Partners in Community Outreach - Healthy Lifestyles Campaign

Evaluation of Campaign Activity For the Six-Month Period – January through June 2010

September, 2010

Background and Introduction:

Partners in Community Outreach is a statewide coalition that promotes and supports healthy families through in-home family education programs. Three nationally recognized programs are represented within the organization including:

- Healthy Families America,
- Parents as Teachers, and the
- Maternal Infant Health Outreach Worker (MIHOW) program.

All three of these programmatic approaches rely on in-home family education services to support and strengthen families with young children and all have been extensively evaluated and shown to be effective.

Partners in Community Outreach initiated the "Healthy Lifestyles Campaign" in May of 2009 through fourteen programs serving families in West Virginia. Support for the program was provided by the Claude Worthington Benedum Foundation.

During the months of January through April of 2009, a number of educational modules were developed for use by home visitors that focus on healthy lifestyle issues including:

- Early childhood development,
- Nutrition,
- · Physical Activity,
- Obesity,
- Smoking
- Alcohol Abuse.
- · Other Drug Abuse, and
- Healthy Pregnancy.

Home visitors working for the fourteen participating programs were trained in how to use campaign materials in April of 2009 and the Healthy Lifestyles Campaign was first implemented within these programs in May of 2009.

In order to assure that the campaign was designed in a way that would be likely to produce the desired results; a logic model was developed to guide the implementation of the campaign (see initial evaluation report dated September, 2009 for more information).

Evaluation Methodology:

Evaluation of the Healthy Lifestyles Campaign addresses three areas of interest:

- 1. Prevalence of healthy lifestyle issues in families served,
- 2. Process inputs and activities provided to the family through the campaign, and
- 3. Outcomes changes in behaviors and attitudes about each lifestyle issue within the families exposed to the campaign materials related to that particular issue.

Data is collected through an on-line Internet based tool. The data collection tool is designed to capture data about activity and observed results over six-month periods of time – July through December, 2009; January through June, 2010; etc.

Guided by the logic model, a preliminary evaluation of the initial implementation efforts during the months of May and June of 2009 was conducted. Analysis of the preliminary data reported by participating programs identified a number of issues related to the reliability of the data and the design of the data collection tool which called into question the validity of the process and outcome measures reported during the first two months of the campaign. Findings from the preliminary evaluation period were used to improve data collection methods resulting in an increased level of reliability during the first full six-month evaluation period (July through December of 2009).

Home visitors enter information into an on-line database about the types of lifestyle issues present within each of the families they reported on, the type and frequency of information and education provided to each of these families, and the changes in attitudes and lifestyle behaviors observed by the home visitor during the reporting period. Home visitors also report additional information about families where there was a pregnancy during the reporting period so that lifestyle issues within families where there is a pregnancy can be captured and analyzed.

An evaluative report was released in April of 2010, which is considered to be an accurate assessment of the effectiveness of the Healthy Lifestyles Campaign in changing attitudes, beliefs and behaviors about targeted lifestyle issues within participating families during the first full six-month period of campaign implementation - July through December of 2009.

This evaluation report addresses the prevalence of lifestyle issues addressed through the campaign, the level of activity (process measures), and the outcomes observed by the home visitors during the second full six-month period of the Healthy Lifestyles Campaign - January through June of 2010.

Summary of Families Served – January through June 2010:

Data was reported on a total of 465 families by thirteen in-home family education programs. Not all home visitors answered every question; thus, percentages reported throughout the report are based on the percent of families where data was available for the specific question or issue being reported.

One Healthy Families America (HFA) program, three Maternal Infant Health Outreach Worker programs (MIHOW), and nine Parents as Teachers programs (PAT) reported data on families participating in the Healthy Lifestyles Campaign during the period of January through June of 2010. A total of 757 families were served during the reporting period by the thirteen programs reporting data. The evaluation is therefore based on lifestyle choices within 61.4% of the total families served by the thirteen programs reporting data for the six-month period.

Twenty-three counties of West Virginia are represented in the data; however, six of the twenty-three counties were represented by only one or two families; thus, almost all (98.7%) of the families represented within the data reside in seventeen counties of the state. 86.3% of the families reside in eleven counties located in the southern and northern parts of the state.

