

TABLE OF CONTENTS

| Acknowledgements | 2 |
|--|------|
| Introduction | 3 |
| Heart Disease and Stroke in Louisiana | 5 |
| Louisiana Demographics | 7 |
| Background | 8 |
| The Louisiana Heart Disease and Stroke Prevention State Plan | 9-13 |
| Goal 1: Infrastructure, Policy Development And System Changes | 9 |
| Goal 2: Prevention of Risk Factors | 9 |
| Goal 3: Detection and Treatment of Risk Factors | 10 |
| Goal 4: Early Identification of Heart Attacks and Strokes | 11 |
| Goal 5: Treatment of Cardiovascular Diseases and Prevention of Recurrent Cardiovascular Events | 13 |
| Evaluation Plan | 14 |
| Appendix A: Acronyms | 18 |
| Appendix B: Crosswalk of Healthy People Objectives with Goals | 19 |
| Appendix C: LA HDSP Coalition Members and Stakeholders | 20 |
| References | 22 |

Alan Levine SECRETARY

Department of Health and Hospitals Office of the Secretary

May 1, 2009

Dear Citizens of Louisiana:

The Louisiana Department of Health and Hospitals, Bureau of Primary Care and Rural Health's Heart Disease and Stroke Prevention Program is pleased to present the 2007-2012 Louisiana State Plan for the Prevention of Heart Disease and Stroke.

The reality today is Louisiana has more than its fair share of death, disability and expense caused by cardiovascular disease – accounting for over 30 percent of all deaths in the state. This translates into our state having the fourth highest morality rate for all cardiovascular diseases, seventh highest for stroke, and fifth highest for heart disease.

Even if a heart attack or a stroke is not fatal, individuals often face extensive hospitalization, lifelong disabilities and very high costs. In fact, Louisiana residents spent a total of almost a half a million days in the hospital due to cardiovascular disease, at a cost of \$2.4 billion, in 2003.

In order to improve these statistics, the Louisiana Department of Health and Hospitals' Heart Disease and Stroke Prevention Program assembled a motivated coalition of stakeholders to help develop this report which details our state's efforts to reduce the rates of heart disease and stroke. This strong plan, based on education, identification of target populations, enhanced data gathering and infrastructure improvement, emphasizes system and policy changes that can reduce the long-term severity of cardiovascular disease and related illnesses throughout the state.

I am confident that with the support and leadership of individuals in the health care industry, state government, workforce and volunteer agencies, successful implementation of this plan will pave the way for a "heart-healthy" Louisiana.

Sincerely,

Gerrelda Davis, MBA

Director, Bureau of Primary Care & Rural Health

ACKNOWLEDGEMENTS

Louisiana Department of Health and Hospitals

Alan Levine Secretary

Sybil Richard
Deputy Secretary

Gerrelda Davis, MBA

Director, Bureau of Primary Care & Rural Health

Matthew T. Valliere, MPA

Director, Chronic Disease Prevention and Control

Jorli Wales, BA
Program Manager, Heart Disease and Stroke Prevention Program

Marisa Marino, MA
Program Monitor, Heart Disease and Stroke Prevention Program

Alok Bhoi, MBBS, MPH
Epidemiologist, Heart Disease and Stroke Prevention Program

Tasha Bergeron, MSPH, RN Chronic Disease Nurse Consultant

Special Thanks to

Margaret O. Casey, RN, MPH
Public Health Consultant
National Association of Chronic Disease Directors



INTRODUCTION

eart disease and stroke remain the leading causes of death in the United States despite improvements in prevention, detection, and treatment. However, the profile of individuals at risk is changing. Heart disease and stroke are no longer thought of as diseases that primarily affect men as they age. They are a killer of people in the prime of life, with more than half of all deaths occurring among women.

Heart disease and stroke remain the leading cause of disability among working adults. Stroke alone accounts for the disability of more than a million Americans each year. As the population ages, the economic impact on the health system grows larger. In 2007, the estimated cost of health care expenditures and lost productivity attributable to heart disease and stroke was \$431.8 billion.

Studies conducted in the United States and elsewhere in the world demonstrate the impact of healthy community environments on cardiovascular health. Effective approaches include altering physical environments by making policy changes at schools, worksites, restaurants, cafeterias, and other settings. These changes promote, enable and reinforce healthy behaviors. Also important are communication strategies that educate citizens, policy-makers, health care professionals and others about how to achieve good cardiovascular health.

After years of targeting individuals with health promotion campaigns, the public health community has modified its understanding of how behaviors change. The Louisiana State Plan for the Prevention and Treatment of Heart Disease and Stroke is grounded in this expanded approach; that is, in giving attention not only to the behavior of individuals, but also to the environments in which they live, work and play. Experience suggests the most successful strategies result in concurrent changes in environments, systems, and policies at the fam-

ily, community, organizational and societal levels.

This Plan is a call to action to address the epidemic of obesity, sedentary lifestyles and tobacco use, the unacceptable levels of blood pressure, diabetes, and cholesterol, and the continuing disparities in health outcomes in specific populations. Adhering to principles of community involvement and engagement, multiple partners were enlisted to collaborate at the state, regional and local levels to address key sectors in our society. The Plan's objectives are rooted in Healthy People 2010, as well as baseline measures taken from data sources unique to Louisiana.

