



Healthy Maine Partnerships

Maine Cardiovascular Health Program

Maine Department of Health and Human Services

Maine Center for Disease Control and Prevention

Maine Cardiovascular Health Program

Signs and Symptoms of Heart Attack and Stroke Mini-grant Evaluation

Summary Report

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Department of Health and Human Services

Healthy Maine Partnerships, Maine Department of Health and Human Services in
collaboration with the Maine Cardiovascular Health Program.

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A list of partners contributing to this project or report includes, but is not limited to:

The following participating Healthy Maine Partnerships and their Partners

Healthy Horizons

Healthy Portland

Knox County Coalition Against Tobacco

Partnership for a Healthy Community

Somerset Heart Health

Maine Cardiovascular Health Council

Medical Care Development

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Purpose and Format of the Report

Purpose and Format

The purpose of this report is to

- Describe the work of the grantees involved in the mini-grant initiative, what they implemented, how and where
- Provide a summary of findings from the participants based on pre and post-education assessments of knowledge
- Summarize the experiences and feedback from the grantees

The information from this report is based on, and in many instances taken from, several documents created for this initiative. Those are as follows:

- Initial Request for Proposals for “Initiatives to Improve Awareness of Signs and Symptoms of Heart Attack and Stroke”
- “Survey Findings from the Signs and Symptoms of Heart Attack and Stroke Mini-Grant Pre and Post-Education Assessments”- the findings, charts and graphs are from this document
- Final Reports submitted by each grantee in the Spring of 2006—feedback and experience comments and descriptions are from this document

Background

Initiatives to Improve Awareness of Signs and Symptoms of Heart Attack and Stroke

In January 2005, the Maine Cardiovascular Health Program (MCVHP), in the Maine Centers for Disease Control and Prevention, awarded mini-grants to five local Healthy Maine Partnerships to create and implement education and awareness campaigns on the signs and symptoms of heart attack and stroke. A total of \$28,000 was awarded, in smaller amounts, to the five local Partnerships through a competitive process. The grant period extended one year from January 2005 through December 2005 and the grantees were located in various regions throughout Maine. Each location designed and implemented unique education strategies for their community in a variety of settings including nursing homes, schools, municipalities, worksites, recreation and fitness facilities and civic organizations. The focus of the education interventions was to educate community members on the -

- ◆ Primary risk factors that make it more likely for someone to have a heart attack or stroke;
- ◆ Initial warning signs or symptoms people may experience when having a heart attack or stroke;
- ◆ The first actions to take when someone is having a heart attack or stroke and the need to call 9-1-1.

The work conducted by each grantee site is as follows.

Knox County Coalition Against Tobacco- Camden/Rockport

Participants: There were 68 project participants at the YMCA sessions including a mix of older community members both male and female, ages 50 to 87, with a range in reported health status

Intervention: The Knox County Coalition Against Tobacco (KCCAT) worked with their host organization, the YMCA, to provide education sessions to their members, class participants and the community at-large. They provided education sessions on signs and symptoms as part of the YMCA programming for class participants aged 50 and over. Class instructors discussed the signs and symptoms, risk factors and led discussion of questions for class participants. They held a no-cost 2-part lecture series led by physicians on the signs, symptoms and risk factors for heart attack and stroke. This lecture series also included segments on physical activity and nutrition to support healthy living. The lecture series was promoted to a local retirement center and was incorporated in their existing programming. It was widely promoted through local media, newsletters, advertisements, internet, posters, and as part of the core YMCA programming for the community. The sessions were attended by more than 100 people at each session. The third part of the KCCAT intervention included public service announcements, posters and advertisements on the signs and symptoms of heart attack and stroke, and the need to call 911.

Healthy Horizons – Greater Waterville

Participants: The interventions reached more than 1850 people in the Waterville area. In three of the community locations, participants were primarily men and women over the age of 65, some were home bound. In the schools and two of the community locations participants were primarily women from age 35 to 65 .

Intervention: Healthy Horizons of Kennebec County worked with a variety of locations to increase awareness and knowledge of the signs and symptoms of heart attack and stroke, and the need to call 9-1-1. The sites included three different school districts, one community center, and three senior community agencies. While the primary audience was the staff at each location, some locations extended the outreach to families as well as affiliated organizations. The education approach included a variety of methods such as weekly emails, payroll based communications, staff meetings, posters, one-on-one discussions, skills fair, wellness and fitness teams. Each site had a kick-off “lunch and learn” event, some had follow-up events, some were invited to blood pressure screenings, others had onsite presentations by local hospital staff. Every site included fun activities and games or contests to draw attention and increase participation. The activities included healthy snack competitions, “heart bingo”, “taste-testing” relying on the food pyramid, and a raffle sponsored by the local Chamber of Commerce, which was open to all participating sites.

Partnership For A Healthy Community- Presque Isle

Participants: The interventions reached more than 345 residents of Aroostook County, including lower income workers at a higher risk for heart disease.

Intervention: The Partnership for A Healthy Community worked with four different groups in Aroostook County to increase awareness of the signs and symptoms of heart attack and stroke and the need to call 9-1-1, as well as the underlying risk factors. The organizations included: Burrelles Luce (a press clipping service), Aroostook County Action Program (a social services agency), Horizons Women’s Health Center and Curves (a fitness facility for women). There were a total of 345 eligible participants represented by these organizations as employees or members. The outreach conducted with these sites included mailings, presentations, posters, fact sheets, pocket cards, heart healthy walks, as well as health risk appraisals for one worksite.

Somerset Heart Health – Skowhegan

Participants: Employees of Skowhegan and Madison/Anson Area chambers of Commerce members, employees of Redington Nursing Care Facility, participants in Redington-Fairview General Hospital’s Adult Education Wellness Class, Semper Fidelis Club members, and participants in the Somerset County branch of the Maine Federation of Women’s Clubs.

Intervention: Somerset Heart Health provided educational information to community members on the signs and symptoms of heart attack and stroke and the need to call 9-1-1, and worked with a business to integrate similar information into a pilot of a “Personal Wellness Profile” for their

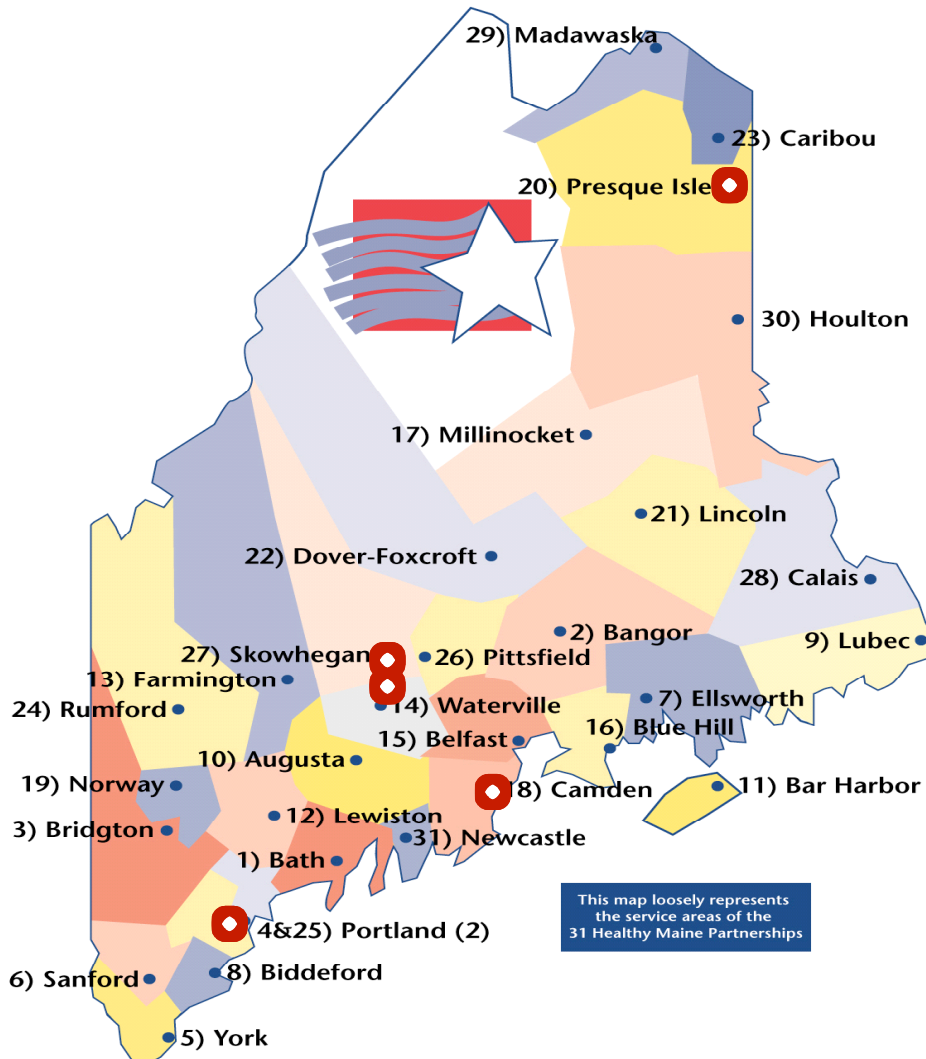
employees. Somerset Heart Health worked with the Semper Fidelis Club, with staff of a local nursing care facility, and the adult education “8 Weeks to Wellness Class” to provide education sessions on the signs and symptoms and underlying risk factors. The “Personal Wellness Profile” is based on scientific information and requires the individual to provide biometric data from their physician. The profile assesses each person’s status on heart health and provides a health rating scale of caution, improve, good, excellent, along with a narrative report and educational materials on the signs and symptoms of heart attack and stroke. The follow-up information provides lifestyle and behavioral tips on improving heart health. Through the education activities, they reached a total of 47 people through the three presentations with community organizations and 54 people through the worksite health profile project. In addition, Somerset Heart Health distributed information throughout the greater community area. The education information included 1,700 tri-fold signs and symptoms of heart attack and stroke pocket cards, prominent display of the information in the Semper Fidelis community calendar, distribution of modified “Kings and Queens Cards” (a version of the American Heart Association cards), and distributing the “Go Red for Women” pins and cards.