Families represented in the reported data are generally those families that have been participating in a home visiting program for some extended period of time. Less than 1% of the families reported on have been enrolled in a program for less than one month and less than 6% have been enrolled for less than three months. More than half of these families (55.6%) have been receiving services from one of the in-home family education programs for more than 18 months. A high percentage of the families represented in the evaluative data (86.7%) have been receiving services for more than 6 months. Thus, nearly all families reported on have been enrolled in an in-home family education program for a sufficient length of time to have been exposed to the healthy lifestyle campaign interventions.

Summary of Lifestyle Issues Present Within Families:

Three of the lifestyle issues addressed through the campaign are routinely addressed by all three models of in-home family education. These issues are

- Enhancing child development,
- Improving nutrition in the daily diet, and
- Increasing physical activity.

All families served by the in-home family education programs can benefit from information, education, and activities related to these three issues and issues related to child development, nutrition, and physical activity were addressed with nearly all families reported on during the evaluation period. More than 90% of all families reported on received information and follow-up services related to all three of these issues.

Other lifestyle issues known to contribute to poor health addressed by the campaign include:

- Significantly overweight family members (adult and or childhood obesity),
- Smoking,
- Alcohol abuse, and
- Other Drug abuse.

The most frequently occurring of the unhealthy lifestyle issues in families was tobacco use. Smoking was reported as an issue in one of every four families (24.8%) reported on. Obesity was also judged to be an issue in many families. One of every five families (20.0%) reported on had one or more family members who, in the opinion of the home visitor, were significantly overweight. Abuse of alcohol or other drugs was noted in families much less frequently. Alcohol abuse was identified in only 1.6% of the families and other drug abuse was identified in 2.7% of the families represented in the data.

Summary of Lifestyle Issues Among Pregnant Women:

Evaluation of the Healthy Lifestyles Campaign addresses issues specific to pregnancy since the in-home family education programs serve a significant number of pregnant women and unhealthy lifestyle behaviors during pregnancy are a prime contributor to poor pregnancy outcomes.

There was a pregnancy within 19.0% of all families represented in the data. This reflects a total of 85 pregnant women. Home visitors reported that 85.9% of the pregnant women abstained from alcohol use during pregnancy and 85.5% did not use any drugs for non-medical purposes. Home visitors were not confident in assessing whether alcohol or other drugs were used by pregnant women in some cases (9 cases for alcohol use and 8 cases for drug use). Thus, there were only three confirmed cases of pregnant women using alcohol during pregnancy among the families reported on during the six-month period. There were four cases where the home visitor reported the pregnant woman definitely used non-prescribed other drugs

Home visitors reported 32.5% of the pregnant women they served during the reporting period (January-June 2010) smoked or may have smoked during their pregnancy. 32.9% of the pregnant women were also reported as having been definitely exposed to second-hand smoke during the pregnancy. Home visitors were "not sure" whether or not 24 of the pregnant women were exposed; thus, an additional 30.5% of these women may have been exposed to second-hand smoke.

Evaluation Findings - January through June 2010

Findings for All Families Where Data Was Reported

Process Measures:

Four distinct types of process measures are being monitored as a part of the ongoing evaluation of the Healthy Lifestyles Campaign. These measures define how well the Healthy Lifestyles Campaign was implemented during the reporting period. The four process indicators describe the type and frequency of healthy lifestyle information and activity delivered to families by home visitors. Two types of strategies are being implemented by home visiting staff to address lifestyle issues:

- (1) Individual face-to-face contacts with one or more family members during home visits to provide information and education related to a specific lifestyle issue, and
- (2) Educational activities outside the home designed to reinforce healthy lifestyle messages and support families to change unhealthy lifestyle behaviors.

The initial presentation of information is provided to one or more family members through educational modules developed for each of the healthy lifestyle issues addressed through the campaign. These modules provide the home visitor with materials and suggestions for presenting the information to the family and also provide information about why the issue is important to the health and well-being of family members.

