TEXAS PLAN TO REDUCE CARDIOVASCULAR DISEASE AND STROKE

May 2005, 2nd Edition

Accomplishments: 2002-2005

Future Activities: 2005-2010

Updated Statistics on Cardiovascular Disease and Stroke in Texas

Texas Council on Cardiovascular Disease and Stroke
Cardiovascular disease and stroke remain the number one and number three causes of death in Texas and account for nearly one half of all deaths in our state. Besides the emotional and human effects, the financial costs of cardiovascular disease and stroke in Texas exceed nine billion dollars.

In 2002, the first Texas Plan to Reduce Cardiovascular Disease and Stroke was completed. During the past three years, progress has been made on many of the action steps.

This update provides a brief overview of current accomplishments and future activities that must be continued or developed in the fight against heart disease and stroke.

The Texas Council on Cardiovascular Disease and Stroke continues to work with stakeholders to promote the mission of the council: to educate, inform and facilitate action among Texans to reduce the human and financial toll of cardiovascular disease and stroke. This will lead to meeting our vision: Texans optimizing heart and brain health through education and action.
The Progressive Development of Cardiovascular Disease
(heart disease and stroke)

Framework adapted from a presentation at the First National CDC Prevention Conference on Heart Disease and Stroke, August 24, 2001.

A Vision of the Future for Texas:

Recognized Interventions for Cardiovascular Health Promotion and Disease Prevention:

The Present Reality:

Texas Council on Cardiovascular Disease and Stroke

A Framework for Cardiovascular Health

The illustration below is intended to represent the full scope of cardiovascular health, including both the progressive development of cardiovascular disease and the opportunities for health promotion and disease prevention. It reflects extensive research that has led to a broad array of recognized interventions which the council continues to review, evaluate and recommend for implementation in Texas.

The council has formed five work groups (see page 6), representing the components necessary to forge comprehensive health promotion and disease prevention programs. Each work group reviews information, drafts action plans and makes recommendations to the full council for programs and activities at specific stages of the progression below.
The council work groups below provide the foundation for evaluating and implementing recognized cardiovascular interventions:

- Surveillance, Data and Outcome Management
- Health Education and Outreach
- Community Policy and Environmental Changes
- Clinical Prevention and Treatment Services

Cardiovascular Disease Prevention

- Few Texans at Risk
  - Risk Factor Detection and Control
- Few Events/Only Rare Deaths
  - Emergency Care/Acute Case Management
- Full Functional Capacity/Low Risk of Recurrence
  - Rehabilitation/Long-Term Case Management
- High Quality of Life Until Death for all Texans
  - End of Life Care

Major Risk Factors

First Event/Sudden Death

Disability/Risk of Recurrence

Late Death
Texas Plan to Reduce Cardiovascular Disease and Stroke

Accomplishments 2002-2005
Goal: To assimilate current data, monitor trends over time, evaluate effectiveness (including cost-effectiveness) of programs and policies, and recommend new programs for enhancing outcomes.

Accomplishments by Action Steps:

**Ongoing**

1. Collect and review data to identify populations at high risk.

The council collaborates with various agencies and organizations currently engaged in collecting, monitoring, and evaluating health data with an emphasis on identifying those persons most burdened by CVD and stroke. The May 2002 State Plan to Reduce Cardiovascular Disease and Stroke identified three target populations to address including youth, persons with CVD or stroke, and African Americans. In 2003, the council developed the *CVD Surveillance Report* that contains disease-specific data points, trends, and facts for heart disease and stroke in Texas based on hospital discharge data, vital statistic reports, Behavioral Risk Factor Surveillance System (BRFSS) information, and both Texas Youth Tobacco and Texas Youth Risk Behavior Surveys. The system incorporates specific charts, tables, graphs, etc., representing high-risk population trends, rates, and percentages regarding not only disease-
specific information but lifestyle/behavior and risk factor information as well.

_Eye on Your Heart_ data fact sheets were developed in spring of 2004. The fact sheets outline CVD death rates for statewide and target populations including African Americans, Hispanics, and women. Additionally, the fact sheets incorporate information and messages on 1) signs and symptoms of a heart attack and stroke, 2) heart and stroke healthy prescription tips on physical activity and nutrition, and 3) the need to call 9-1-1. The fact sheets are updated annually and are available online at [www.dshs.state.tx.us/wellness](http://www.dshs.state.tx.us/wellness).