This vision is consistent with the *Public Health Action Plan to Prevent Heart Disease and Stroke*, developed and embraced by key partners at the national and state level, public health experts, and heart disease and stroke prevention specialists. The national plan, developed through a process convened by the Centers for Disease Control and Prevention and its parent agency, the Department of Health and Human Services, presents targeted recommendations and action steps for the nation to address the Healthy People 2010 goal of improving cardiovascular health through:

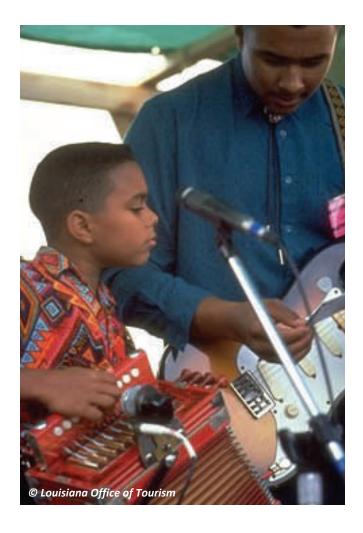
- Prevention, detection, and treatment of risk factors;
- Early identification and treatment of heart attacks and strokes; and,
- Prevention of recurrent events.

The following principles will guide Louisiana partners' work in health promotion and disease prevention of heart disease and stroke:

1. Heart disease and stroke are recognized as the leading killers in Louisiana, first and third respectively;

- Use of science, technology, appropriate surveillance, data analysis and evaluation will guide the work;
- 3. Prevention and management of risk factors will reduce the occurrence of heart disease and stroke:
- Work will focus on high-risk populations using community-based interventions; and
- 5. A comprehensive approach to reduce the burden of heart disease and stroke will recognize the many diverse risk factors that affect cardiovascular health.

This plan provides a framework to achieve a vision in which heart disease and stroke are no longer inevitable consequences of aging, where people can expect to live in heart healthy and stroke-free communities. These recommendations are based on the best available science and the most promising interventions for population-wide impact. To accomplish the objectives set forth in this plan, a commitment is needed from all residents of Louisiana to do whatever is possible to prevent heart disease and stroke.



HEART DISEASE AND STROKE IN LOUISIANA:

CURRENT STATUS

eart disease and stroke are the leading causes of death in Louisiana, killing more than 14,000 residents each year. While Louisiana ranks 28th in terms of total population in the U.S., the state had the fifth highest mortality rate due to heart disease, and the seventh highest rate for stroke among the 50 states and D.C. in 2005. For every person who dies from a heart attack or angina, 18 people live with these conditions. For every person who dies from a stroke, seven people cope with the consequences of the non-fatal event. Many of these survivors are disabled and cannot lead productive lives. They are also at high risk for future cardiovascular events. Furthermore, these numbers are increasing as the epidemic of heart disease and stroke continues. Growing disparities in health have contributed to a much higher toll in some population groups.

Advances in medicine have contributed to a gradual decrease in the national death rate for heart disease and stroke, however, heart disease and stroke are still the first and third cause of death in Louisiana (Figure 1).²

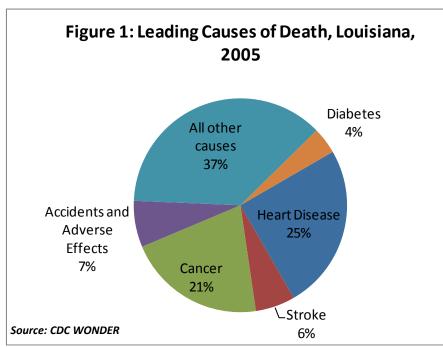
Cardiovascular diseases (CVD), which include both heart disease and stroke, cost the state of Louisiana \$1.4 billion in 1999 alone, according to the Louisiana Hospital Inpatient Discharge Database (LAHIDD). LAHIDD confirmed that the cost of CVD had risen to \$2.4 billion in 2003, an increase of approximately 71%.³ This is evidence of the significant impact of heart disease and stroke on the State of Louisiana in terms of death, disability and state dollars. The social and economic cost to the state must alert the citizens and serve as a call to action to move toward healthier lifestyles.

- In 2005, heart disease caused 11,008 deaths in Louisiana, which is 25% of all deaths of Louisianans, making this the primary cause of death.^{2,4}
- Stroke was rated the third leading cause of death in Louisiana in 2005, accounting for 2,469 (6%) deaths.^{2,4}
- The age-adjusted heart disease mortality rate in Louisiana (251.7 per 100,000 population) was 19.2% higher than the national rate in 2005; the stroke mortality rate (56.7 per 100,000 population) was 21.7% higher.
 - Heart disease and stroke kill more women than men in Louisiana, although the ageadjusted mortality rate is higher for men.
 For both men and women in Louisiana, age-adjusted heart disease and stroke death rates are higher for African

Whites.

• Heart disease and stroke were responsible for more than 91,000 hospitalizations in 2003 and \$2.4 billion in hospital charges in Louisiana.