The process indicators monitored include:

- Initial presentation of information and educational materials to family members related to specific healthy lifestyle issues.
- Frequency of providing follow-up information related to specific issues.
- Number and percentage of families with opportunity to attend one or more activities outside the home.
- Number and percentage of families participating in group activities outside the home.

Process Indicators Related to Child Development, Good Nutrition, and Physical Exercise:

Healthy lifestyles information and education related to child development, nutrition, and exercise is routinely made available to all families receiving in-home family education services. Information and education designed to enhance child development, improve the level of nutrition in family meals,

Home visitors have provided initial information and education about child development, nutrition, and physical activity to more than 90% of all families reported on.

and increase healthy physical activity was presented to nearly all families reported on.

Table 1 summarizes the number of families and percent of total families represented in the reported data who have received information and education about child development, nutrition, and physical exercise.

Table 1

Information & Education Provided by Home Visitor	<u>%</u> Families	<u>Total</u> <u>Families</u>
Enhancing child development (children's book suggestions, limiting screen time, etc.)	91.0%	405
Good nutrition (child nutrition, worries about nutrition, eating out, nutrition during pregnancy, etc.)	96.2%	428
Physical activity (physical activity with infants & toddlers, general physical activity, activity during pregnancy, etc.)	91.7%	408

A second process measure being monitored is the percentage of families who receive follow-up information after the initial presentation of the information and education materials about each healthy lifestyle issue. These follow-up interventions might involve a discussion with the parent about the specific issue or an activity with the parent and/or child related to the issue.

Reported data indicates that all families (100%) who receive the initial information and education about child development, nutrition, and physical activity are provided with some level of follow-up education or activity to reinforce the desired lifestyle.

At least one follow-up session was provided during the reporting period to all families who had received the initial information and education. Most families received one to five follow-up contacts - 78% of all families received between one and five follow-up contacts related to child development, nutrition, and physical activity during the six-month period.

Some families received more than five episodes of follow-up education or activity related to these issues during the period addressed by the evaluation. More than 20% of the families received in excess of five follow-up contacts during the six-month period.

The opportunity to engage in activities outside the home with other parents is the third process indicator used to evaluate how well the Healthy Lifestyles Campaign is being carried out. In-home family education programs reporting data sponsored out-of-home activities that were available to many of the families reported on. Out-of-home activities related to child development were made available to 65.8% of families, activities that reinforce good nutrition were made available to 71.9% of families, and activities that encourage physical activity were available to 66.1% of the families. The number and percentage of families who had the opportunity to attend a program sponsored group

activity during the six-month reporting period is summarized in Table 2 for the three healthy lifestyle issues commonly addressed with all families served.

Table 2

Availability of Group Activities Outside the Home	% Families with Opportunity to Attend	Total Families With Opportunity to Attend Activity
Enhancing child development (children's book suggestions, limiting screen time, etc.)	65.8%	293
Good nutrition (child nutrition, worries about nutrition, eating out, nutrition during pregnancy, etc.)	71.9%	322
Physical activity (physical activity with infants & toddlers, general physical activity, activity during pregnancy, etc.)	66.1%	295

The fourth process indicator used to assess the degree to which the Healthy Lifestyles Campaign was carried out in the manner intended is family participation in outside group activities. The

number of activities attended by one or more members of each family reported on was captured for each of the issues addressed.

During the six-month reporting period, close to 40% of all families reported on attended

Fifty-five to sixty percent of the families that had the opportunity to attend out of home activities designed to encourage healthy lifestyles actually attended one or more such activities. at least one out-of-home group activity designed to reinforce healthy lifestyles in areas of child development, nutrition, and physical activity. More than half or the families participated in out-of-home activities when provided the opportunity to do so by the family education program.

Participation in program sponsored activities outside the home is summarized in Table 3. The participation rate for all families reported on is summarized in the table as is the participation rate

among only those families served by programs that sponsored out-of-home group activities related to each lifestyle issue.