The council reviewed the 2003 Behavioral Risk Factor Surveillance System (BRFSS) Report on Heart Disease and Stroke that was finalized in May of 2005. The report shows higher CVD prevalence rates in the following groups of people: 1) over 45 years of age; 2) lower educational level; 3) lower income level; and 4) residents of non-metropolitan areas. Among all demographic categories, the highest percentage of CVD is in people age 65 and older with a prevalence rate of 27%.

2. Collect and review health provider data to identify current practices for management of high cholesterol, high blood pressure, smoking, physical activity, nutrition management, etc.

The Surveillance, Data, and Outcome Management workgroup of the council collaborates with various internal and external agencies and organizations to maintain knowledge and expertise of current prevalence and trends in behaviors and clinical markers that affect health outcomes in regards to heart disease and stroke. Health provider data is collected and reviewed at quarterly meetings of the workgroup and through mail, E-mail, conference calls, etc. External partners include the American Heart Association, Texas Medical Association, Texas Medical Foundation, Texas Health Care Information Collection (THCIC) Center for Health Statistics (formerly the Texas Health Care...
Information Council), Texas Hospital Association, and Texas Medicaid Program. Internal partners who attend meetings of the workgroup include the Texas Department of State Health Services’ Obesity Prevention and Diabetes Programs, Texas Emergency Medical Services (EMS) and Trauma Registry Program, Texas Health Steps Program, and School Health Program. These organizations regularly provide and present data to council members. Reviews of these data pieces have resulted in the development of collection systems that include practices for CVD management at the site, local, and state levels. The first system is the CVD Impact Assessment Inventory of Policy and Environmental Strategies. This baseline assessment was created in February 2003 and consists of policies, plans, rules, and regulations currently in place in Texas that affect CVD and stroke development, risk, and/or related lifestyle behaviors and conditions. The assessment is updated annually. The second system is the BRFSS Report on Heart Disease and Stroke in Texas. The 2003 report highlights 1) medical advances that increase the number of CVD survivors in the state; 2) smoking rates for those persons with and without CVD; 3) recognition of CVD and stroke signs and symptoms and 9-1-1 response indicators in the Texas population; 4) preventive health practices including taking aspirin daily for those age 35 and older, reduced fat/cholesterol consumption, and increase consumption of fruit and vegetables; and 5) use of preventive health screenings for blood pressure, cholesterol, and diabetes. The report is available online at http://www.tdh.state.tx.us/chs/brfss/pages/riskf.htm

In summary, much of the review of practices for management of behaviors and conditions affecting CVD and stroke has logically transitioned to the Clinical Prevention and Treatment Services workgroup of the council, who in turn have developed various monitoring and recognition programs to track and award providers who are meeting standards in primary and secondary prevention of CVD and stroke. (See Section on Action Steps for Clinical Prevention and Treatment Services.)
3. Collect and review baseline data from the Texas Tobacco Settlement pilot programs to identify needs and gaps in addressing tobacco.

The council maintains a strong relationship with the DSHS Tobacco Prevention Program and regularly incorporates data and reports on smoking rates, trends, and health costs in Texas into the CVD Surveillance Report, the Behavioral Risk Factor Surveillance System Report on Heart Disease and Stroke in Texas, and the CVD Impact Assessment Inventory of Policy and Environmental Strategies.

Through council/workgroup meetings, the DSHS Tobacco Prevention Program regularly updates the council on changes and progress made through the pilot programs in East Texas. The 76th Texas Legislature designated settlement interest dollars to prevent tobacco use and promote cessation in East Texas communities. This pilot program known as the Texas Tobacco Prevention Initiative serves as the model program for comprehensive community tobacco prevention. Information from the program’s successes have been presented at the 2003, 2004 and 2005 annual meetings of the Texas Public Health Association, and the Texas CVD and Stroke Summit 2004: Developing a Heart and Stroke Healthy Community by the DSHS Tobacco Prevention Program. The purpose was to disseminate effective models of community-based tobacco prevention in an educational format that could be readily replicated in communities/community sites interested and ready for implementing changes towards this risk factor.