Healthy Portland – Portland

Participants: The interventions reached more than 1300 employees of City of Portland and 1600 employees of the Portland Public Schools .

Intervention: Healthy Portland’s signs and symptoms of heart attack and stroke education initiatives focused primarily on the employees of the City of Portland including the Portland school system, at a total of 19 sites. In addition, they conducted educational outreach to city residents through various media channels. The education activities conducted with city employees included health risk appraisals, educational sessions with school staff, paycheck stuffers with education information, email health tips, and general distribution of materials in the rotunda of City Hall. In several cases, the information was also available to city residents who frequented the City Hall. The students enrolled in the Certified Nurses Assistants program at the Portland Arts and Technology High School worked with a volunteer physician from the American Heart Association (AHA) to film an interview on the signs and symptoms of heart attack and stroke, the need to call 9-1-1, and the underlying risk factors. This video was aired on a local channel throughout the month of February.

Location of MCVHP Grantees for the Signs and Symptoms Mini-grant Project



Evaluation of the Mini-grant Project

The MCVHP Signs and Symptoms Mini-grant Project included evaluation as a core responsibility for each grantee. In the original request for proposals, applicants were asked to address baseline and follow-up assessments of participant knowledge of signs and symptoms of heart attack and stroke and the need to call 9-1-1. Applicants were also informed that successful grantees would be required to provide a report including “a description of each project and any barriers and outcomes”¹. As the work of the grant unfolded, each grantee site administered a pre and post intervention survey, referred to as “pre and post tests”, to eligible participants. A survey research firm tabulated the final results and prepared a report of findings. In addition, at the end of the grant project, each site submitted a final report recounting their experiences. Case studies were developed, based on survey data, final grantee reports, and anecdotal communications with project coordinators.

The overall purpose of the Signs and Symptoms of Heart Attack and Stroke Evaluation was to understand the types of education activities implemented by the grantees, the demographics of the participants, assess attendees’ level of knowledge before and after the education, and identify outcomes and lessons learned through the pilot project. Findings from the evaluation will be used to inform future design and implementation of projects addressing the signs and symptoms of heart attack and stroke and the need to call 9-1-1.

Data Collection and Survey Response Rates

The MCHVP worked with their evaluation survey partner, Market Decisions of Portland, to provide assistance in the assessments of the participant’s change in knowledge of heart attack and stroke and the need to call 9-1-1. Market Decisions developed the pre and post-test surveys and provided them to the MCVHP to work directly with their grantees on survey administration. The surveys were distributed by each of the grantee sites to participants whenever practical. There were instances where it was cost prohibitive or simply not feasible to survey participants, such as in the case of educational messages broadcast through local media. Participants were asked to complete both a baseline assessment before the education intervention, and a follow-up assessment. The administration of the post-test was conducted at varying intervals of time after the intervention, depending on the intervention and the grantee. Several of the participating HMPs offered raffles or contests to help promote participation in the survey. A total of 1,259 pre-test surveys and 754 post-test surveys were completed.

The grantees implemented a variety of education activities. For some activities, such as posters or distributed brochures, the exact number of people who were exposed to the interventions cannot be precisely known. Due to the varying nature of exposure and the unknown number of persons reached, response rates would not be appropriate to this methodology. The following tables show the number of pre test and post-test surveys completed for each type of intervention, and for each of the five participating Healthy Maine Partnerships.

¹ “Initiatives to Improve Awareness of Signs and Symptoms of Heart Attack and Stroke”, Maine Cardiovascular Health Program, Bureau of Health, Maine Department of Health and Human Services.

Table 1: Type of Interventions Used by Each HMP

Intervention Type	Pre-test (Number of surveys)	Pre-test (Percentage of surveys)	Post-test (Number of surveys)	Post-test (Percentage of surveys)	Total
Presentation or Class	100	7.9%	72	9.5%	172
Multiple Interventions	773	61.4%	317	42.0%	1090
Interoffice Mail	193	15.3%	165	21.8%	358
Monthly Staff Meetings	193	15.3%	200	26.5%	393
Total	1259	100.0%	754	100.0%	2013

Table 2: Number of Surveys for Each Participating Healthy Maine Partnership

HMP	Pre-test	Post-test	Total
Healthy Horizons	606	252	858
Partnership For A Healthy Community	167	65	232
Knox County Coalition	68	46	114
Somerset Heart Health	32	26	58
Healthy Portland	386	365	751
Total	1259	754	2013

Limitations of the Survey Data

There are several limitations and caveats that apply to the evaluation findings. The evaluation of the mini-grant initiative used a descriptive approach with a mix of data collection methods including participant surveys and grantee reports. The evaluation design did not include comparison groups, randomized trials, nor did it use specific outcome goals.

The evaluation surveys were administered by each grantee to their participants whenever possible. The respondents may not represent the full range of participants exposed to the education information. The respondent numbers are very small for some sites and some interventions, therefore caution should be used in interpreting the findings for individual sites or interventions. Respondents were asked to list three signs and symptoms of heart attack and stroke, while the education information included more than three signs. Based on this difference, it is difficult to measure increases in knowledge of all of the signs and symptoms. In addition, the responses to the survey represent the knowledge of the respondent at a single point in time; the survey findings do not provide insights into the longer-term retention of knowledge.

Participants may have been exposed to educational information on the signs and symptoms of heart attack and stroke from other sources. Due to limiting factors including unknown participation and response rates and the variety of the interventions, the findings from the pre and post-test surveys should be considered qualitative information and should only be used to provide general direction.

Key Findings from Participant Surveys

Profile of the Survey Respondents

A majority of respondents to the pre and post-test surveys were older, educated, insured and reported that their health was good or very good. This finding reflects the demographics of the majority of the participating groups- municipal employees, social service employees, women’s groups and community groups.

- Respondents averaged 50 years of age.
- Most respondents were female (86% pre-test and 81% post-test), with some or more college education (76% pre-test and 87% post-test).
- Most respondents reported that their general health was “good” or “very good” (76% pre-test and 77% post-test). Pre-test respondents reported an average BMI of 27, and post-test respondents of 26.
- The vast majority of respondents were covered by health insurance (96% pre-test and 98% post-test).

Table 3: Gender of Survey Respondents

Q20 Please indicate your gender	Pre-test (Number of surveys)	Pre-test (Percentage of surveys)	Post-test (Number of surveys)	Post-test (Percentage of surveys)	Total (Number of surveys)
1 Male	171	13.8%	139	18.6%	310
2 Female	1064	86.2%	607	81.4%	1671
Total	1235	100.0%	746	100.0%	1981

Table 4: Education of Survey Respondents

Q16 What is the highest grade in school you completed?	Pre-test (Number of surveys)	Pre-test (Percent age of surveys)	Post-test (Number of surveys)	Post-test (Percentage of surveys)	Total (Number of surveys)
1 Never attended or only kindergarten	1	0.1%	0	0.0%	1
2 Grades 1-8 (elementary)	12	1.0%	1	0.1%	13
3 Grades 9-11 (some high school)	21	1.7%	6	0.8%	27
4 Grade 12 or GED (High school graduate)	258	20.9%	95	12.6%	353
5 College 1-3 years (some college or technical school)	330	26.8%	164	22.0%	494
6 College 4 years or more (college graduate)	611	49.6%	479	64.5%	1090
Total	1,233	100.0%	745	100.0%	1,978

Table 5: Self-Reported General Health of the Survey Respondents

Q1 Would you say that in general your health is:	Pre-test (Number of surveys)	Pre-test (Percent age of surveys)	Post-test (Number of surveys)	Post-test (Percent age of surveys)	Total (Number of surveys)
1 Excellent	171	13.7%	110	14.8%	281
2 Very Good	483	39.0%	339	45.5%	822
3 Good	457	36.6%	237	31.8%	694
4 Fair	118	9.5%	53	7.1%	171
5 Poor	15	1.2%	5	.7%	20
Total	1,244	100.0%	745	100.0%	1,988

Table 6: Health Insurance Status of Survey Respondents

Q21 Do you have health insurance?	Pre-test (Number of surveys)	Pre-test (Percentage of surveys)	Post-test (Number of surveys)	Post-test (Percentage of surveys)	Total (Number of surveys)
1 Yes	1,183	96.0%	729	97.5%	1912
2 No	48	3.9%	19	2.5%	67
8 Don't Know	1	.1%	0	0%	1
Total	1,232	100.0%	748	100.0%	1,980

Respondent Personal Experience with Heart Attack and Stroke

While the majority of respondents reported that they had not had a heart attack or stroke, about half reported that they did know someone who had a heart attack or a stroke. Thus the education information was relevant to their experiences and knowledge.