Table 3

Rate of Participation in One or More Out-of-Home Activity	Participation <u>Rate</u> Total Families	Participation Rate With Opportunity
Enhancing child development (children's book suggestions, limiting screen time, etc.)	39.0%	59.7%
Good nutrition (child nutrition, worries about nutrition, eating out, nutrition during pregnancy, etc.)	39.8%	55.9%
Physical activity (physical activity with infants & toddlers, general physical activity, activity during pregnancy, etc.)	36.9%	56.3%

Nearly all of the families that participated in out-of-home activities attended between one and five such activities during the six-month reporting period (January through June, 2010). Six to seven percent of families who had access to out-of-home activities through the program attended these activities more than five times. 21 families attended more than five activities related to child development, 19 families attended more than five activities designed to reinforce good nutrition and 18 families attended more than five out-of-home activities to encourage physical exercise.

Outcome Measures:

Three types of outcome measures were monitored to assess the effectiveness of the Healthy Lifestyles Campaign. These outcome measures define to what degree desired changes were observed in families by the home visitors during the reporting period. Outcome indicators are based on home visitor perception of: (1) changes in knowledge, (2) changes in attitudes and beliefs, and (3) changes in behavior related to each of the lifestyle issues addressed through the campaign. Home visitors were asked to offer their opinion about whether one or more family members increased their knowledge, changed their belief or attitude about the issue, and/or changed their behavior for each of the lifestyle issues addressed. When reporting whether or not family members had changed, home visitors could respond "Yes, definitely", "Maybe", or "No, I don't think so".

A "Yes, definitely" opinion by the home visitor that one or more family members increased their knowledge, changed their belief or attitude, and/or changed their behavior about a particular lifestyle issue is the specific indicator used to assess the desired outcome. Only a "Yes, definitely" opinion by the home visitor is considered to be a reliable indicator of a desired change related to the particular issue within the family.

Since new families enter the in-home family education programs throughout the year, not all families served during a particular six-month period would necessarily have been presented with the initial information and education about any given issue. Further, not all of the lifestyle issues addressed through the campaign are present within all families. Therefore, outcome measures are defined as the percentage of those families that have received the initial information and education about a particular lifestyle issue where desired change in knowledge, attitude/belief, and/or behavior associated with that issue is observed by the home visitor.

Outcome Indicators Related to Child Development, Good Nutrition, and Physical Exercise:

Increased knowledge about child development was noted in 68.4% of those families where this issue was addressed. Increased knowledge about good nutrition was observed by the home visitors a little less frequently (in 62.9% of families where the issue was addressed), and knowledge about the importance of physical activity was reported in 59.6% of all families where the issue was addressed.

Table 5 summarizes the percentage of total families served by the thirteen programs reporting data where home visitors were confident that one or more of the family members had increased their knowledge about the importance of enhanced child development, good nutrition, and physical activity.

Table 5

Increased Knowledge Within Family	% Families Increasing Knowledge
Enhancing child development (children's book suggestions, limiting screen time, etc.)	68.4%
Good nutrition (child nutrition, worries about nutrition, eating out, nutrition during pregnancy, etc.)	62.9%
Physical activity (physical activity with infants & toddlers, general physical activity, activity during pregnancy, etc.)	59.6%

The second outcome indicator is an opinion by the home visitor that one or more family members changed their attitude or beliefs about the particular issue. More than half of

the families appear to have made some observable changes in their attitude and beliefs about the importance of child development activities; however, less than half of the families exhibited an observable change in attitudes and beliefs about the importance of sound nutrition and physical activity. Home visitors were confident that there was a change in attitude or beliefs about enhancing child development within 54.3% of the families that received

A positive change in attitude and beliefs about the importance of child development, good nutrition, and physical activity was observed in more than half of the families.

information and education about the issue. Changes in attitude or beliefs about the importance of good nutrition were noted in 48.8% of families, and desired changes in attitude or beliefs about the importance of physical exercise were observed by home visitors in 44.6% of the families.

Table 6 presents the percentage of those families who received initial information and education about the lifestyle issue where a change in attitude and beliefs about that particular issue was observed.

<u>Table 6</u>

Change in Attitude or Beliefs About Importance of Issue	% Families Changing Attitude or Beliefs
Enhancing child development (children's book suggestions, limiting screen time, etc.)	54.3%
Good nutrition (child nutrition, worries about nutrition, eating out, nutrition during pregnancy, etc.)	48.8%
Physical activity (physical activity with infants & toddlers, general physical activity, activity during pregnancy, etc.)	44.6%

The third outcome indicator is an observation by the home visitor that one or more family members changed their behavior. Home visitors were asked to report on whether or not specific changes in behavior were observed in one or more family members. These behavioral changes include:

- Increased positive interaction with young children,
- Changes in daily diet to incorporate more healthy food choices,
- Increased physical activity.