The council Web site has designated links to tobacco program data reports and surveys pertaining to the settlement Tobacco Prevention Initiative at http://www.dshs.state.tx.us/wellness/community.shtm

4. Convene regional partners to identify ways to collect regional data.
Through quarterly council/workgroup meetings, regional partners are convened to identify and discuss ways to collect and format regional data. For monitoring purposes, a CVD Intervention Reporting System and Database was developed in 2003 for tracking and evaluating activities aimed at reducing risk for developing CVD and stroke. The system is being refined at present to make it accessible to local health department and community groups to report activities accomplished. Information from this system along with relevant demographic and disease burden facts will be incorporated to create a county fact sheet system in 2006.

The council works with the DSHS Chronic Disease Prevention Branch to provide maps of county and region-specific rates for mortality, disease prevalence, and hospitalizations (see Selected Statistics for Cardiovascular Disease and Stroke section at the end of this report.) The information is included in the CVD Surveillance Report and is updated every two years. The Texas Heart and Stroke Healthy City Recognition program incorporates an assessment system for large, mid-size, and small cities in all public health regions of Texas. Starting in 2003, as a baseline collection system of policy and environmental interventions towards heart and stroke health in Texas large and small size cities, the process was repeated in 2004, to assess mid-size cities. In February 2005, the assessment for large cities was restarted with a completion date set for June 30, 2005. The council has continually supported the program through information review and assignment of recognition criteria for bronze, silver, and gold status Heart and Stroke Health City recognition. The council Web site has a designated page for information pertaining to the program at http://www.dshs.state.tx.us/wellness/hshcrp.shtm (see appendix for exact city assessment schedules and recognition assignments.)

5. Work with the Texas Institute for Health Policy Research on data collection, research, and policy development for cardiovascular disease and stroke.
The council interacts with the Texas Institute for Health Policy at quarterly meetings of the council and Surveillance, Data, and Outcome Management workgroup. No expansions for collaboration have been recommended to date. The Institute has been designated a link on the council Web site page for data and surveillance. Discussion and feedback on critical health care topics in keeping with both the council’s and the Institute’s goals towards cost effectiveness of programs and policies will continue to occur through invitation to regular meetings of the council and workgroup.

6. **Collate collected and reviewed data into a cardiovascular disease and stroke database.**

The council completed a thorough review of data systems (e.g. vital statistics, BRFSS, the Texas Youth Risk Behavior System, hospital discharge data, etc.) for information and trends related to CVD and stroke. Items were reviewed and analyzed to compile the *CVD Surveillance Report* (see Action Step 1.) in 2002 and 2003. The system was recently updated for Web site accessibility in February 2005, and is available at [http://www.dshs.state.tx.us/wellness/data.shtm](http://www.dshs.state.tx.us/wellness/data.shtm)

The report is available in PowerPoint format and may be downloaded for use by communities, health care providers, community groups, etc., that advocate for CVD and stroke prevention. The presentation format is being revised to include program strategies that are based on public health interpretation of the data through the council and the Texas Department of State Health Services’ Cardiovascular Health and Wellness Program. The program strategies will be made available as part of the report to provide guidance to sites, agencies, and groups to validate and support activities they are implementing or planning to implement to help reduce risk of heart disease and stroke in their respective populations.
Goal: To promote awareness and behaviorally-based health education to achieve cardiovascular health in Texas

Action Steps: One Year

1. **Promote the CVH Clearinghouse** - The Council recently replaced the CVD and Stroke Clearinghouse with an online listing of reports, publications and data/surveillance links and resources. The Texas Cardiovascular Quality Recognition Program to date has recognized seven physicians and twelve hospitals. The program seeks to improve patient outcomes by recognizing physicians and hospitals for implementing and monitoring secondary prevention guidelines for cardiovascular disease (CVD) and improving standards of care.

2. **Implement annual awards programs** - The Cardiovascular Health Promotion Awards was promoted in various Texas schools, worksites, healthcare sites and communities. In 2004, ten programs applied for the award and three were recognized (one outstanding and two honorable mention) at the Texas Public Health Association’s Conference in Houston by the Texas Department of State Health Services. In 2005, eighteen programs applied for the award and seven were recognized (three outstanding and four...
honorable mention) at the 2005 Texas Public Health Association’s Conference in Midland by the Texas Department of State Health Services.