- ◆ The vast majority of the survey respondents had never been told by a doctor, nurse or other health professional that they had a heart attack (96%), stroke (97%) or a transient ischemic attack (96%).
- ◆ About half of the respondents who completed the pre-test **knew someone** who had experienced a heart attack (53%), angina or coronary heart disease (52%), or a stroke (54%). About one in four (24%) pre-test respondents reported that someone they spend time with had a transient ischemic attack (TIA). The post-test responses were similar on each of these items.

Figure 1: Percentage of Respondents' Who Report Having Been Told by a Health Professional that They Had a Heart Attack, Stroke or TIA

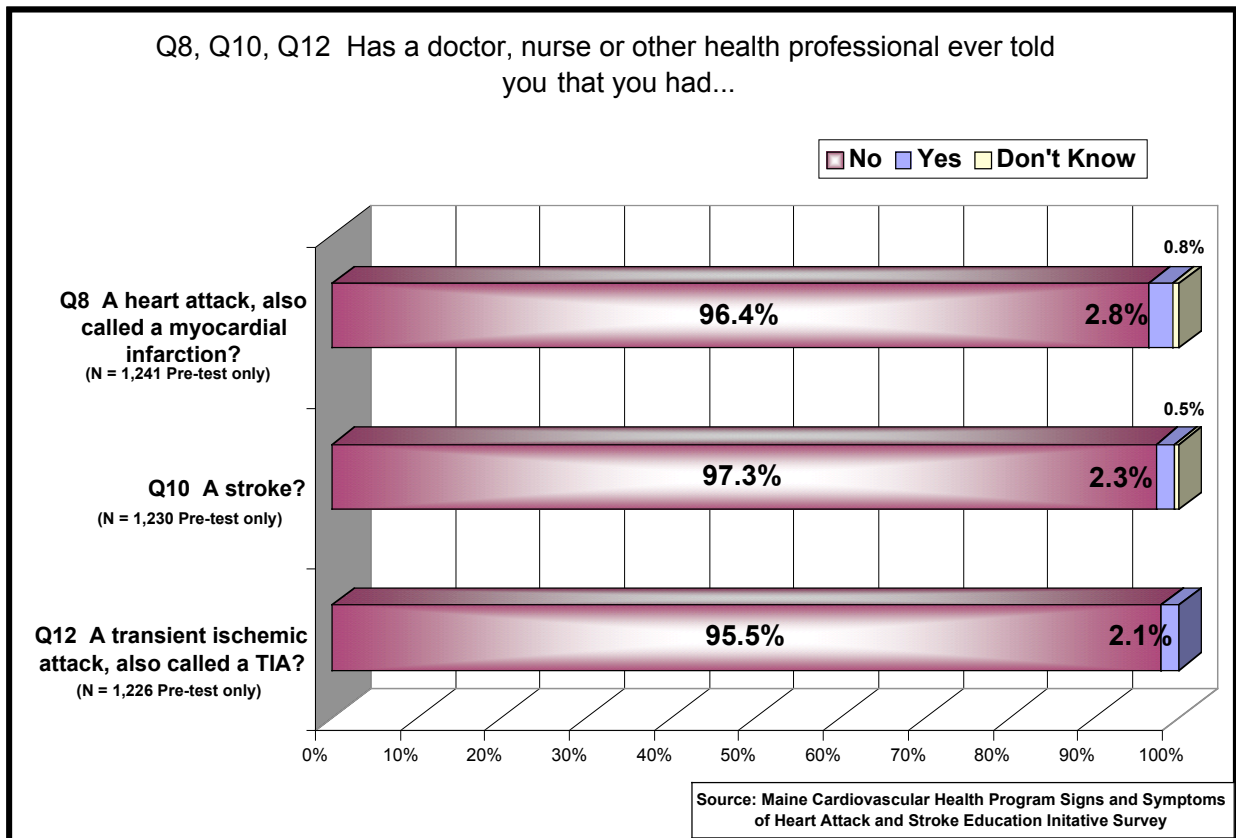
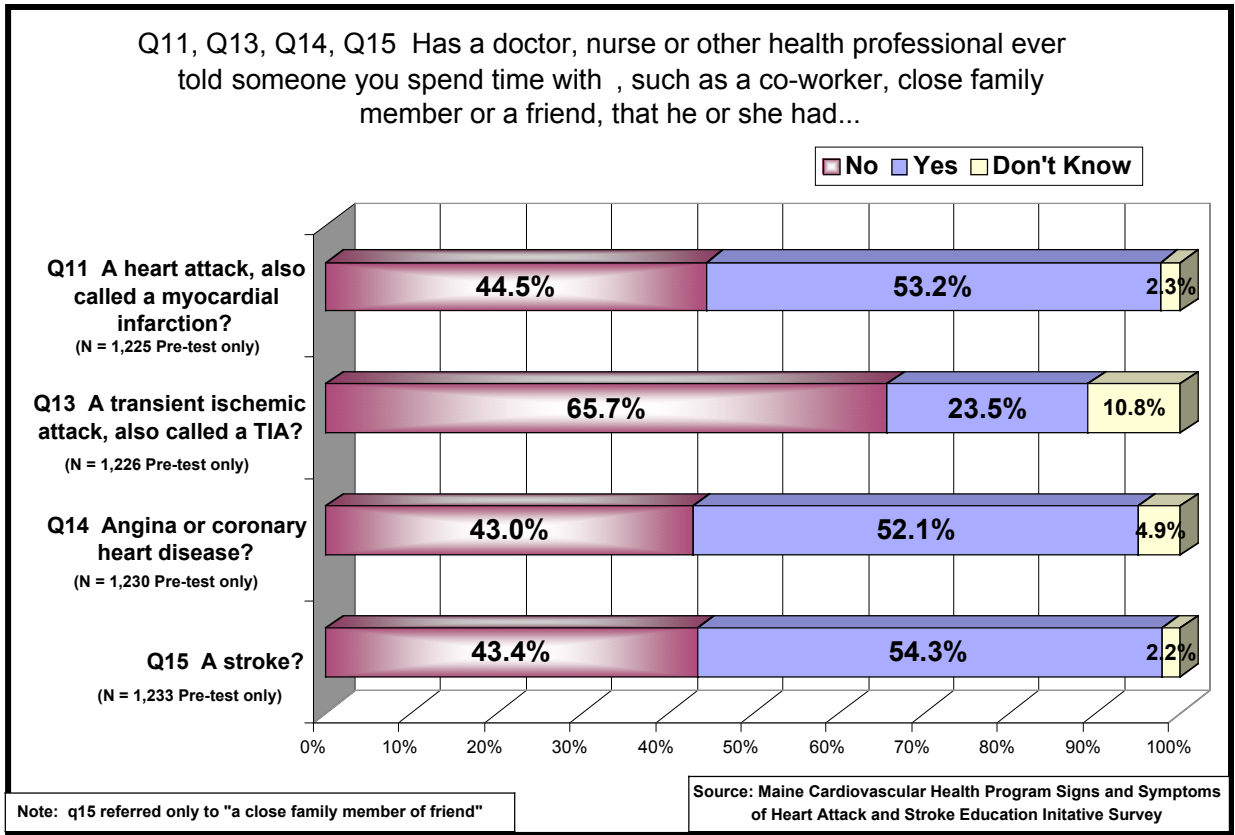


Figure 2: Percentage of Respondents Who Report Having an Acquaintance Who Had a Heart Attack, TIA, Coronary Heart Disease or a Stroke



Respondent Knowledge of Signs and Symptoms of Stroke

Knowledge of Risk Factors for Stroke

All of the respondents were exposed to some type of education information on the risk factors of stroke through the work of their local HMP, either in a community or worksite setting.

Respondents showed modest improvement in reporting the correct risk factors for stroke after they received the education information. On some specific risk factors, a smaller proportion of people reported knowledge of the factors leading to stroke. Over half were able to state two of the preventable or modifiable risk factors including overweight (63%) and smoking (51%). However, only 23% reported inadequate exercise as a risk factor. Slightly less than half reported high blood pressure as a risk factor (48%) and 33% reported cholesterol. See Table 7.

The percentage of respondents who mentioned high cholesterol as a risk factor for stroke increased 12 percentage points (from 26% to 40%) after the interventions. Family history and diet were also somewhat more likely to be mentioned post-test than pre-test.

Some of the responses in the “other” category referred to over-exertion or co-morbidities. Substance abuse was mentioned by several respondents, as were particular emotional disturbances, such as “divorce,” “death” and “working with women”.

Table 7: Risk Factors for Stroke Identified by the American Stroke Association

Risk Factors for Stroke

The American Stroke Association has identified several factors that increase the risk of stroke, most of which can be modified, treated or controlled.