Americans when compared to

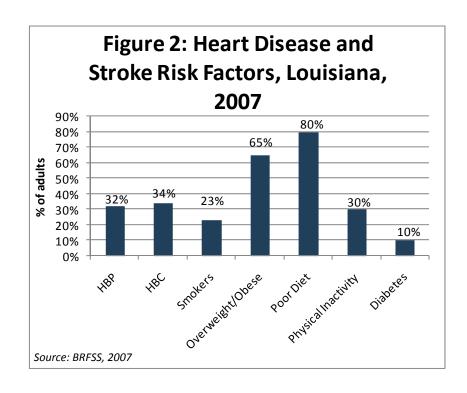


The controllable risk factors that contribute to a high mortality rate include poor nutrition, lack of physical activity, high blood cholesterol, high blood pressure, obesity, diabetes and tobacco use. Data shows that the number of adults in Louisiana with these risk factors is high (Figure 2).

- In 2007, 22.6% of Louisiana adults reported that they currently smoked.⁵
- Only 38.6% of Louisiana adults reported that they met the Healthy People 2010 recommendations for physical activity in 2007. (Increase the proportion of adults who engage in regular, preferably daily, moderate physical activity.)
- Over half (65.2%) of all Louisiana adults were overweight or obese in 2007.⁵
- The awareness of the individual signs and symptoms of heart attack and stroke varied widely. In general, African Americans in Louisiana reported being less aware of signs and symptoms of heart attack and stroke than Whites in 2007.⁵

"The awareness that health is dependent upon habits that we control makes us the first generation in history that to a large extent determines its own destiny."

Jimmy Carter



LOUISIANA DEMOGRAPHICS

| | Louisiana | U.S. |
|-----------------------------------|-----------|-------------|
| Total population | 4,287,768 | 299,398,485 |
| Male | 48.5% | 49.2% |
| Female | 51.5% | 50.8% |
| Median age (years) | 35.6 | 36.4 |
| Under 5 years | 7.0% | 6.8% |
| 18 years and older | 74.6% | 75.4% |
| 65 years and older | 12.2% | 12.4% |
| One race | 99.0% | 98.0% |
| White | 64.4% | 73.9% |
| Black or African American | 31.6% | 12.4% |
| American Indian and Alaska Native | 0.6% | 0.8% |
| Asian | 1.3% | 4.4% |
| Some other race | 1.1% | 6.3% |
| Two or more races | 1.0% | 2.0% |
| Hispanic or Latino (of any race) | 2.9% | 14.8% |
| Median household income | \$39,337 | \$48,451 |
| Individuals below poverty level | 19% | 13.3% |
| High school graduate or higher | 79.4% | 84.1% |
| Bachelor's Degree or higher | 20.3% | 27.0% |
| Unemployed | 7.8% | 6.4% |
| Uninsured | 21.9% | 15.8% |

Source: U.S. Census Bureau, 2006



BACKGROUND

he Louisiana Heart Disease and Stroke Prevention (HDSP) Program began in 1999 with funding from the Centers for Disease Control and Prevention (CDC). The mission of the HDSP Program is to promote the prevention and control of heart disease and stroke and the elimination of related health disparities. The program works to increase the state's capacity to address heart disease and stroke prevention, as well as improve surveillance of heart disease, stroke and related risk factors, in order to improve and implement interventions to eliminate disparities between general and priority populations.

The HDSP Program is housed in the Chronic Disease Prevention and Control Unit of the Louisiana Department of Health and Hospitals (LADHH) with the Diabetes Prevention and Control Program, the Tobacco Control Program and the Asthma Prevention Initiative. Recent changes in LADHH have provided new and expanded opportunities to address chronic disease morbidity and mortality among the state's most disadvantaged citizens. Categorical chronic disease programs, such as the Heart Disease and Stroke Prevention Program, formerly in the Office of Public Health, were integrated into the Bureau of Primary Care and Rural Health which provides technical assistance to communities, federally qualified health centers (FQHC), physician practices, rural health clinics and small rural hospitals. This integration of chronic disease efforts with a health care delivery network provides an unprecedented opportunity to significantly reduce the burden of disease and strengthen program activities aimed at pri-

"Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has."

Margaret Mead

mary and secondary prevention of heart disease and stroke.

The Louisiana State Plan for the Prevention of Heart Disease and Stroke represents a combined effort of stakeholders, coalition members and HDSP Program staff. It consists of five broad goals, based on the goals of CDC's *Public Health Action Plan to Prevent Heart Disease and Stroke*:

- 1. Prevention of Risk Factors
- 2. Detection and Treatment of Risk Factors
- Early Identification of Heart Attacks and Strokes
- Treatment of Cardiovascular Diseases and Prevention of Recurrent Cardiovascular Events
- 5. Infrastructure, Policy Development And System Changes

What follows is a set of objectives for each of the above goals. Each objective has at least one strategy. It will be the responsibility of the HDSP Coalition to develop specific action steps for each strategy in order to achieve the objectives.

GOAL 1: INFRASTRUCTURE, POLICY DEVELOPMENT AND SYSTEM CHANGES

Objective 1

By 2012, develop and maintain infrastructure and capacity to promote policy development and systems changes that will improve cardiovascular health.

Strategies

- 1. Create working partnerships with organizations that could support and positively influence program development and implementation.
- 2. Revise and update as needed the *Louisiana State Plan for the Prevention and Treatment of Heart Disease and Stroke*.
- 3. Develop a community coalition in the Delta area (northeast Louisiana).
- 4. Put into place an infrastructure for the development of a stroke registry.

Partners: All partners will be involved in this objective.

Baseline: N/A

Objective 2

By 2012, HDSP staff will continue to attend and/or facilitate meetings with partners.