Home visitors reported behavioral changes that promote early childhood development in 75.6% of families. As was the case during the preceding six-month evaluation period, a higher percentage of parents were observed increasing positive interaction with their young children than were reported as having changed attitudes and beliefs about child development. This finding seems to confirm that many parents believe in the value of child development activities prior

The second six months of evaluative data seems to confirm that many parents are aware of the importance of early childhood development prior to receiving inhome family education services but they may lack the knowledge and skills to interact with their children in ways that promote positive development.

to enrollment in an in-home family education program but may lack the knowledge or ability to engage in such activities until taught what to do by the home visitor.

Observed changes in daily diet leading to improved nutrition was reported in half of the families where this issue was addressed and changes in behavior related to increased levels of physical activity were observed in a little less than half of the families.

Table 7 summarizes the percentage of families where desired changes in behaviors were observed by home visitors.

<u>Table 7</u>

Observed Change in Behavior	% Families Changing Behavior
Enhancing child development (children's book suggestions, limiting screen time, etc.)	75.6%
Good nutrition (child nutrition, worries about nutrition, eating out, nutrition during pregnancy, etc.)	49.8%
Physical activity (physical activity with infants & toddlers, general physical activity, activity during pregnancy, etc.)	45.3%

Findings for Specific Sub-Groups of Families

Families Where Obesity Was an Identified Issue:

90 of the families (20%) included in the reported data had one or more family members who, in the opinion of the home visitor, were "significantly overweight". Nearly 80% of these families, received information and education about this lifestyle issue.

Process Measures:

The reported data indicates that all of the families where the issue of obesity was addressed received some level of follow-up education or activity about issues related to being overweight. A little less than half (45.6%) of the families had the opportunity to attend program sponsored out-of-home group activities about weight loss and nearly half (48.8%) of those families attended one or more out-of-home activities that supported them in losing weight.

Process indicators related to overweight family members are summarized in Table 8-A for those families where home visitors reported significantly overweight family members.

Table 8-A

<u>Process Indicators – Obesity (Total = 90)</u>	Percent Families
Presented with information and education about issues related to obesity.	79.8%
Provided with follow-up education or activities about weight loss.	100.0%
With opportunity to attend out-of-home activities related to losing weight.	45.6%
With opportunity who participated in out-of-home activities related to losing weight.	48.8%

Outcome Measures:

In the opinion of the home visitors, 60.6% of the 71 families where obesity was addressed had one or more members who increased their knowledge about the negative health effects of being overweight. Home visitors reported a change in attitudes and belief about lifestyle choices that promote obesity in 33.8% of the families, and one or more family members lost weight in 40.8% of these families during the sixmonth reporting period.

These outcome indicators are summarized in Table 8-B.

Table 8-B

Outcome Indicators – Obesity (Total = 71)	Percent Families
Increased knowledge about the detrimental effects of being overweight.	60.6%
Changed attitudes and beliefs about lifestyle issues leading to obesity.	33.8%
One or more overweight family members lost weight.	40.8%

Families Where Smoking Was an Identified Issue:

112 families represented in the reported data (24.8%) had one or more family members who smoked during the six-month reporting period.

Process Measures:

Home visitors addressed smoking as a lifestyle issue with 93 of the families with smokers by providing the initial information and education about the issue. Some follow-up education or activity was also made available to all 93 families about issues related to smoking during the reporting period.

31.3% of the families where smoking was an issue had the opportunity to attend program sponsored out-of-home group activities about smoking cessation. Family members within 57.1% of those families that had the opportunity to participate were reported as having attended at least one activity.

Process indicators related to smoking are summarized in Table 9-A for those families where home visitors reported one or more family members who smoked.