The controllable risk factors for stroke include:

- ◆ High Blood Pressure
- ◆ Tobacco Use
- ◆ Diabetes Mellitus
- ◆ Carotid or Other Artery Disease
- ◆ Other Heart Disease
- ◆ Transient Ischemic Attacks (TIAs)
- ◆ Atrial Fibrillation (heart rhythm disorder)
- ◆ Certain Blood Disorders
- ◆ Sickle Cell Anemia
- ◆ High Blood Cholesterol
- ◆ Physical Inactivity and Obesity
- ◆ Excessive Alcohol Use
- ◆ Some Illegal Drugs

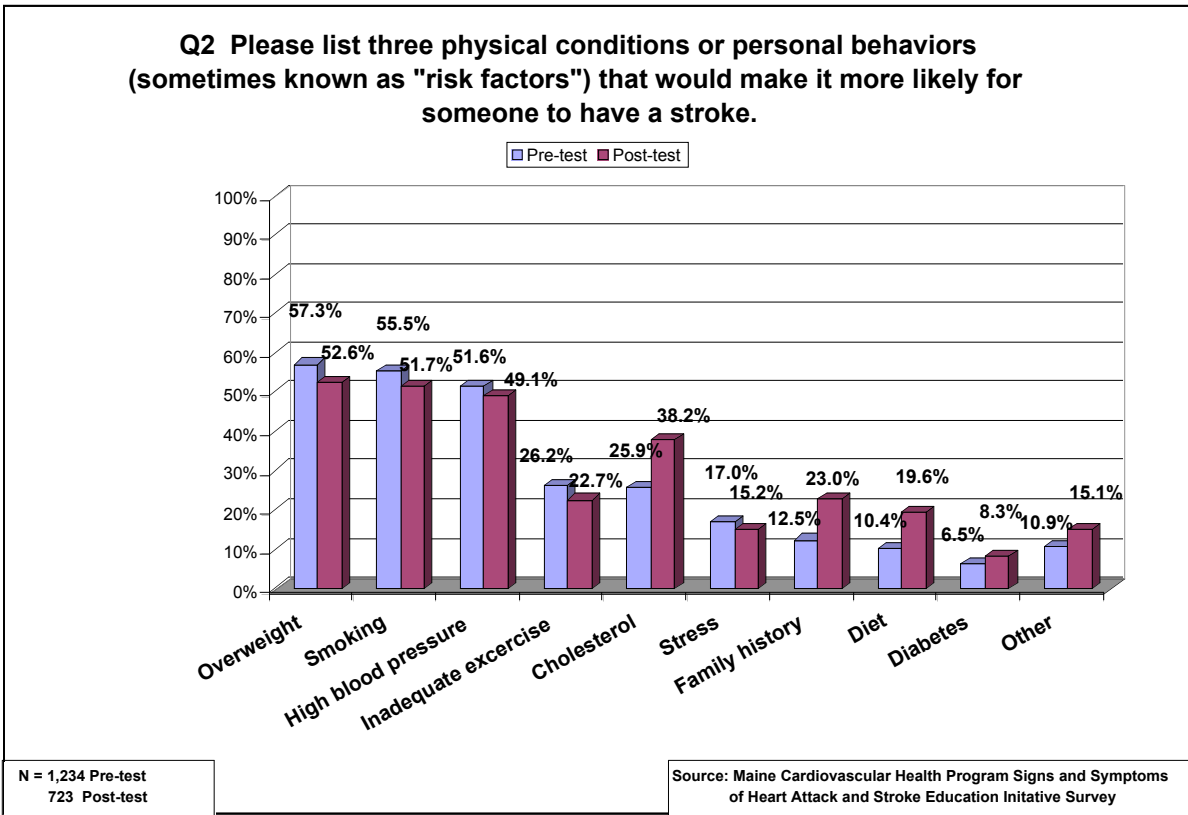
The risk factors that cannot be controlled include:

- ◆ Increasing Age
- ◆ Sex (Gender)
- ◆ Heredity (Family History) and Race
- ◆ Prior Stroke or Heart Attack

The American Stroke Association also lists several “other” factors, which include:

- ◆ Individual Response to Stress
- ◆ Aging and Menopause
- ◆ Birth Control Pills
- ◆ Taking oral contraceptives and smoking greatly increases the risk of stroke

Figure 3. Respondents' Pre and Post-Test Knowledge of the Risk Factors for Stroke (Q2-Open Ended Question)



Respondent Knowledge of the Signs and Symptoms of Stroke

Each of the respondents received information on the signs and symptoms of a stroke. See Table 8.

The pre and post-education effort survey results show an increase in the proportion of respondents reporting the individual signs and symptoms of a stroke. The proportion of respondents identifying numbness as a sign, increased from 78% to 91%, and dizziness increased from 35% to 40%. The other signs and symptoms had increases in reports as well. Interestingly, there was an increase in the percentage of respondents reporting “shortness of breath” as a risk factor. That is a warning sign of a heart attack and is not associated with stroke.

In addition to improvements in knowledge of the signs and symptoms of a stroke, most (96% post-test) state that they would call 9-1-1 if they thought someone was having a stroke.

Table 8 : The Signs and Symptoms of Stroke

The Signs and Symptoms of Stroke

The American Stroke Association lists the following warning signs of stroke:

- ◆ Sudden numbness or weakness of the face, arm or leg, especially on one side of the body
- ◆ Sudden confusion, trouble speaking or understanding
- ◆ Sudden trouble seeing in one or both eyes
- ◆ Sudden trouble walking, dizziness, loss of balance or coordination
- ◆ Sudden, severe headache with no known cause
- ◆ The percentage of respondents who mentioned numbness or weakness as a warning sign of stroke increased, from 78% to 91%. The percentage of those who named dizziness or loss of balance also increased, from 35% to 46%.

Figure 4: Respondents' Pre and Post-Test Knowledge of the Warning Signs or Symptoms of Stroke (Q3 Open Ended Question)

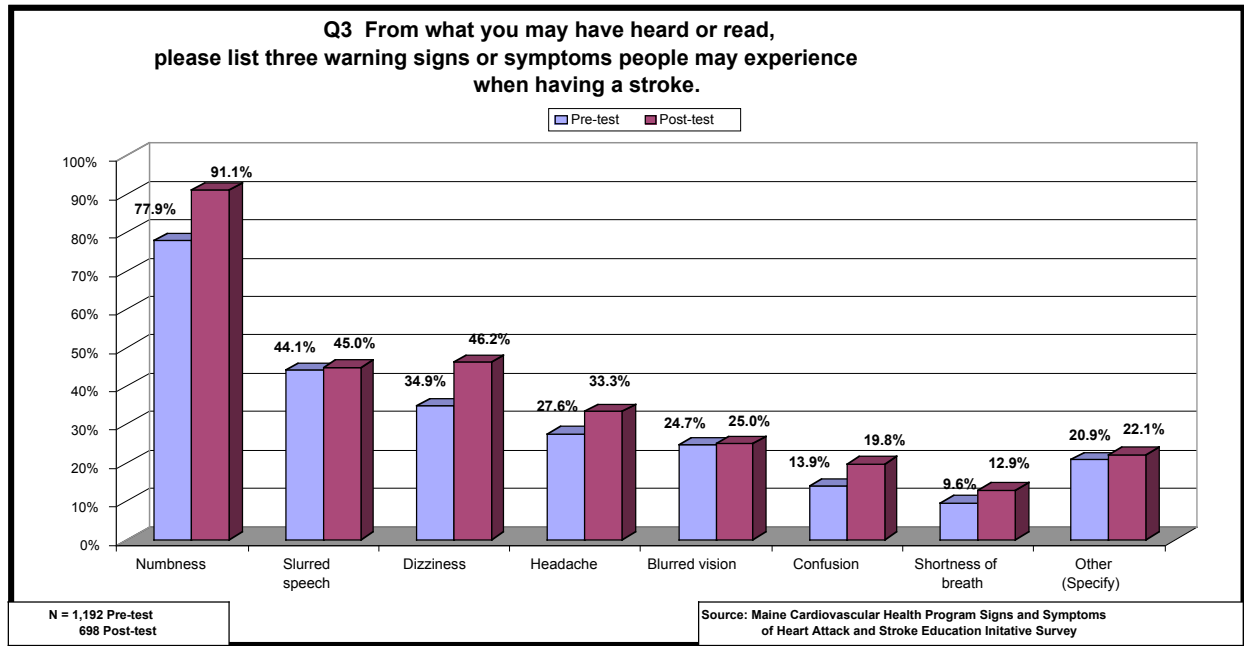
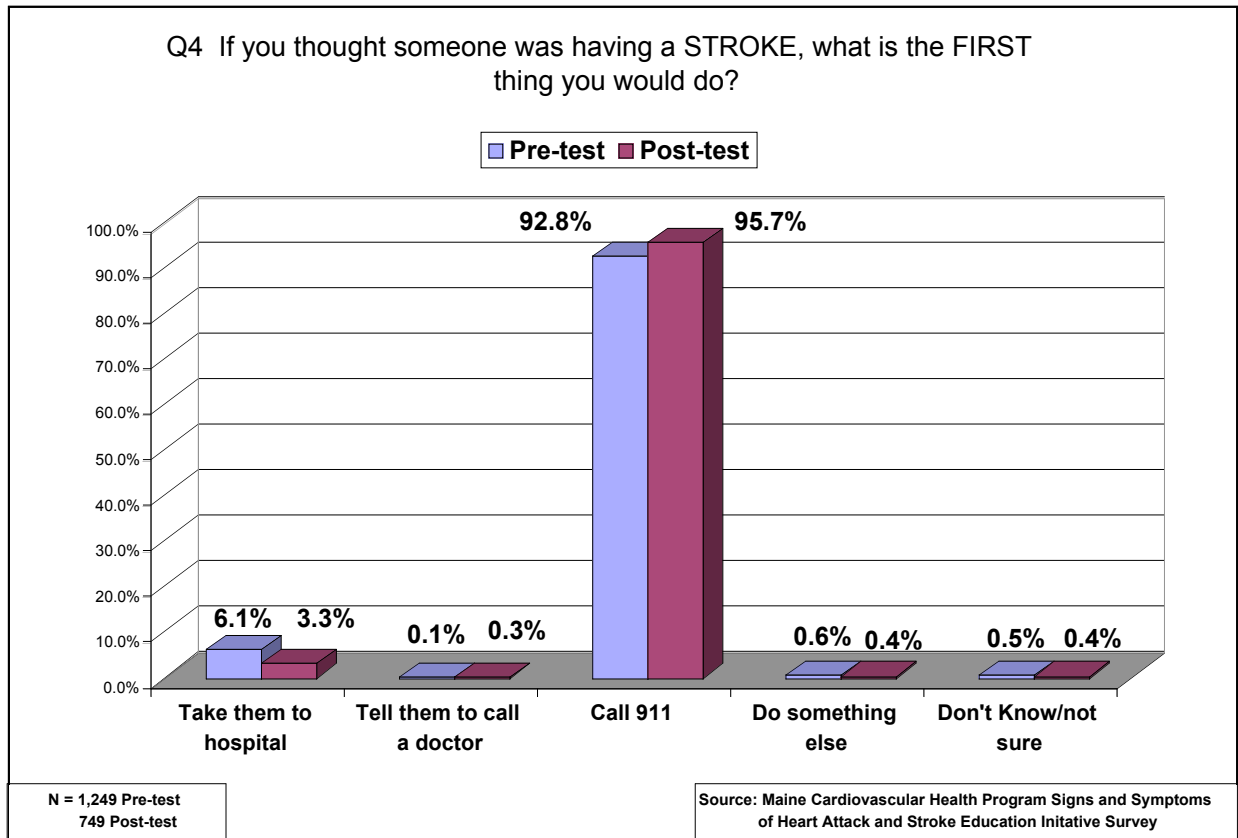