Strategies

- 1. Facilitate monthly workgroup meetings.
- Facilitate quarterly meetings of the Advisory Council.
- 3. Facilitate full coalition meetings twice a year.
- 4. Attend and participate in Obesity Council meetings.
- 5. Attend and participate in Diabetes Council meetings.
- 6. Attend and participate in Tobacco Cessation Consortium meetings.

Partners: All partners will be involved in this objective.

Baseline: N/A

GOAL 2: Prevention of Risk Factors

Objective 1

By 2012, the baseline of healthy behaviors in Louisiana will be improved by 5%. Healthy behaviors include physical activity, avoiding tobacco use, and adopting heart-healthy nutritional habits.

Strategies

- 1. Collaborate with other chronic disease programs (tobacco, diabetes, asthma, obesity, etc.) on initiatives that address healthy behaviors.
- 2. Promote legislative activities related to healthy behaviors:
 - Ban on smoking
 - Healthy choices in vending machines
 - Physical activity
- Collect data on heart disease and stroke risk factors to define burden and trends in cardiovascular disease (CVD) based on BRFSS module schedule to target activities and policies.

Partners: Diabetes Prevention and Control Program (DPCP), Tobacco Control Program (TCP), Asthma Management and Prevention Program (AMPP), Louisiana Obesity Council, Oral Health Program, American Heart

Association (AHA), American Diabetes Association, American Lung Association, Louisiana Public Health Institute (LPHI), Governor's Council on Physical Fitness & Sports, Louisiana Primary Care Association (LPCA), EXCELth, Inc.

Baseline: Physically Active: 69% (2006 BRFSS); Smoking: 23.4% (2006 BRFSS); 5 or more daily servings of fruits and vegetables: 20.2% (2005 BRFSS); Overweight or obese: 63% (2006 BRFSS)

Objective 2

By 2010, develop and initiate worksite activities that promote education on high blood pressure (HBP) and high blood cholesterol (HBC) at two worksites.

Strategies

- Create an employee awareness campaign to encourage regular blood cholesterol and blood pressure screenings that emphasize the importance of making lifestyle changes to prevent CVD.
- 2. Employers to adopt health promotion and disease management programs.

Partners: Office of Group Benefits (OGB), Louisiana Business Group on Health

Baseline: 0 – Developmental Stage



Page 9

GOAL 2 cont.

Objective 3

By 2012, collaborate with at least four partners to implement projects that target improving disparate populations' understanding of their personal risk for heart disease and stroke.

Strategies

 Collaborate with other organizations to provide education and culturally sensitive materials with appropriate health literacy levels regarding prevention of risk factors for heart disease and stroke to disparate populations.

Partners: McFarland, AHA Cultural Initiatives, Hispanic

Apostolate of the Archdiocese of New Orleans, Catholic Charities Archdiocese of New Orleans, Office of Public Health

Baseline: 0 - Developmental Stage

"Not everything that is faced can be changed, but nothing can be changed until it is faced."

James Baldwin

GOAL 3: DETECTION AND TREATMENT OF RISK FACTORS

Objective 1

By 2012, increase by 5% the percentage of adult Louisianans who obtain appropriate screenings with follow-up for:

- blood pressure
- blood cholesterol (total cholesterol, HDL, LDL)
- blood sugar levels
- body mass index (BMI)

Strategies

- Collaborate with partners to make blood pressure, cholesterol, blood sugar level and BMI screenings available to adults at convenient times and locations and with little or no cost.
- 2. Partner to assure convenient and affordable screening opportunities for clients at federally qualified health centers (FQHCs) are offered.

Partners: DPCP, National Kidney Foundation, LA Chapter, Louisiana Primary Care Association (LPCA), Louisiana Rural Health Association (LRHA), Obesity Council

Baseline: BP – Developmental; Cholesterol – 77% (2005 BRFSS); Glucose – Developmental; BMI— Developmental

Objective 2

By 2012, increase the number of FQHCs/RHCs from 0 to 10 who participate in the CVD collaborative and have developed registries to track patient progress.

Strategies

- 1. Partner with LPCA/LRHA to create a cardiovascular disease data collection system.
- 2. Provide technical support for the implementation of the Chronic Care Model.

Partners: LPCA, LRHA, DPCP, Louisiana Health Care Quality Forum (LHCQF)

Baseline: 0 - Developmental Stage

Objective 3

By 2012, reduce the percent of individuals with diabetes in the FQHC Diabetes Registries that have uncontrolled high blood pressure and high cholesterol by 10%.

Strategies

- 1. Partner with LPCA, LRHA and the DPCP to heighten awareness of the connection between diabetes, heart disease and stroke.
- Provide on-going technical and financial support of FQHCs/Rural Health Clinics (RHC) participating in the Louisiana Diabetes and Cardiovascular Disease Collaboratives.

Partners: LPCA, LRHA, DPCP



GOAL 3 cont.

Objective 4

By 2012, two of six major health insurers will offer benefit packages for prevention and health treatment services for heart disease and stroke.

Strategies

- 1. Create and administer a survey to determine how many health insurers are currently offering benefit packages for prevention and health treatment services for heart disease, stroke and diabetes.
- Establish key strategies to work with health insurers on benefit packages for prevention and health treatment services for heart disease, stroke and diabetes.
- 3. Ensure that reimbursement policies require that physicians routinely screen for HBP/HBC.