Table 9-A

Process Indicators – Smoking (Total = 112)	Percent Families
Presented with information and education about issues related to smoking.	83.0%
Provided with follow-up education or activities about smoking.	100.0%
With opportunity to attend out-of-home activities related to smoking cessation.	31.3%
With opportunity who participated in out-of-home activities related to smoking cessation.	57.1%

Outcome Measures:

59.1% of the families where smoking was addressed were reported as having increased their level of knowledge about smoking as a lifestyle issue. Changes in attitude about smoking were observed by home visitors less frequently. Changes in attitudes and beliefs about the dangers of smoking were observed in less than one of every three families where the issue was addressed (31.2%). Home visitors reported that someone in the household quit smoking during the six-month period January-June 2010) in seven families or 7.5% of the families where the issue was addressed.

One additional outcome measure was reported related to smoking lifestyles - the

Data reported by home visitors indicates a notable reduction in exposure to second-hand smoke in households with smokers.

percent of families where <u>all</u> smokers in the household changed their smoking habits so they no longer smoked inside the house. This is a desired outcome since second-hand smoke is known to affect the health of non-smokers who may be exposed. Home visitors reported that smokers in half (49.5%) of all households where this lifestyle issue was addressed changed their

smoking habits so no family member smoked inside the house.

The outcome indicators related to a smoking lifestyle are summarized in Table 9-B.

Table 9-B

Outcome Indicators – Smoking (Total = 93)	Percent
	Families
Increased knowledge about smoking.	59.1%
Changed attitudes and beliefs about smoking as a lifestyle.	31.2%
Household member quit smoking.	7.5%
All household members who smoke changed smoking habits so	
they no longer smoke inside the house.	49.5%

Families Where Alcohol Use Was an Identified Issue:

7 families represented in the data had a family member who, in the opinion of the home visitor, drank excessively or otherwise abused alcohol during the reporting period.

Process Measures:

Home visitors addressed alcohol use as a lifestyle issue with all seven of the families where excessive drinking was an identified lifestyle issue by providing the initial information and education about alcohol use. At least one and in some cases up to 10 incidents of follow-up education or activity was also made available to these 7 families about issues related to alcohol use during the reporting period.

5 of the 7 families where alcohol use was an issue had the opportunity to attend program sponsored out-of-home group activities about this topic. Only 2 of those families that had the opportunity to participate in out-of-home activities were reported as having attended one to five sessions.

Process indicators related to alcohol are summarized in Table 10-A for those families where home visitors reported one or more family members who abuse alcohol.

Table 10-A

<u>Process Indicators – Alcohol (Total = 7)</u>	Percent Families
Presented with information and education about issues related to alcohol use.	100.0%
Provided with follow-up education or activities about alcohol use.	100.0%
With opportunity to attend out-of-home activities related to alcohol use.	71.4%
With opportunity who participated in out-of-home activities related to alcohol use.	40.0%

Outcome Measures:

Less than half of the 7 families where alcohol use was addressed definitely increased their knowledge about the issue based on home visitor reports. Increased knowledge about the abuse of alcohol was noted in 42.9% of these families (3 total families) during the six-month period. Home visitors reported that only 1 of the families (14.3%) changed their attitude and beliefs about the issue. Reduced alcohol consumption was noted in none of the families.

Outcome indicators related to alcohol use as a lifestyle issue are summarized in Table 10-B.

Table 10-B

Outcome Indicators – Alcohol (Total = 7)	Percent Families
Increased knowledge about excessive drinking and alcohol abuse.	42.9%
Changed attitudes and beliefs about alcohol use.	14.3%
Household member notably reduced alcohol consumption.	0.0%

Families Where Other Drug Use Was an Identified Issue:

12 families had a family member who, in the opinion of the home visitor, abused other drugs during the reporting period.

Process Measures:

Home visitors addressed drug abuse as a lifestyle issue with all 12 of these families by providing the initial information and education about the issue. One to five incidents of follow-up education or activity was also made available to all 12 families about issues related to the abuse of other drugs during the reporting period.

3 of the 12 families where drug abuse was a reported issue had the opportunity to attend program sponsored out-of-home group activities about this topic. Only 1 of those families that had the opportunity to participate in out-of-home activities related to drug abuse was reported as having attended at least one session or activity.