3. **Assess readiness for sites to implement health education programs and risk awareness campaigns** - Texas schools, worksites and communities were assessed and provided technical assistance, training and consultation as they developed policies and environmental changes for cardiovascular health promotion. Information is provided to the Health Education Work Group to assist in determining the target population and strategies for health education efforts. A new campaign was developed to target women at risk for CVD or stroke. The *Heart of Texas Women* awareness campaign was promoted in collaboration with local health departments, State of Texas agencies, Breast and Cervical Cancer Control Services, and the American Heart Association-TX Affiliate. Over fifty entities registered for the event and held local activities.

4. **Disseminate statewide surveillance information on CVD and stroke** - The surveillance, data and outcome management workgroup is currently maintaining this information since it deals with data surveillance.

5. **Promote school programs for CVD and stroke prevention** - The Texas School Health Network is administered by DSHS as part of its School Health Program. At the state level, the Network maintains a collaborative relationship with other health and education organizations. DSHS assists in supporting healthy school environments and healthy behaviors of all students and personnel by promoting the Heart Smart Site Program and the Texas Cardiovascular Health Promotion Awards. Ten CATCH kits were implemented in school districts in the south Texas area with assistance from the Texas Education Agency and the UT-School of

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**Health Education and Outreach**

**Accomplishments 2002-2005**

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**Special Populations to Address:**

1. Youth
2. African Americans
3. Persons with CVD and stroke
Public Health, Center of Health Promotion Prevention and Research

Two Year

1. Identify needs and gaps in risk awareness and health education for CVD and stroke – Over the last two years, the workgroup has continually worked to identify needs and gaps making sure there is an evaluation tool in the programs developed and implemented. The Health Education and Outreach Workgroup ensures the programs promoted are evidence-based and that they address populations at higher risk for CVD. The workgroup has worked to develop tools to evaluate every awareness campaign currently being promoted. Evaluation results and information collected are reviewed and appropriate revisions made according to evaluation and results collected.

2. Coordinate and collaborate with agencies to disseminate CVD and stroke prevention programs - The Workgroup collaborated with numerous partners such as the Texas Department of State Health Services (DSHS) Cardiovascular Health and Wellness Program, American Heart Association-Texas Affiliation, Texas School Health Network, Texas Medical Association, Texas Medical Foundation, DSHS Tobacco Prevention Program, DSHS School Health Program, Texas Bicycle Coalition, Texas Business Group on Health, University of Texas-School of Public Health, Texas Education Agency on statewide and local dissemination of programs such as the Coordinated Approach to Child Health (CATCH) and the implementation of Senate Bill 19 (SB19) relating to health education and physical activity in schools, Commissioner’s Challenge Texas Round-Up, Duck Anti-Tobacco Campaign, Texas Asthma Program, Texas Alzheimer’s Program, DSHS Comprehensive Cancer Program, and the DSHS Obesity Prevention Program.
3. **Provide training and support to schools on coordinated school health programs** - The workgroup supports the Coordinated School Health Programs project and assists the Texas Education Agency and local school districts to promote public school curriculum(s) as approved by the TEA, that includes physical, nutritional, and health education relating to cardiovascular disease and stroke promotion. The workgroup partnered with the Texas Diabetes Program, DSHS Obesity Prevention’s Nutrition and Physical Activity Workgroup (NUPAWG), DSHS Youth Focused Group School Health Program and University of Texas-Houston CATCH program. These partnerships provided professional education opportunities to school administrators, teachers and auxiliary personnel in developing coordinated school health programs for the prevention of cardiovascular disease, obesity and diabetes.

**Five Year**

1. **Support and participate in awareness campaigns and health education program for CVD and stroke prevention** - The Texas Department of State Health Services held its 1st Annual *Heart of Texas Women* Campaign to promote awareness of heart disease in Texas women. DSHS offered a *Heart Truth for Women* Kit to local health departments, state agencies, universities, psychiatric centers, family health care vendors, consortiums, hospitals, city offices, and not-for-profit community service organizations to support ongoing health education efforts by the Texas Council on Cardiovascular Disease and Stroke. Forty-four participating sites in 29 Texas cities received a kit and held their own *Heart of Texas Women* event(s) either on February 4th, 2005, or during the month of February. In addition, DSHS recognized the Department of State Health Services Region 2/3 office in Arlington as having “The Most
Innovative and Effective Heart of Texas Women Event,” and four other sites around the state were recognized as honorable mentions.