Figure 5: Respondents' Pre and Post-Test Knowledge of What to Do in Case of Stroke



Respondent Knowledge of Heart Attack

Risk Factors for Heart Attack

Each respondent was provided educational information on risk factors that lead to heart attack. See Table 9.

There was little change from pre-test to post-test results in the specific risk factors for heart attack named by respondents. Both pre- and post-test, respondents generally focused on the “controllable” risk factors. About two-thirds mentioned being overweight (63% and 65%, respectively) and about half mentioned smoking (56% and 55%, respectively) as risk factors for heart attack.

Among the risk factors for heart disease that cannot be controlled, respondents mentioned family history most frequently (12% pre-test and 5% post-test).

“Other” responses included over exertion, either in very cold or very hot weather, certain prescription drugs and clogged arteries. Some respondents listed particular emotional upsets that may have come from individual experiences, such as “having heard someone close to them die before they got there to see them, “stress, divorce or someone dies or is dying” and “working with students/parents.”

A few respondents confounded the causes (“clogged arteries”) or symptoms (“shortness of breath” or “pain in left arm”) of stroke or heart attack with the risk factors.

Table 9: The American Heart Association Risk Factors for Heart Attack

Risk Factors for Heart Attack

The American Heart Association distinguishes between controllable and uncontrollable risk factors for heart attack.

Controllable risk factors include:

- ◆ Cigarette smoking and exposure to tobacco smoke
- ◆ High blood cholesterol (especially LDL or “bad” cholesterol over 100 mg/dL)
- ◆ High blood pressure
- ◆ Physical inactivity
- ◆ Obesity and being overweight
- ◆ Diabetes mellitus

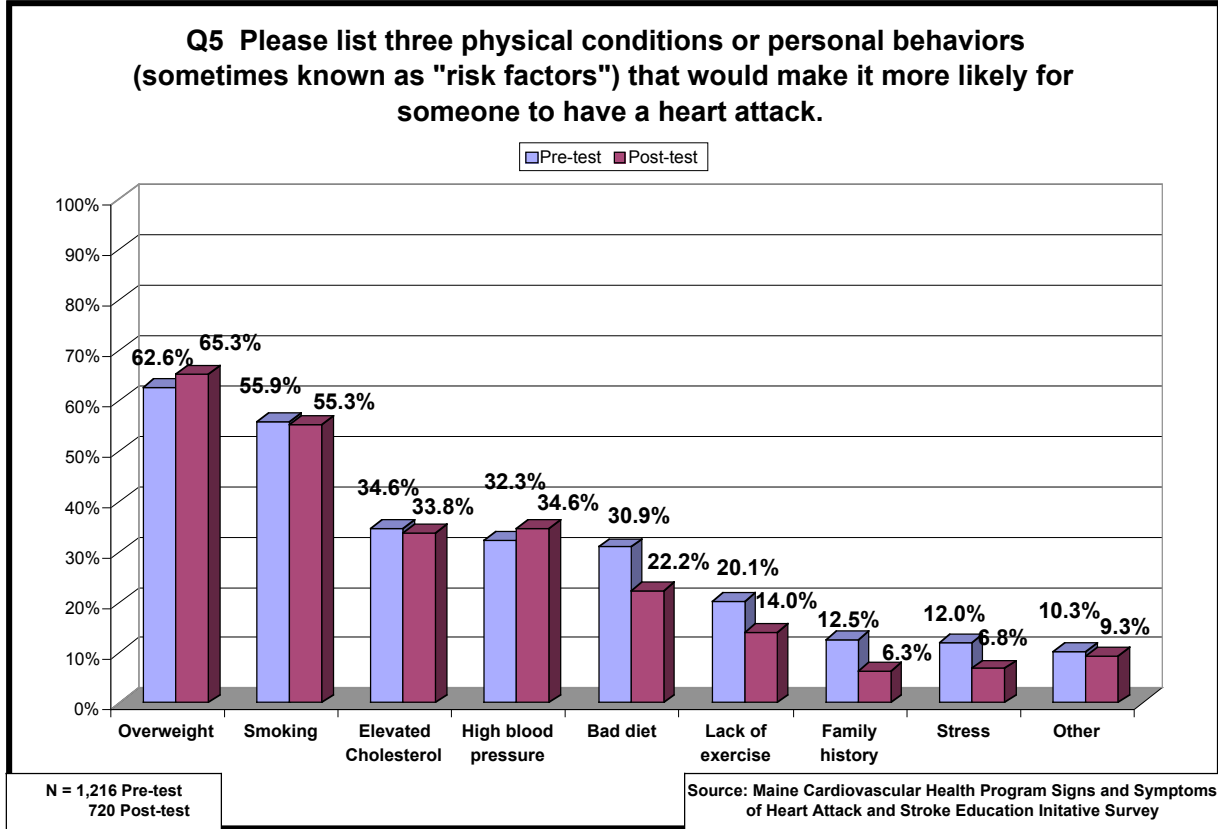
Risk factors for heart disease that cannot be controlled include:

- ◆ Increasing Age
- ◆ Gender (male)
- ◆ Race (African American, Mexican-American, American Indian)
- ◆ Heredity (Family History)

The American Heart Association also lists several other factors, including:

- ◆ Individual Response to Stress
- ◆ Excessive Alcohol
- ▲ Some Illegal Drugs

Figure 6. Respondents' Pre and Post-Test Knowledge of the Risk Factors for Heart Attack (Q5 Open Ended Question)



Respondent Knowledge of the Signs and Symptoms of Heart Attack and the Need to Call 9-1-1

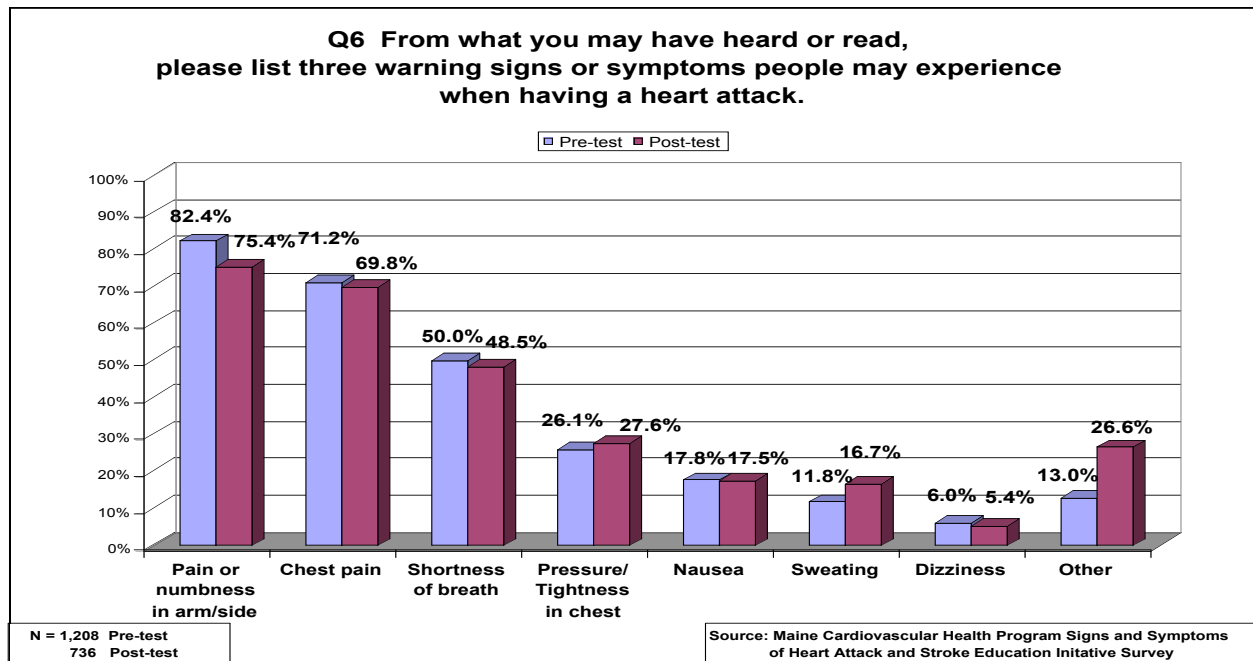
After being exposed to the education information, the majority of respondents, both pre and post-test, were able to name pain or numbness in the side or arm and/or chest pain as signs of heart attack. Although no single sign showed a dramatic increase in awareness, several signs or symptoms increased slightly. This may indicate an increased breadth of knowledge after the intervention among respondents overall. See Table 10.

