household, with an average of two children per household in the DMA.

Table 2.5 Statistics on Pregnant Women and Smoking Prevalence by County in the Tallahassee DMA, June 2005

Tallahassee DMA										
Florida County of Caller	Quitline Calls, June 2005						Birth and Smoking Statistics, DMA Counties			
	All Women	Pregnant Women	Percent Pregnant Women	Average Age of Pregnant Women	Pregnant with Children < 18	Average Number of Children <18	Women Smokers in County	Smoking Births, 2001-2003 Average	Total Births, 2001-2003 Average	Percent Smoking Births
Gadsden	5	2	40.0%	23	1	1.0	4,775	48	704	6.80%
Hamilton					1		1,145	23	172	13.40%
Jefferson	2	1	50.0%	31		3.0	1,277	16	154	10.40%
Lafayette	2						570	15	89	16.90%
Leon	22	2	9.1%	29	2	3.0	25,314	232	3,001	7.70%
Madison	3						1,823	31	232	13.40%
Suwannee	3	1	33.3%	22	1	1.0	3,602	89	465	19.10%
Taylor	2						1,903	42	231	18.20%
Wakulla	4						2,227	64	285	22.50%
Total	43	6	14.0%	26	5	2.0	42,637	560	5,333	10.50%

Data from the Tampa / St. Petersburg DMA is shown in Table 2.6. There was one high risk county in the DMA, Citrus County, with a 23.3% rate of smoking births. There were six calls from women in Dixie County, but no calls from pregnant women. The Tampa/St. Petersburg DMA had the most women calling the Quitline, 114, of any other DMA and the greatest number of pregnant women, with 29. Hillsborough County logged the greatest number of pregnant women calling the Quitline, with 14. Hillsborough County has the largest smoking population for women, with a prevalence rate of 18.5 among women.

Compare Pinellas County, though, with almost the same number of women smokers as Hillsborough, and a higher smoking birth rate, but only three pregnant women called. Pasco County, with five pregnant calling, came in second among the counties. The average age of pregnant women calling the Quitline from this DMA was 24. Almost half of the pregnant callers had an average of 1.3 children in the household.

Table 2.6 Statistics on Pregnant Women and Smoking Prevalence by County in the Tampa/St. Petersburg DMA, June 2005

Tampa / St Petersburg DMA										
Quitline Calls, June 2005							Birth and Smoking Statistics, DMA Counties			
Florida County of Caller	All Women	Pregnant Women	Percent Pregnant Women	Average Age of Pregnant Women	Pregnant with Children < 18	Average Number of Children <18	Women Smokers in County	Smoking Births, 2001-2003 Average	Total Births, 2001-2003 Average	Percent Smoking Births
Citrus	6						12,402	201	862	23.30%
Hardee							2,483	35	473	7.40%
Hernando	3						13,872	262	1,236	21.20%
Highlands	3	1	33.3%	28	1	1.0	9,043	104	895	11.60%
Hillsborough	33	14	42.4%	26	5	1.2	103,056	1,016	15,083	6.70%
Manatee	16	2	12.5%	19	1	1.0	27,564	424	3,306	12.80%
Pasco	15	5	33.3%	24	1	2.0	36,229	733	3,924	18.70%
Pinellas	22	3	13.6%	26	2	1.0	97,471	1,073	9,197	11.70%
Polk	11	3	27.3%	22	1	2.0	49,805	950	6,916	13.70%
Sarasota	5	1	20.0%	22	1	1.0	34,651	386	2,873	13.40%
Total	114	29	25.4%	24	12	1.3	386,574	5,184	44,765	11.60%

The last table, Table 2.7, compares counties that were not included in the target DMAs, but had pregnant women calling the Quitline. Of note is the 34 women and eight pregnant women calling from Marion County. This county is in the broadcast footprint of the Tampa / St. Petersburg DMA, as shown in Figure 2.1. There is a great likelihood that these pregnant women called the Quitline in response to the media campaign.

Putnam County also falls in the shadow of the Tampa / St. Petersburg DMA, and had three women and one pregnant woman calling the Quitline. Other than these numbers, there were very few pregnant women calling from the remainder of the counties, one a piece. The average age of women calling the Quitline in this table is 23, and ten of them had children under 18 in the household.