2. Assist in acquisition of funds to implement risk awareness campaigns and health education programs - The workgroup continues to establish a list of potential funding sources to support sustainable awareness campaigns and health education at the community level i.e. health foundations, health affiliate organizations, corporate sponsors, etc., and make the information available through a link on the Council website. Plans to use the list of sources to identify potential funding opportunities to support expansion of Council activities including the Heart of Texas Women Campaign and the Cardiovascular Health Promotion Awards are in development for 2006-2007.
Goal: Create local champions that can bring groups together to develop a local comprehensive plan to promote cardiovascular health and stroke prevention through policy and environmental changes.

Texas Objective: Increase the proportion of worksites that provide comprehensive employer sponsored health programs that address physical activity, nutrition, weight management and tobacco use cessation; schools that offer comprehensive school health; and communities that offer programs and facilities for physical activity. Timeline – 3 years

Action Steps:

One Year

1. Identify target communities for development of a local comprehensive cardiovascular disease prevention program - An assessment schedule was developed to identify communities that included a First Year, Second Year and Third Year rotation of assessments. Cities were categorized as metropolitan size (over 500,000 population, 2000 Census), mid-size (100,000 – 500,000 population, 2000 Census), and small-size (0–100,000 population, 2000 Census). A set of metro, mid-size and small-size cities were identified to be assessed during the first year, followed by an additional set of cities to be assessed in the second year. In the third year, the first set of assessed cities would be reassessed, to determine if changes in the community-based indicators had occurred between

Special Populations to Address:

1. Youth
2. African Americans
3. Persons with CVD and stroke
the assessment periods. The workgroup collaborated with the American Heart Association-Texas Affiliate to develop community task forces in communities that were evaluated in 2003 and 2004, and assist cities in meeting Heart and Stroke Healthy indicators.

2. Develop community specific baseline data and track community results and activities through development of community indicator database at Texas Department of State Health Services (DSHS) that corresponds with HP 2010 objectives - During the development of the Heart and Stroke Healthy City Recognition Program, the planning group reviewed a list of eighty community-based indicators currently being promoted by the CHW program for the prevention of heart disease and stroke. Though all these indicators are important to the prevention of heart disease and stroke, the planning group identified the top ten to be included in a community level recognition program. To support the development of site-based policy and environmental change indicators, the CHW program reviewed the list of eighty indicators and developed a Heart Smart Site Recognition program. This program would allow individual health care, school, worksite or community organizations the opportunity to be recognized for individual efforts in the prevention of heart disease and stroke. These eighty indicators, currently categorized by site type, were developed into an online site-based recognition program. Individual sites can enter the program, complete the online assessment tool, and submit the application to determine if they meet a recognition level. Sites meeting the recognition criteria are provided a Certificate of Recognition. Ten community-based indicators out of a list of 80 indicators that are vital to reducing the burden of heart disease and stroke were identified for cities to receive recognition as a Heart and Stroke Healthy City. The planning group identified a set of criteria for each community-based indicator to determine at what level the indicator may be met, partially met, or not met. The
ten indicators are 1) Cardiovascular Disease (CVD) and stroke media campaigns are provided in the community, 2) Physical activity areas are designated, safe, accessible and promoted, 3) Healthy food options are accessible and promoted, 4) Public schools (grades K-6) comply with all legislated components of a coordinated school health program and daily physical activity, 5) Moderate to strong city smoking ordinances are in place, 6) CPR classes are available, 7) A plan is in place to reduce disparities in CVD and stroke, 8) Defibrillators (Manual and/or Automated External) are available, 9) Stroke is treated as a medical emergency in the community and appropriate acute stroke treatment protocols are in place, and 10) Health Sites in the community promote primary and secondary prevention of CVD and Stroke.

For monitoring purposes, a CVD intervention reporting system and database has been developed for tracking and evaluating activities aimed at reducing risk for developing CVD and stroke statewide. Information from this system along with relevant demographic and disease burden facts will be incorporated to create the county fact sheet system suggested in the 2003 report. Currently, staff from the Texas Department of State Health Services are using the system with long range plans to expand to local health departments and community groups reporting on the system for comprehensive statewide coverage.