Partners: Louisiana Association of Health Plans (LAHP), DPCP

Baseline: Unknown

Objective 5

By 2012, offer two training opportunities per year for health care providers on best practices in regard to the detection, treatment, and management of heart disease and stroke risk factors.

Strategies

- Help provide the appropriate professional training to healthcare providers to ensure that eligible patients receive appropriate therapy for the treatment of risk factors within nationally recommended standards and guidelines of care.
- Promote strategies that encourages physicians to utilize national, best-practice guidelines on HBP and HBC screening.

Partners: DPCP, TCP, Obesity Council, AHA, Oral

Health Program

Baseline: 0 - Developmental Stage

GOAL 4: EARLY IDENTIFICATION OF HEART ATTACKS AND STROKES

Objective 1

By 2012, conduct at least two awareness/educational campaigns for the public in regard to recognizing signs and symptoms of heart attack and stroke and the importance of calling 911.

Strategies

- Identify and promote awareness programs/ campaign materials on heart attack and stroke signs and symptoms.
- 2. Develop a statewide community-focused event targeting increasing individuals' knowledge on the signs and symptoms of stroke.
- 3. Monitor emergency room and/or 911 call data regarding heart attack and stroke patients.
- 4. Promote heart attack and stroke awareness projects at worksites.

Partners: AHA, Bureau of Emergency Medical Services (EMS), American College of Emergency Physicians, Louisiana Chapter

Baseline: 0 – Developmental Stage

Objective 2

By 2010, establish a baseline of Emergency Medical Technicians' (EMT) knowledge of stroke signs and symptoms and the need for immediate treatment. By 2012, increase the baseline by 10%.

Strategies

- Conduct assessment of EMT's knowledge of stroke signs and symptoms and the need for immediate treatment.
- 2. Expand the training of emergency medical personnel on evaluating stroke victims before they arrive at a hospital.

Partners: Bureau of EMS, LA Association of Nationally Registered EMTs

Objective 3

By 2011, establish a baseline of pre-hospital providers with standardized pre-hospital protocols/guidelines for the treatment and transport of heart attack and stroke patients.

Strategies

- Conduct assessment of pre-hospital providers to determine if they have protocols/guidelines for the treatment and transport of heart attack and stroke patients.
- 2. Develop model guidelines for the treatment and transport of heart attack and stroke.

Partners: AHA, Bureau of EMS

Baseline: Unknown

Objective 4

By 2012, determine a baseline number of parishes with enhanced 911 systems in place.

Strategies

- 1. Conduct assessment of parishes with enhanced 911 systems in place.
- 2. Determine partnerships and resources needed for enhancing 911 services.

Partners: AHA, Bureau of EMS, Louisiana Emergency

Response Network (LERN)

Baseline: Unknown

Objective 5

By 2010, determine a baseline of the number of Automated External Defibrillators (AEDs) located in the two worksites participating in the worksite wellness program (see Goal 2, Objective 2).

Strategies

- Assessment of the number of AEDs located at the worksites.
- 2. Provide worksites with recommendations on purchasing and placement of AEDs.

Partners: AHA, Bureau of EMS

Baseline: Unknown

Objective 6

By 2010, establish a baseline of the number of persons who received Cardiopulmonary Resuscitation (CPR)/AED training in the two worksites participating in the worksite wellness program (see Goal 2, Objective 2). By 2012, increase that number by 10%.

Strategies

- 1. Obtain data on CPR/AED training in worksites.
- 2. Increase the number of convenient and affordable opportunities for CPR/AED training.

Partners: AHA, Bureau of EMS



GOAL 5: TREATMENT OF CARDIOVASCULAR DISEASES AND PREVENTION OF RECURRENT CARDIOVASCULAR EVENTS

Objective 1

By 2012, offer two training opportunities per year for health care providers on best practices in regard to the detection, treatment, and management of heart disease and stroke.

Strategies

- Help provide the appropriate professional training to emergency department staff to ensure that eligible patients receive appropriate therapy for heart attacks and stroke within nationally recommended standards and guidelines of care.
- 2. Support the participation of hospitals in the American Heart Association's Get with the Guidelines Program for Heart Failure and Stroke.

Partners: AHA, Bureau of EMS **Baseline:** 0 – Developmental Stage

"The greatest achievements are those that benefit others."

Denis Waitley

Objective 2

By 2010, increase the number of hospitals using telemedicine to treat heart attack and stroke from 0 to 2.

Strategies

1. Designate a hospital certified as a Primary Stroke Center to serve as a telemedicine hub and identify hospitals to serve as its "spokes."

Partners: AHA, Louisiana Rural Health Information Exchange (LaRHIX), Ochsner Clinic Foundation

Baseline: 0 - Developmental Stage

Objective 3

By 2009, determine a baseline of the number of acute care facilities in the state which have stroke treatment protocols.

Strategies

- Develop an organized system and map of hospitals that are acute stroke capable or Joint Commission certified Primary Stroke Centers.
- 2. Ensure the system map includes the roles and responsibilities for each hospital within the system,

and every hospital included in the map has a policy or plan in place with protocols for triage, treatment and transfer of stroke patients outside their capabilities to a primary stroke center or another appropriate hospital institution.

3. Assess stroke treatment capabilities and capacities across the state at least once every two years.

Partners: AHA
Baseline: Unknown

Objective 4

By 2012, increase the number of Joint Commission certified Primary Stroke Centers in Louisiana from 2 to 5.