Table 2.7 Statistics on Pregnant Women and Smoking Prevalence by County in the All Other Counties with Pregnant Women Calling the Quitline, June 2005

Florida Counties with Pregnant Women Calling the Quitline, June 2005										
Florida County of Caller	Quitline Calls, June 2005						Birth and Smoking Statistics, DMA Counties			
	All Women	Pregnant Women	Percent Pregnant Women	Average Age of Pregnant Women	Pregnant with Children < 18	Average Number of Children <18	Women Smokers in County	Smoking Births, 2001-2003 Average	Total Births, 2001-2003 Average	Percent Smoking Births
Broward	17	1	5.9%	27	1		169,637	726	22,335	3.3%
Lake	7	1	14.3%	21	1	1.0	21,950	387	2,645	14.6%
Marion	34	8	23.5%	26	7	1.4	27,062	543	2,948	18.4%
Miami-Dade	14	1	7.1%	19			235,266	313	32,369	1.0%
Putnam	3	1	33.3%	21	1	2.0	7,198	165	909	18.2%
Missing	1	1	100.0%	27						
Total	76	13	17.1%	23	10	1.5	461,112	2,134	61,206	3.5%

Table 2.8 Cost of the Prenatal Media Campaign in June 2005

Targeted DMAs	Calls from June 2005	TV Cost	Radio Cost	Total	Cost per Person	Calls from Rest of 2005	Total
Fort Myers DMA	70	\$69,205	\$21,360	\$90,565	\$1,294	183	253
Gainesville DMA	55	\$37,560	\$21,740	\$59,300	\$1,078	135	190
Panama City DMA	18	\$15,910	\$7,328	\$23,238	\$1,291	97	115
Tallahassee DMA	65	\$27,395	\$15,290	\$42,685	\$657	129	194
Tampa/St Pete DMA	177	\$55,200	\$0	\$55,200	\$312	1,130	1,307
DMA Total	385	\$205,270	\$65,718	\$270,988	\$704	1,674	2,059
Rest of Florida	240					2,194	2,434

The summary cost of the prenatal smoking cessation media campaigns are given in Table 2.8. The cost per person is given for the number of Quitline calls for all callers from the target county DMAs in June 2005, rather than just pregnant callers. The cost per person ranges from a low of \$312 in Tampa/St. Petersburg DMA to a high of \$1,294 in the Fort Myers DMA. These costs are, in part due to the number of people who called the Quitline from these DMAs and the cost of advertising over television and radio. The average cost per person is \$704.

Conclusions from Prenatal Media Campaign

The prenatal smoking cessation media campaign that aired in June 2005 appears to have successfully informed women and men about the Florida Quitline, and motivated smokers, especially pregnant smokers, to call the Quitline for help. The data show that 625 people called the Quitline in June, 2005, much higher than the average of 351 per month over the rest of 2005. A larger than average number of 18 to 34 year old women and men called the Quitline in June, with 61.6% of them calling from one of the DMA target counties.

Instead of an average of eight pregnant women per month, 60 pregnant women called the Quitline in June 2005. Among the pregnant women who called the Quitline, 78.6% called from one of the target DMAs and another 15.0% called from counties within the “footprint” of the target DMAs. This indicates that over 93% of the pregnant women who called the Quitline in June 2005 did so within broadcast reach of the media campaign.

The majority, 97.5%, of the pregnant woman who called the Quitline in June wanted to quit smoking. Half of the pregnant women calling the Quitline from the DMAs had children under 18 in the household, for a total of 37 children at risk of second hand smoke. Pregnant smokers calling from the DMAs requested counseling to quit smoking 79.6% of the time, which could help lower the second hand risk to many children. Only 8.5% of the pregnant women calling the Quitline from the DMAs cited radio as their source of their knowledge about the Quitline, but 78.7% cited television as their source. Fully 70% of the pregnant women could remember the TV ad well enough to describe it. The average media cost for calling the Quitline was \$704 per person.

From the data presented, it seems clear that the prenatal smoking cessation media campaign that aired in June 2005 had a positive effect on motivating both pregnant women and men and women in the 18 to 34 age range to call the Florida Quitline. The increased volume of calls in June 2005 is like no other month before it, and the seven-fold increase in the number of calls from pregnant women points to a successfully targeted campaign. The general recognition of TV ads as a stimulus to call the Quitline points to the efficacy of the advertising.

One anomaly in the data stands out – that only two pregnant women from the original nine counties with high smoking birth rates called the Quitline. There could be multiple explanations for this finding, and these should be investigated before another media campaign is developed. Otherwise, the prenatal smoking cessation media campaign was successful in motivating pregnant women smokers to call the Florida Quitline.