3. **Utilize DSHS staff or other community champions to create stakeholder partnerships** – The council has formed four work groups (Surveillance, Data and Outcome Management; Health Education and Outreach; Community Policy and Environmental Changes; and Clinical Prevention and Treatment Services), representing the components necessary to forge comprehensive health promotion and disease prevention programs. Each work group reviews information, drafts action plans and makes
recommendations to the full council for programs and activities. The council work groups provide the foundation for evaluating and implementing recognized cardiovascular interventions. The council participated with state and national partners in many health education, public awareness, and community outreach activities throughout the state in 2003 and 2004.

To promote the prevention of risk factors for CVD and stroke:

**Tobacco** – The council has included an indicator in the Heart and Stroke Healthy City Program that encourages cities to have moderate to strong smoking ordinances.

**Physical Activity and Nutrition** – The council supported the Texas Round-Up, the Governor’s statewide physical activity program. Physical activity and nutrition indicators are in the city recognition program.

**High Blood Pressure** - The council supported the Know Stroke campaign, a National Institute of Neurological Disorders and Stroke (NINDS) Program. This program seeks to raise awareness about the symptoms of stroke and the need to seek treatment quickly. DSHS worked with NINDS to initiate interventions in Houston. Ten to twelve Stroke Champions were trained in Houston and conducted more than 50 large-scale events; Stroke Champions distributed a total of 27,225 materials in Houston.

**High Blood Cholesterol** - The council supported the LIPID Project, a Texas Medical Foundation (TMF) project. The LIPID Advisory Group partnered with AHA, DSHS, and other organizations in seven south Texas counties to reduce the health disparity of lipid testing in African Americans with diabetes in Texas.

**Diabetes** - The council coordinated with the Diabetes Program, the Texas Education Agency, and the UT-Houston School of Public Health, Center of Health Promotion Prevention and Research, to promote the use of CATCH through statewide trainings offered at
4. Provide resources through DSHS or other organizations to identify community priorities and implement initiatives that reach local policy and environmental goals - The Heart and Stroke Healthy City Index is a self assessment and planning guide adapted from the Center for Disease Control and Prevention (CDC) School Health Index for Physical Activity and Healthy Eating: A Self Assessment and Planning Guide (February 2004). The index helps communities identify the strengths and weaknesses of their community’s policies and programs that support cardiovascular health and develop an action plan to improve policies and environmental changes in the community. The results from using the Index can help communities become recognized as a Heart and Stroke Healthy City by implementation of 10 indicators that are important in reducing the burden of heart disease and stroke. The work group also works with the Texas Recreation and Parks Association, DSHS Office of Tobacco Prevention and Control, the American Heart Association, and the Texas Department of Agriculture on related risk factor prevention strategies.

5. Promote evidence-based best practices for policy and environmental changes for physical activity, nutrition, and tobacco – The council, in collaboration with its partners from business, health care, school, and community organizations, has developed a list of indicators that, when present in a community can assist in promoting a heart and stroke healthy environment. The council promotes the Heart and Stroke Healthy City and Heart Smart Site Programs based on proven interventions that have made a significant difference in increasing physical activity and better eating habits, as well as reducing tobacco use, and decreasing response time to heart attacks and strokes. The Texas Cardiovascular Quality Recognition Program seeks to improve patient outcomes by recognizing physicians and hospitals for implementing and
monitoring secondary prevention guidelines for cardiovascular disease and improving standards of care. Access to this information is intended to assist health plans, business groups, and consumers identify providers who follow quality improvement practices. Stair use signs were provided by DSHS to worksites, schools and communities as well as continual promotion of no smoking ordinances.