Strategies

- 1. Recruit hospitals to become Primary Stroke Centers .
- 2. Provide technical assistance and training to hospitals applying to become stroke certified.

Partners: AHA

Baseline: 2 centers in 2007

Objective 5

By 2009, 20% of acute stroke capable or Primary Stroke Centers will have implemented a standardized screening and assessment tool of functional status consistent with national guidelines for hospitalized stroke patients.

Strategies

- 1. Assessment of acute stroke capable hospitals and Primary Stroke Centers with stroke rehabilitation placement protocols to establish a baseline.
- 2. Implement screening tool based on evidence based guidelines.

Partners: AHA

EVALUATION PLAN

GOAL 1: INFRASTRUCTURE, POLICY DEVELOPMENT AND SYSTEM CHANGES

Objectives in Goal 1 will be evaluated by process evaluation.

| Objectives in Goul 1 will be evaluated by process evaluation. | | | | |
|---|--|--|--|---|
| GOAL 2: PREVENT | ION OF RISK FACT | ORS | | |
| Objective | Indicator | Data Source | Baseline | Target |
| Objective 1: By 2012, the baseline of healthy behaviors in Louisiana will be im- proved by 5%. | Percentage of adults who participated in any physical activities. | BRFSS – exercise module (administered yearly) | Physically Active: 69% (2006 BRFSS) | Physically Active: 72.5% |
| | Percentage of adults who are current smokers. | BRFSS - tobacco use module (administered yearly) | Smoking: 23.4% (2006 BRFSS) | Smoking: 22.2% |
| | Percentage of adults who have consumed fruits and vegetables five or more times per day. | BRFSS – fruits and vegetables module (administered odd years) | 5 or more daily servings of fruits and vegetables: 20.2% (2005 BRFSS) | 5 or more daily servings of fruits and vegetables: 21.2% |
| | Percentage of adults with a BMI over 25.0. | BRFSS - Overweight and Obesity (BMI) module (administered yearly) | Overweight or obese: 63% (2006 BRFSS) | Overweight or obese: 59.9% |
| Objective 2: By 2010, develop and initiate worksite activities that promote education on high blood pressure (HBP) and high blood cholesterol (HBC) at two worksites. | Worksites initiating worksite activities | Worksite inventory database. | Developmental / baseline = 0 | 2 worksites initi- ating worksite wellness activi- ties |
| Objective 3: By 2012, collaborate with at least four partners to implement projects that target improving disparate populations' understanding of their personal risk for heart disease and stroke. | Partners imple- menting projects | Contract monitoring, process evaluation | Developmental / baseline = 0 | A minimum of four partners will implement pro- jects by 2012 |

| GOAL 3: DETECTION | AND TREATMENT | OF RISK FACTORS | | |
|--|---|---|---|--|
| Objective | Indicator | Data Source | Baseline | Target |
| Objective 1: By 2012, increase by 5% the percentage of adult Louisianans who obtain appropriate screenings with follow-up for: • blood pressure • blood cholesterol (total cholesterol, HDL, LDL) • blood sugar levels • body mass index (BMI) | # of people receiving: • blood pressure screenings • blood cholesterol screenings • glucose screenings • BMI screenings | BRFSS, Quality Improvement Data (Louisiana Health Care Review), Health Plan Employer Data and Information Set (HEDIS), FQHC Diabetes Registries | Blood Pressure – Unknown Cholesterol – 77% (2005 BRFSS) Glucose – Un- known BMI – Unknown | Blood Pressure – Unknown Cholesterol – 80.9% Glucose – Un- known BMI – Unknown |
| Objective 2: By 2012, increase the number of FQHCs/RHCs from 0 to 10 who participate in the CVD collaborative and have developed registries to track patient progress. | FQHCs/RHCs participating in CVD collaborative | CVD Registries | 0 FQHCs/RHCs in 2007 | 10 FQHCs or RHCs participat- ing in the Health Disparities Col- laborative who have registries collecting CVD data. |
| Objective 3: By 2012, reduce the percent of individuals with diabetes in the FQHC Diabetes Registries that have uncontrolled high blood pressure and high cholesterol by 10%. | Percent of diabetes patients with high blood pressure Percent of diabetes patients with high cholesterol | Diabetes and CVD Registries | Unknown | Unknown |
| Objective 5: By 2012, two of six major health insurers will offer benefit packages for prevention and health treatment services for heart disease and stroke. | Self-reported policies reported by insurance providers | Survey to be developed by HDSP Program. | Unknown | Two health insurers will offer heart disease and stroke benefit packages. |
| Objective 6: By 2012, of- fer two training opportu- nities per year for health care providers on best practices in regard to the detection, treatment, and management of heart disease and stroke risk factors. | Number of trainings offered each year on heart disease and stroke risk fac- tors. | Contract monitor- ing, training evaluations. | Developmental/ baseline = 0 | Two trainings offered each year for healthcare providers on heart disease and stroke risk factors |