Responses in the “other” category, both pre and post-test, included change in skin color, passing out or unconsciousness, blurred vision, metallic taste in mouth, bloody nose, red face, and exhaustion.

Table 10: The Signs and Symptoms of a Heart Attack

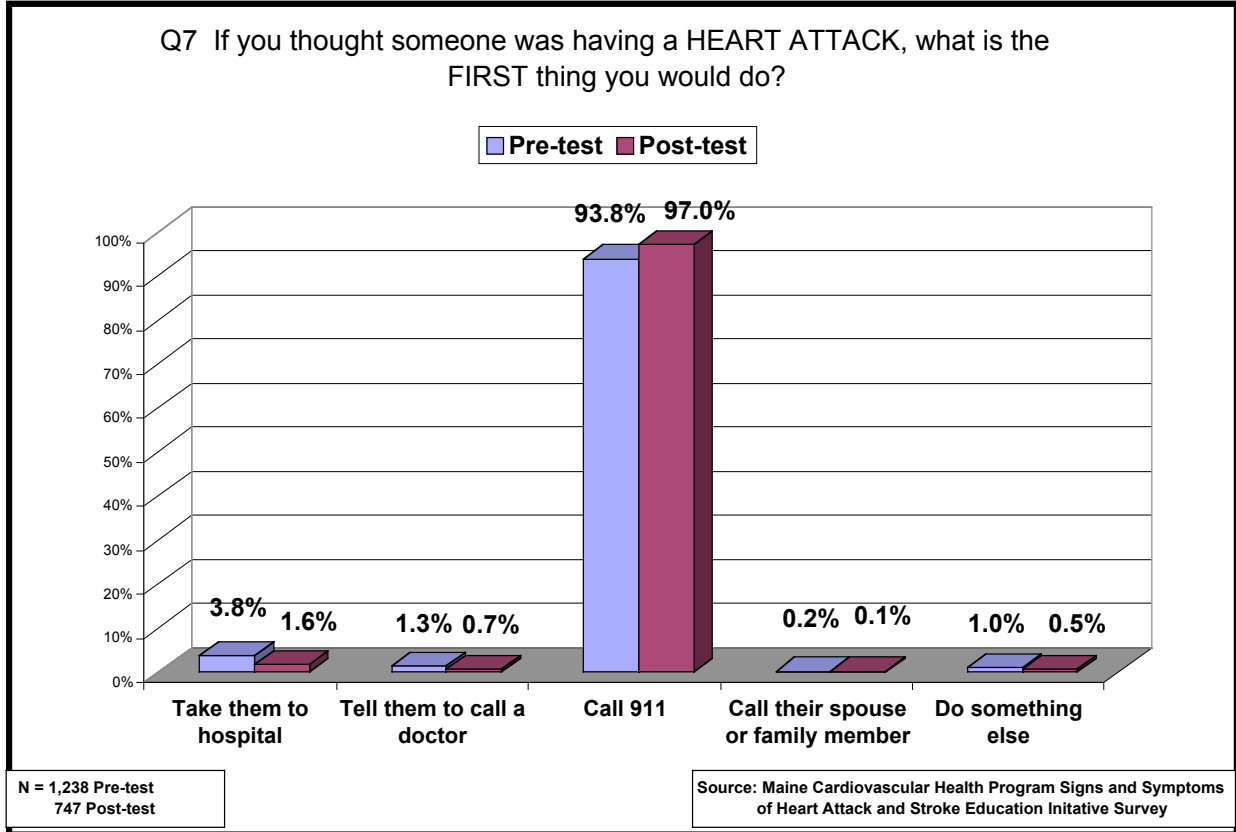
<u>The Warning Signs of Heart Attack</u>	
The American Heart Association lists the following warning signs for heart attack:	
◆	Chest pain or discomfort
◆	Pain or discomfort in jaw, neck or back
◆	Pain or discomfort in arms or shoulders
◆	Shortness of breath
◆	Feeling weak, lightheaded or faint

Figure 7: Respondents' Pre and Post-Test Knowledge of the Warning Signs or Symptoms of Heart Attack



The vast majority of those surveyed before (94%) and after (97%) the interventions said they would call 911 first if they thought someone was having a heart attack.

Figure 8: Respondents' Pre and Post-Test Knowledge of What to Do in Case of Heart Attack



Sources of Information on Signs and Symptoms of Heart Attack or Stroke

As part of the follow-up post-test, respondents were asked to indicate where they have seen or heard information on the signs and symptoms of heart attack or stroke. This question was designed to understand the various messages and sources of messages on heart attack and stroke, including the mini-grant and other messages. Over half of the respondents to the post-test survey reported that they had seen or heard information about recognizing the signs and symptoms of a heart attack or stroke from television (61% and 53%, respectively) or from brochures, paycheck inserts or poster (57% and 55%, respectively).

Others reported they saw or heard information at their healthcare provider office (32% heart attack and 28% stroke) or from materials sent in the mail (30% heart attack and 27% stroke).

Looking at this information for each grantee site shows some interesting findings. Considering the site-specific interventions, the majority of the Partnership For A Healthy Community respondents (77% heart attack, 76% stroke) reported that they had received information in the mail. More than half (53% heart attack, 50% stroke) of the Healthy Portland respondents reported receiving paycheck inserts or saw a poster. For Healthy Horizons, most (61% heart attack and 58% stroke) reported seeing paycheck inserts, brochures or posters. Each group of respondents acknowledged the information provided through local channels. (Knox County Coalition Against Tobacco and Somerset Heart Health post-test surveys did not include this question.)

Figure 9: Post-Test Recollection of Where Respondents have Seen or Heard Information About Recognizing the Signs and Symptoms of Stroke