Process indicators related to other drug abuse are summarized in Table 11-A for those families where home visitors reported one or more family members who abused drugs.

Table 11-A

Process Indicators – Other Drugs (Total = 12)				
Presented with information and education about issues related to other drug abuse.	100.0%			
Provided with follow-up education or activities about other drug abuse.	100.0%			
With opportunity to attend out-of-home activities related to abuse of other drugs.	25.0%			
With opportunity who participated in out-of-home activities related to abuse of other drugs.	33.3%			

Outcome Measures:

Home visitors reported very little increase in knowledge about other drug use. Only 1 of the 12 families where this issue was addressed was reported as having increased their knowledge about other drug use as a lifestyle issue. A change in attitude and beliefs about other drug use was not observed by the home visitor in any of the families where the issue was addressed; however, home visitors reported that one or more household members had "stopped using other drugs" during the six-month reporting in 1 of the 12 households.

The outcome indicators related to other drug use are summarized in Table 11-B.

Table 11-B

Outcome Indicators – Other Drugs (Total = 12)				
Increased knowledge about other drug use.	8.3%			
Changed attitudes and beliefs about other drug use.	0.0%			
Household member stopped using other drugs.	8.3%			

Families Where There Was a Pregnancy:

Home visitors reported data during the six-month period for 85 families where there was a pregnancy.

Outcome Indicators - Pregnant Women:

Of the 85 pregnant women for whom data was collected, home visitors reported that 73 did not use alcohol during the pregnancy, 71 did not use any drugs for non-medical purposes, and 56 did not smoke. Among the 12 women who used alcohol or may have used alcohol, home visitors reported only 1 woman who continued to use alcohol throughout the pregnancy; however in 10 of the remaining 11 cases, home visitors did not know if the pregnant woman used alcohol. 3 of the 4 women who used other drugs continued to use other drugs during pregnancy. The reported data also indicates that 13 of the women continued to smoke throughout the pregnancy.

Exposure to second hand smoke was also reported in the data. 30 of the 85 pregnant women were reported as having not been exposed to second-hand smoke either at home or in the workplace during pregnancy. All smokers in the household stopped smoking inside the house where the pregnant woman would be exposed to second hand smoke in 10 of the households.

Forty (40) live births were reported during the six-month period representing 47% of the pregnancies. Four (10%) of these births were to low birth weight babies and two (5%) of the births were premature (prior to 36 wks.). None of the pregnancies ended in abortion or miscarriage.

Outcome indicators for pregnant women are summarized in Table 12.

Table 12

Outcome Indicators – Pregnant Women (Total = 85)	Percent
	Pregnancies
Did not use alcohol during pregnancy.	85.9%
Did not use other drugs during pregnancy.	85.5%
Did not smoke during pregnancy.	67.5%
Alcohol users who stopped using at some point during	
pregnancy.	33.3%
Drug users who stopped using at some point during pregnancy.	25.0%
Smokers who stopped smoking at some point during	
pregnancy.	31.3 %
Was not exposed to second-hand smoke during pregnancy.	36.6%
Smoking households where all smokers stopped smoking	
inside during pregnancy.	20.4%
Number of deliveries during the six-month period - January	40
through June 2010	
Low birth weight deliveries	10.0%
Premature deliveries	5.0%
Miscarriages	0.0%

Smoking During Pregnancy:

A comparative analysis of the evaluation data for the subset of families where a pregnant woman <u>smoked during pregnancy</u> vs. the subset of families where a pregnant woman <u>did not smoke during pregnancy</u> was also conducted. There were a total of 20 households where a pregnant woman was known to have smoked during her pregnancy. In 18 of these families (90%) the pregnant woman smoked and was also exposed to other household members who smoked (second-hand smoke).

Pregnancy outcomes for the sub-group of pregnant women who gave birth during the six-month reporting period are summarized below for both known smokers and non-smokers.