| GOAL 4: EARLY IDENTIFICATION OF HEART ATTACKS AND STROKE | | | | |
|--|--|--|---------------------------------|---|
| Objective | Indicator | Data Source | Baseline | Target |
| Objective 1: By 2012, conduct at least two awareness/educational campaigns for the public in regard to recognizing signs and symptoms of heart attack and stroke and the importance of calling 911. | Number of aware- ness/educational campaigns | Contract monitoring, evaluation survey to be developed | Developmen- tal/baseline = 0 | Two awareness/ educational campaigns by 2012 |
| Objective 2: By 2010, establish a baseline on EMTs' knowledge of stroke signs and symptoms and the need for immediate treatment. By 2012, increase the baseline by 10%. | Percent of EMTs who recognize all 5 signs and symp- toms of stroke. | HDSP developed EMT assessment | Unknown | Unknown |
| Objective 3: By 2011, establish baseline of pre-hospital providers with standardized pre-hospital protocols for the treatment and transport of heart attack and stroke patients. | Number of pre- hospital providers with stroke proto- cols in place. | AHA survey | Unknown | Unknown |
| Objective 4: By 2012, determine a baseline number of parishes with enhanced 911 systems in place. | Number of par- ishes with en- hanced 911 sys- tems in place | Bureau of EMS | Unknown | Unknown |
| Objective 5: By 2010, determine a baseline of the number of Automated External Defibrillators (AEDs) located in the two worksites participating in the worksite wellness program. | Number of AEDs located at work- sites | Bureau of EMS/AED Placement Program | Unknown | Unknown |
| Objective 6: By 2010, establish a baseline of the number of persons who received CPR/AED training in the two worksites participating in the worksite wellness program. By 2012, increase that number by 10%. | Number of partici- pants in CPR train- ings | Bureau of EMS | Unknown | Unknown |

GOAL 5: TREATMENT OF CARDIOVASCULAR DISEASES AND PREVENTION OF RECUR-RENT CARDIOVASCULAR EVENTS Objective Indicator **Data Source Baseline Target** Objective 1: By 2012, offer Number of trainings Contract monitor-Developmental/ Two trainings two training opportunities offered each year on ing, training baseline = 0 offered each year per year for health care heart disease and evaluations. for healthcare providers on best pracstroke. providers on tices in regard to the deheart disease and tection, treatment, and stroke management of heart disease and stroke. Objective 2: By 2010, in-Hospitals using tele-LaRHIX 0 hospitals in 2 hospitals using crease the number of hos-2007 telemedicine in medicine. pitals using telemedicine 2012. to treat heart attack and stroke from 0 to 2. Objective 3: By 2009, de-Map of hospitals that **AHA** survey Developmental/ Baseline number termine a baseline of the are acute stroke cabaseline = 0 of acute care fanumber of acute care fapable or Joint Comcilities with cilities in the state which mission certified Pristroke protocols have stroke treatment mary Stroke Centers. plotted on a map. protocols. Objective 4: By 2012, in-**Joint Commission** Joint Commission 2 centers in 2007 5 centers in 2012 crease the number of Joint certified Primary certification, AHA Commission certified Pri-Stroke Centers in survey mary Stroke Centers in Louisiana. Louisiana from 2 to 5. Objective 5: By 2009, 20% Acute stroke capable AHA survey Unknown Unknown of acute stroke capable or hospitals and Pri-**Primary Stroke Centers** mary Stroke Centers with stroke rehabiliwill have implemented a standardized screening tation placement protocols and assessment tool of functional status consistent with national guidelines for hospitalized stroke patients.

APPENDIX A: Acronyms

| AED | Automated External Defibrillators |
|--------|---|
| AHA | American Heart Association |
| AMPP | Asthma Management and Prevention Program |
| BMI | Body Mass Index |
| BRFSS | Behavioral Risk Factor Surveillance System |
| CDC | Centers for Disease Control and Prevention |
| CHD | Coronary Heart Disease |
| CPR | Cardiopulmonary Resuscitation |
| CVD | Cardiovascular Disease |
| DPCP | Diabetes Prevention and Control Program |
| EMS | Emergency Medical Services |
| EMT | Emergency Medical Technician |
| FQHC | Federally Qualified Health Centers |
| GWTG | Get With the Guidelines |
| HBC | High Blood Cholesterol |
| HBP | High Blood Pressure |
| HDL | High-Density Lipoprotein (cholesterol) |
| HDSP | Heart Disease and Stroke Prevention |
| HEDIS | Health Plan Employer Data and Information Set |
| LADHH | Louisiana Department of Health and Hospitals |
| LAHIDD | Louisiana Hospital Inpatient Discharge Database |
| LAHP | Louisiana Association of Health Plans |
| LaRHIX | Louisiana Rural Health Information Exchange |
| LDL | Low-Density Lipoprotein (cholesterol) |
| LERN | Louisiana Emergency Response Network |
| LHCQF | Louisiana Health Care Quality Forum |
| LPCA | Louisiana Primary Care Association |
| LPHI | Louisiana Public Health Institute |
| LRHA | Louisiana Rural Health Association |
| OGB | Office of Group Benefits |
| RHC | Rural Health Clinic |
| TCP | Tobacco Control Program |