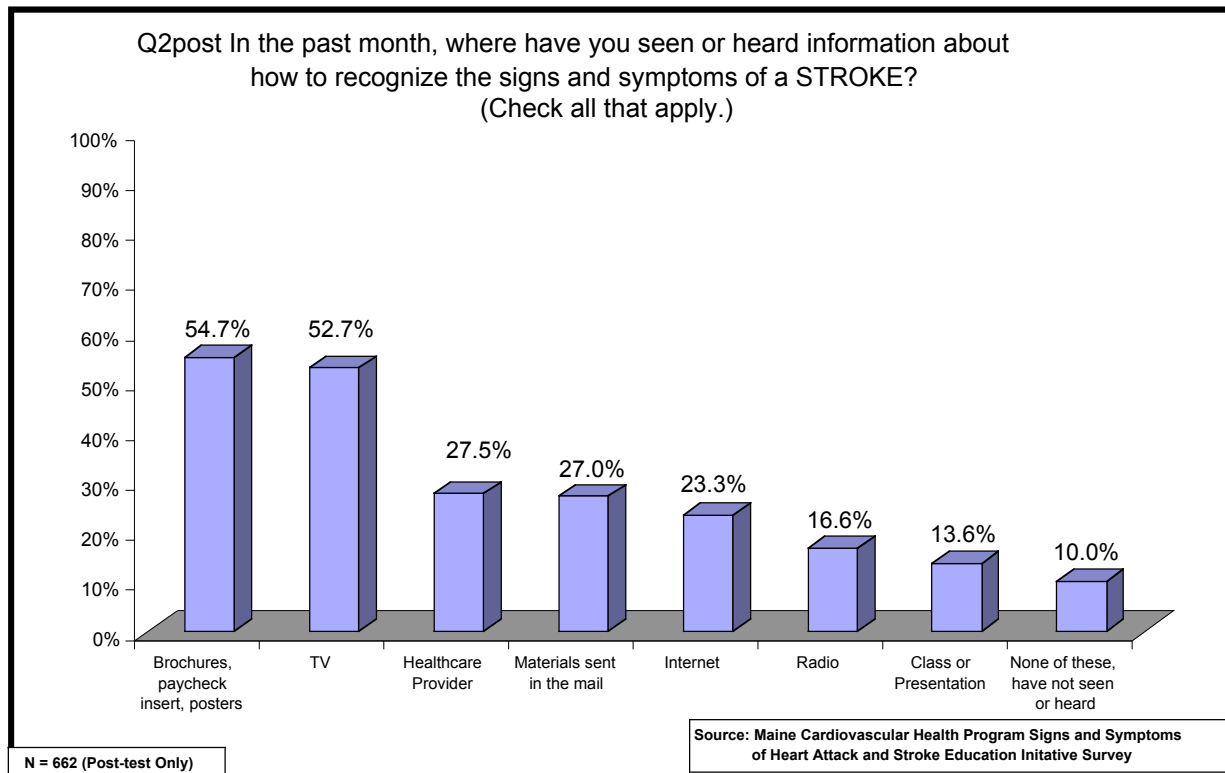
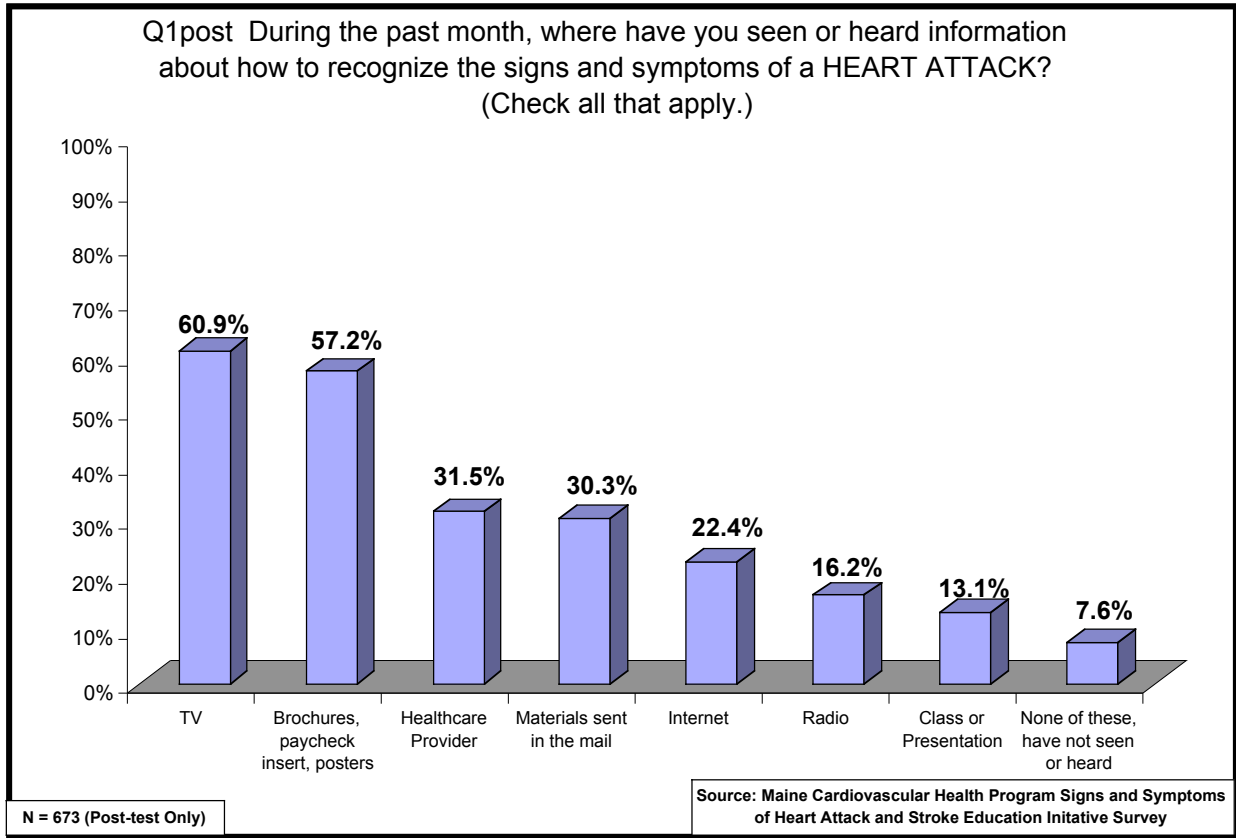


Figure 7: Post-Test Recollection of Where Respondents have Seen or Heard Information About Recognizing the Signs and Symptoms of Heart Attack



Respondent Perceptions of the Interventions

The vast majority of respondents found the interventions to be “very” or “somewhat” helpful, with just 4% describing the program as “not very” or “not at all helpful”.

Overall, respondents found the multiple interventions to be most helpful. These included one on one discussion and small group activities, distribution of materials with paychecks and presentations accompanied by mailings. Data was not available for the presentation/class intervention format on this question.

The findings for each grantee location with responses to this question are similar to the overall findings, with Partnership For A Healthy Community respondents reporting overwhelmingly, 76%, “very helpful”.

Figure 8: Respondents’ Perceptions of the Signs and Symptoms of Heart Attack and Stroke Education Program

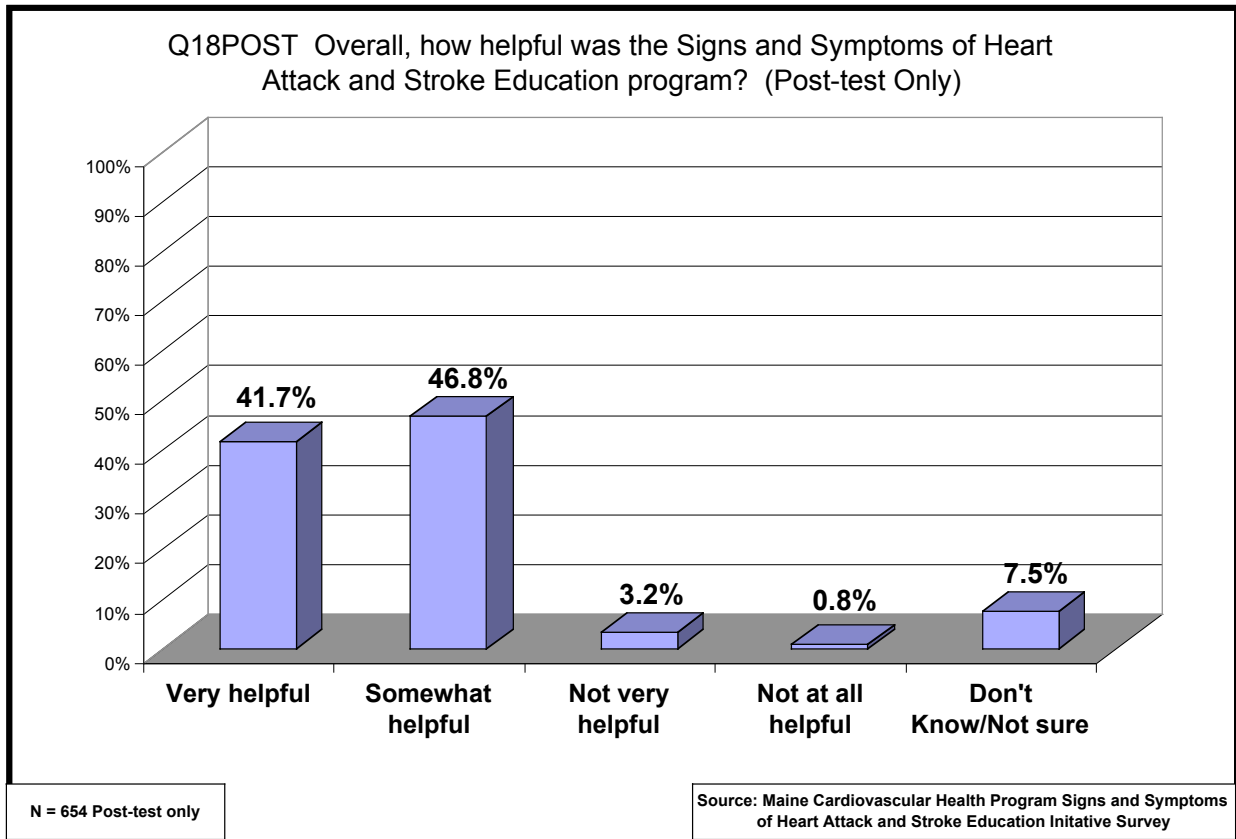
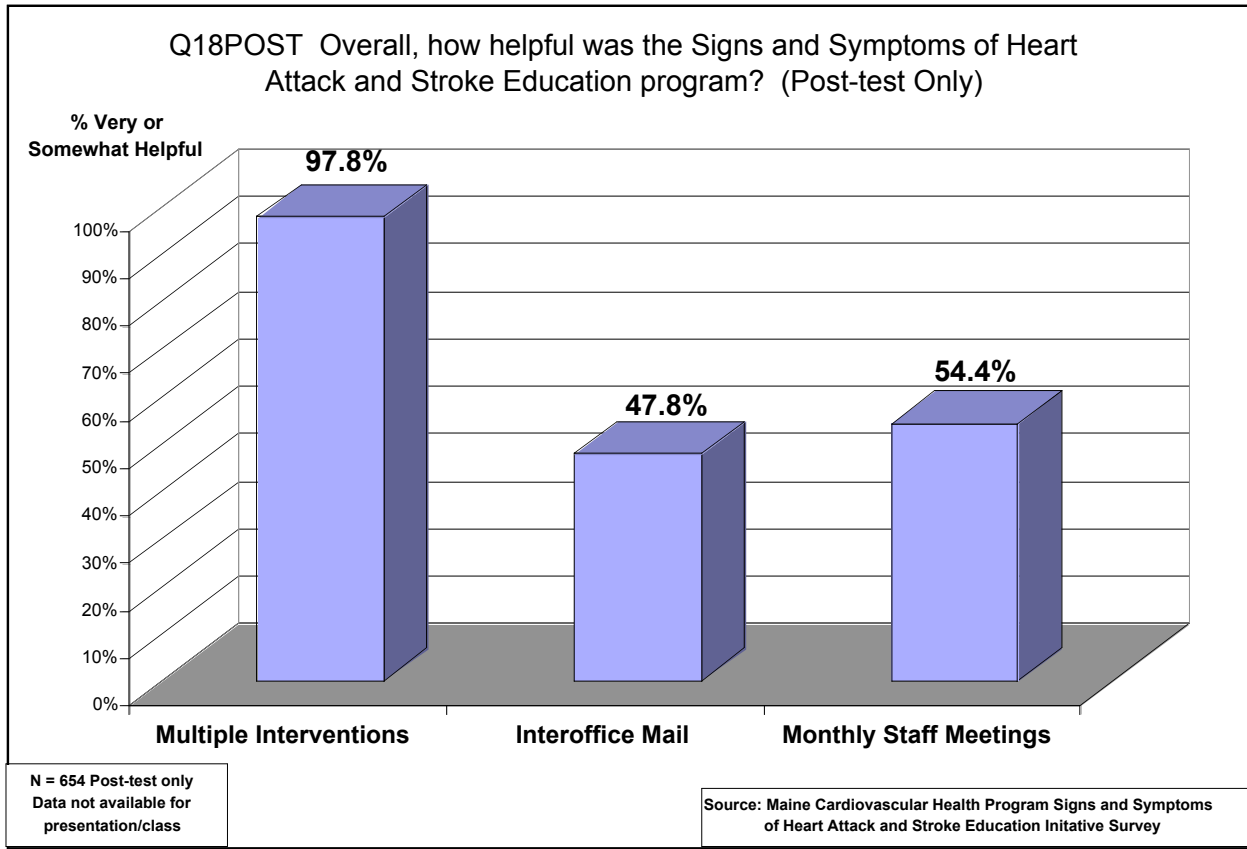