	Number of Births	Number of LBW Babies	Percent LBW Babies	Number of Premature Deliveries	Percent Premature Deliveries	Number of Miscarriages	Percent Miscarriages
Smokers	12	2	16.6%	1	8.3%	0	0.0%
Non- Smokers	28	2	7.1%	1	3.6%	0	0.0%

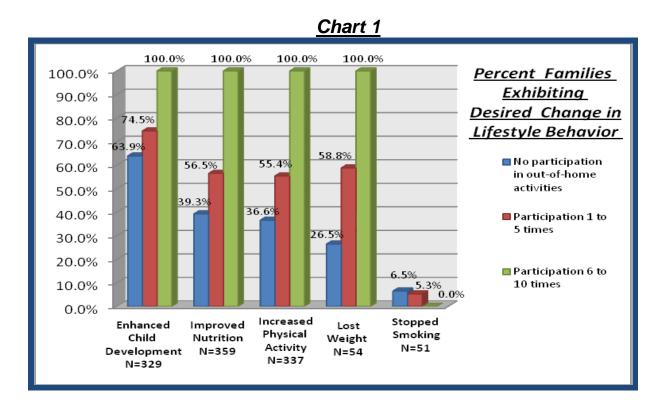
One baby born to a mother that smoked experienced complications due to lungs that were not fully developed.

Effect of Out-of-Home Activities on Desired Lifestyle Changes

Reported data was analyzed to determine if there was any obvious correlation between the number of out-of-home activities families participated in and desired outcomes. The percentage of families that were reported as having changed their behavior related to each lifestyle issue was examined for the group of families who participated in no out-of-home activities, in 1 to 5 out-of-home activities, and in 6 to 10 out-of home activities. The percentage of families exhibiting the desired behavior change for each lifestyle issue is defined as the number of families identified by the home visitor as having achieved the desired outcome (improved their nutrition, lost weight, etc.) divided by the total number of families where the issue was addressed.

This comparative analysis was conducted for five of the seven lifestyle issues addressed by the campaign – the numbers of families where issues related to alcohol abuse and drug abuse was addressed were too small to be meaningful so these two issues were not included.

The percentage of families reported as having changed their behavior increased as participation in out-of-home activities increased for four of the five issues examined. There appears to be a strong positive correlation between participation in out-of home activity and desired changes in lifestyle behavior in the areas of child development, nutrition, physical activity, and weight loss. The results of this analysis are summarized in Chart 1.



100% of Families who participated in at least 6 out-of-home activities during the six month period addressed by the evaluation exhibited the desired changes in lifestyle behaviors related to child development, nutrition, physical activity, and weight loss.

There was no meaningful difference noted in the area of smoking cessation for those families that participated in out-of-home activity related to smoking and those that did not.

General Conclusions - January through June 2010

- The Healthy Lifestyles Campaign continues to be carried out with fidelity to the program model.
- A high percentage of all families served by the in home family education programs receive information and follow-up related to child development, good nutrition, and healthy physical activity.
- 3 of every 4 families make positive changes in how parents interact with their young children to enhance child development, and half of all families make lifestyle changes related to improved nutrition and increased physical activity.
- Parents appear to be aware of the importance of early childhood development prior to healthy lifestyles intervention; however, the campaign increases their knowledge and abilities to interact with their young children in ways that promote positive development.
- 65% to 70% of the programs participating in the evaluation make available outof-home group activities that support families in areas of child development, nutrition, and physical activity.
- 50% or more of the families that have an opportunity to attend out-of-home activities in areas of child development, nutrition, physical activity, and weight loss do so. Participation in these activities increases the likelihood that these families will make better lifestyle choices.
- The campaign is fairly successful in encouraging overweight family members to lose weight. Just over 40% of the families where this issue is addressed are reported as having at least one family member who lost weight.
- Desired changes in behavior related to use of alcohol, tobacco, and other drugs were observed infrequently within those families where these issues were addressed.
- Although only about 7.5% of the families where smoking was addressed have a family member who is reported as having quit, half (49.5%) of all smoking

households are reported as having changed their smoking behavior so that smokers no longer smoke inside the house.

- The rates of low birth weight babies and premature births are more than twice as high among the group of women who smoked during their pregnancy than among those who did not smoke.
- There is a strong positive correlation between the rate of participation in out-of home group activities and positive changes in lifestyle behaviors in areas related to parent-child interaction, improved nutrition, increased physical activity, and weight loss.

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