APPENDIX B: Crosswalk of Healthy People Objectives with Goals

| Healthy People 2010 Objectives | Goal 1 | Goal 2 | Goal 3 | Goal 4 |
|--|--------|--------|--------|--------|
| 12-1. Reduce coronary heart disease deaths. | х | х | х | х |
| 12-2. Increase the proportion of adults aged 20 years and older who are aware of the early warning symptoms and signs of a heart attack and the importance of accessing rapid emergency care by calling 911. | | | х | |
| 12-3. Increase the proportion of eligible patients with heart attacks who receive artery-opening therapy within an hour of symptom onset. | | | | х |
| 12-4. Increase the proportion of adults aged 20 years and older who call 911 and administer cardiopulmonary resuscitation (CPR) when they witness an out-of-hospital cardiac arrest. | | | x | |
| 12-5. Increase the proportion of eligible persons with witnessed out-of-hospital cardiac arrest who receive their first therapeutic electrical shock within 6 minutes after collapse recognition. | | | х | |
| 12-6. Reduce hospitalizations of older adults with congestive heart failure as the principal diagnosis. | | | | х |
| 12-7. Reduce stroke deaths. | х | х | х | х |
| 12-8. Increase the proportion of adults who are aware of the early warning signs and symptoms of a stroke. | | | х | |
| 12-9. Reduce the proportion of adults with high blood pressure. | | х | | |
| 12-10. Increase the proportion of adults with high blood pressure whose blood pressure is under control. | | х | | |
| 12-11. Increase the proportion of adults with high blood pressure who are taking action (for example, losing weight, increasing physical activity, or reducing sodium intake to help control their blood pressure. | х | х | | |
| 12-12. Increase the proportion of adults who have had their blood pressure measured within the preceding 2 years and can state whether their blood pressure was normal or high. | | х | | |
| 12-13. Reduce the mean total cholesterol levels among adults. | | Х | | |
| 12-14. Reduce the proportion of adults with high total blood cholesterol levels. | | х | | |
| 12-15. Increase the proportion of adults who have had their blood cholesterol checked within the preceding 5 years. | | х | | |
| 12-16. Increase the proportion of persons with coronary heart disease who have their LDL-cholesterol treated to a goal of less than or equal to 100 mg/dl. | | х | | |

APPENDIX C: HDSP Coalition Members and Stakeholders

AARP Louisiana

American Diabetes Association

American Heart Association

American Lung Association

Bunkie General Hospital

Catholic Charities Archdiocese of New Orleans

Emergency Nurses Association

EXCELth, Inc.

Governor's Council on Physical Fitness & Sports

Governor's Office of Elderly Affairs

Heart Clinic of Louisiana

Hispanic Apostolate of the Archdiocese of New Orleans

Louisiana Asthma Management and Prevention Program

Louisiana Association of Health Plans

Louisiana Association of Nationally Registered EMT's

Louisiana Business Group on Health

Louisiana Chapter of the American College of Cardiology

Louisiana Chapter of the American College of Emergency Physicians

Louisiana Council on Obesity Prevention and Management

Louisiana Department of Health & Hospitals/ Medicaid

Louisiana Department of Health & Hospitals/ Bureau of Primary Care and Rural Health

Louisiana Department of Health & Hospitals/
Office of Public Health

Louisiana Department of Health & Hospitals/

Office of Public Health/Bureau of Emergency Medical Services

Louisiana Department of Insurance/Louisiana Heath Care Commission

Louisiana Diabetes Prevention and Control Program

Louisiana Emergency Response Network

Louisiana Health Care Quality Forum

Louisiana Health Care Review

Louisiana Hospital Association

Louisiana Occupational Therapy Association

Louisiana Office of Group Benefits

Louisiana Oral Health Program

Louisiana Pharmacist Association

Louisiana Primary Care Association

Louisiana Public Health Institute

Louisiana Rural Health Association

Louisiana Rural Health Information Exchange

Louisiana Senate Committee on Health & Welfare

Louisiana State Medical Society

Louisiana State Nurses Association

Louisiana State University Health Care Services
Division

Louisiana State University Health Sciences
Center

Louisiana Tobacco Control Program

McFarland Institute

National Kidney Foundation, LA Chapter,

Ochsner Clinic Foundation

Peoples Health, Inc.



Coalition Members and Stakeholders cont.

Pfizer, Inc.

Southern University Agricultural Research & Extension Center

Teche Action Clinic

Touro Infirmary

Tulane University

University of Louisiana at Lafayette

University of Louisiana at Monroe

West Jefferson Medical Center

REFERENCES

¹ US Department of Health and Human Services. A Public Health Action Plan to Prevent Heart Disease and Stroke. Atlanta, GA: Department of Health and Human Services, Centers for Disease Control and Prevention; 2003.

² Belame S, Akhter S. The 2006 Louisiana Health Report Card. Louisiana Office of Public Health, April 2007.

³ Huang S, Hsueh Y, Hossain M. The 2005 State of the Heart and Stroke Report. Louisiana Office of Public Health, and the American Heart Association, Southeast Affiliate, June 2005.

⁴ Centers for Disease Control and Prevention, National Center for Health Statistics. Compressed Mortality File 1999-2004. CDC WONDER On-line Database, compiled from Compressed Mortality File 1999-2004 Series 20 No. 2J, 2007.

⁵ Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System (BRFSS). http://www.cdc.gov/brfss

⁶Bhoi, A. Defining the Burden of Heart Disease and Stroke in Louisiana, 2008. Louisiana Department of Health and Hospitals, October 2008.



Louisiana Department of Health and Hospitals Heart Disease and Stroke Prevention Program Bureau of Primary Care and Rural Health 628 North 4th Street, 2nd Floor P.O. Box 3118 Baton Rouge, LA 70821-3118 Ph: (225) 342-8094

www.laheart.dhh.louisiana.gov