Figure 9: Respondents' Ratings of the Helpfulness of the Signs and Symptoms of Heart Attack and Stroke Education Program by Type of Intervention



Respondent Recommendations for Improvements to the Signs and Symptoms of Heart Attack and Stroke Education

Post-test respondents were asked to make suggestions for improvement to the mini-grant educational project. Respondents' recommendations fell into ten general categories:

Table 11: Types of Respondent Recommendations for Improvements to the Signs and Symptoms of Heart Attack and Stroke Education

Percentage	Type of Comment
24%	Additional Methods Of Reaching People With The Information
15%	Appreciation for a Good Program
15%	Additional Places To Reach People With The Information
13%	Repeat The Information More Often
9%	Other Information Respondents Thought Should Be Included
8%	Address Women's Specific Health Concerns
4%	Include Personal Experiences Or Testimonials From Heart Attack Or Stroke Survivors
3%	Questions Related To The Information
1%	Request For Multi-Lingual Literature
9%	Other Comments

Key Findings Reported by the Grantees

Each of the five participating local HMPs provided summary reports at the end of the grant project. In the reports, they provided responses to the following questions.

- Please describe any barriers and outcomes that were encountered and/or measured around the strategies. How were barriers addressed?
- Please describe how this project will shape future efforts to address signs and symptoms awareness in your community.
- What recommendations do you have for the MCVHP as they consider developing future signs and symptoms awareness projects?

Barriers Reported by Grantees

Several themes emerged from the description of barriers that grantees faced in this initiative. The first was the challenge in creating an interest in participation in the education efforts. The grantees addressed this by working with existing groups, creating fun around the education effort and using incentives. Another common challenge was in the administration and return of completed post-education effort surveys. Grantees described that they used incentives to increase response rates. The third common barrier was staff turnover, as staff leave, it is a challenge to maintain momentum on the project. This barrier was overcome through technical assistance provided by the MCVHP. Specific barriers and solutions are listed below.

Creating interest in participation

- Used “captive” groups like worksites worked well
- Used existing classes and community groups worked well
- Used existing meetings such as staff meetings worked well
- Used incentives to increase participation
- Implemented games and fun activities to increase interest

Issues with the Survey

- Difficult to locate participants in classes or presentations once it ended
- Difficult to schedule time to administer the pre and post test in a single class
- Limited the survey responses of signs and symptoms to 3, did not allow grantees to see if knowledge of all of the signs and symptoms had changed
- Needed to provide incentives to have surveys completed
- Surveys required hours of folding and stapling to prepare to send to staff
- Surveys spurred conversation about improvements in knowledge

Turnover in staff

- Turnover in staff at local intervention sites created need for clear communication
- Turnover and staff vacancy at the local HMP created need for assistance from the MCVHP

Plans for Future Efforts

Several of the grantees described their intentions to use their lessons learned in future programming at their HMP. Their future uses include using the lessons learned about communication and education in other health education work, using their new local connections for additional health promotion projects, and expanding the education on signs and symptoms to other audiences. Their plans include the following-

Increase the frequency and methods of education for a single audience

- The more times and places a message is heard, the more likely it will be remembered
- Include contact on a regular basis, rather than a one-time class
- Incorporate messages into existing avenues of communication

Lessons learned are applicable to other health education work

- Set up a system of health communications using grass roots connections that could be expanded to other efforts in the HMP

Expanding work on cardiovascular health in several other projects at the HMP

- Other areas include cardiovascular disease education for people with diabetes, using Mission Possible materials to educate on high blood pressure and participating in the Heart Safe Communities initiative
- Based on the positive response to the education classes, exploring ways to bring more of this information to the community
- Will train all staff members on “CPR Anytime”

Grantee Recommendations to the MCVHP for Future Signs and Symptoms Projects

Grantees expressed a variety of suggestions and ideas for the MCVHP on future work on signs and symptoms as well as other cardiovascular-related projects. The grantees encourage the MCVHP to use a variety of methods and channels to reach audiences with the information. They found the materials to be very helpful and suggest additions to augment the set that they are using. Finally, there were suggestions for additional programming related to primary prevention of the risk factors for heart disease and stroke. The specific suggestions for the MCVHP are as follows-

Present the information in different forms using a variety of methods to reach people

- People need to see the information in many places before they take notice
- Explore many avenues for communication- not just the traditional ones
- Increase funding to allow for the purchase of more professional materials and give-away items
- Look for groups that already have access to the people you want to impact

Continue to provide quality materials

- Continue to supply these quality resources, saves time and energy
- Information from MCVHP and the AHA was particularly useful
- More resources on signs and symptoms of heart attack (like the stroke materials)

Support/technical assistance from MCVHP was essential

- Clear communication, technical assistance and support was very helpful
- Consider support for the Personal Wellness Profile as a viable tool to link individual risk/lifestyle behavioral change to policy and environmental changes supporting that change for citizens
- Engage primary care physician practices in preventative health risk management
- Increase the number of nurse practitioners who focus on preventative risk management or give us as partnerships the funds to create such a position

Conclusions and Recommendations

Summary of Findings

The “Initiative to Improve Awareness of the Signs and Symptoms of Heart Attack and Stroke” was successful in engaging local Healthy Maine Partnerships to implement innovative education initiatives in their communities. The initiative provides interesting and insightful experiences from a variety of settings and with a variety of locations throughout the state.

The participants in the awareness initiatives were generally older, and more educated than the typical Maine resident and had insurance. While individual grantees worked with a mix of audiences, most participants were from worksites or groups actively engaged in the community.

While it is difficult to measure the impact of the education program, the self-reported awareness of the signs and symptoms of heart attack and stroke showed modest increases. Participants were by and large pleased with the education efforts and found them helpful.

The local HMP grantees offered a variety of lessons learned for the MCVHP in future efforts. They encouraged the program to use a variety of education methods to increase awareness of the signs and symptoms of heart attack and stroke. They also felt that the MCVHP should use existing groups (including worksites, civic groups or common gathering places) to reach people with the education. Grantees found the administration of the surveys to assess change in knowledge to be a challenge. They expressed concern over the low return rates of the post-education assessments. Overall, participants and grantees found the information provided by the MCVHP and the American Heart Association to be very informative and useful.

Recommendations

The mini-grant initiative was successful in piloting various signs and symptoms of heart attack and stroke awareness-building approaches in the local communities. Many lessons were learned during the mini-grant project from participants as well as the grantees that lead to recommendations for future MCVHP programming. The recommendations are as follows-

- Provide clear objectives for the education efforts- identify audience of focus and education objectives. (Some audiences suggested include women, people who do not speak English)
- Identify ways to reach the focus audience using existing groups or means of communication (i.e. worksite, civic and church groups, etc.). Communicate frequently.
- Create opportunities that are fun and/or engaging
- Continue to provide the quality materials and technical assistance from the MCVHP
- Use the survey findings of the assessment of knowledge to identify the specific signs and symptoms and risk factors that are lesser known and focus on increasing awareness of those symptoms
- Work with the scientific community and other state cardiovascular health programs to identify appropriate ways to measure knowledge and retention knowledge of the signs and symptoms of heart attack and stroke
- Refine the evaluation survey instrument to allow respondents to provide information on all of the signs and symptoms and not limit the responses to three.