6. **Implement an awards program through DSHS that provides recognition to exemplary cardiovascular health promotion programs** - Past accomplishments include the development of the Heart and Stroke Healthy City Recognition Program in August 2003 by a group of public and private organizations, dedicated to reducing the burden of heart disease and stroke on Texans. This planning group was brought together through the Cardiovascular Health and Wellness (CHW) program and included representatives from health, business, and school settings. The group identified the top ten community-based indicators, out of a list of 80 indicators that are vital to reducing the burden of heart disease and stroke. The group also developed levels of recognition that cities could achieve. These levels are based on a scoring mechanism from points assigned to the met, partially met and not met rating scale. The CHW program contacts each city using an assessment tool to collect information on the criteria related to each indicator. The council reviews this information and determines if the indicator is met, partially met, or not met in each city. Twelve communities were identified for the first assessment in 2003 (Six metro cities, three mid-sized, and three small-sized communities). Twenty cities were identified for the second round of assessment in 2004 (Ten small-sized cities and ten mid-sized cities). Six metro cities were reassessed in 2005. Recognition criteria level: Gold Level – Score of 40 with All Indicators Met; Silver Level – Score of 35 or greater and no “No Indicators Met” with no more than 2 partially met indicators; Bronze Level – Score of 30 or greater and no “No Indicators Met”
with no more than 5 partially met indicators; and Honorable Mention – Score of 30 or greater and only 1 “No Indicator Met.”

To support the development of site-based policy and environmental change indicators, the CHW program reviewed the list of eighty indicators and developed a Heart Smart Site Recognition program. This program allows individual health care, school, worksite or community organizations the opportunity to be recognized for individual efforts in the prevention of heart disease and stroke. Individual sites enter the program, complete the online assessment tool, and submit the application to determine if they meet a recognition level. Sites meeting the recognition criteria are provided a Certificate of Recognition.

The Texas Cardiovascular Health Promotion Awards were developed and implemented in 2002, 2003, 2004 and 2005. This award program seeks to identify and recognize entities in the categories of Healthcare, School, Worksite, and Community that have implemented innovative and effective programs that improve treatment, prevention and public awareness. Programs competing for the Texas Cardiovascular Health Promotion Awards must demonstrate efforts to help targeted audiences in schools, worksites, healthcare settings and the community recognize the impact of the risk factors for heart disease and stroke.

Three Years

1. **Promote Senate Bill 19** – In 2004, 10 grant-funded CATCH kits were disbursed to school districts in the Lower Rio Grande Valley area. Local school districts are also evaluated in select Texas cities in the Heart and Stroke Healthy City Recognition Program. Each city is rated on the ability of their school districts to comply with the legislated mandates for physical activity and progress towards implementing a coordinated school health program by 2007.
2. **Help enforce Zero tolerance for smoking on school campuses.**
   The Heart and Stroke Healthy City recognition program supports school adherence to state law.

3. **Encourage adoption and improved enforcement of city smoking ordinances** - Council working with DSHS Office of Tobacco Prevention and Control to promote enforcement issues. City ordinances are promoted through the Heart and Stroke Healthy City Recognition Program as one of the ten indicators that must be achieved for recognition.

**Five Years**

1. **Work with representatives from governmental, school, community and legislative sectors to incorporate physical education into the statewide assessment of student performance** - Currently being reviewed and assessed. A Governor’s Task Force on Physical Activity is currently reviewing strategies to promote physical activity in the school setting.
Clinical Prevention and Treatment Services

**Goal:** Educate the public and health care providers on the risk factors for CVD and stroke and work to ensure that screening, diagnosis and appropriate treatment are provided. Specifically, the risk factors include: high blood pressure, high cholesterol, tobacco, physical inactivity, poor nutrition, obesity and diabetes.

**Two Years**

1. **Promoted community involvement in screening and distributing risk factor materials** - The council Supported, and continually promotes the AHA’s *Get With the Guidelines* program (GWTG). The TDSHS purchased ten GWTG Coronary Artery Disease and ten GWTG Stroke kits, which were made available to hospitals in 2004 and 2005. Currently, GWTG has been accepted by 11 of the 20 targeted hospitals. In addition to GWTG, the *Heart of Texas Women* (HOT) *Campaign* was promoted, which was a statewide educational campaign to increase the awareness of heart disease in women. This program provided educational kits and awareness to 44 sites in 29 Texas cities, reaching over 2,500 people. A faith-based program was promoted and implemented using the AHA’s faith-based program, *Search Your Heart* (SYH). This program targeted African-American populations and was designed to educate participants about their disproportionate risk for heart disease and stroke. To date, 45 churches have committed to SYH, 25 churches have been trained, and the program has reached 4,400 people. Also,

**Special Populations to Address:**

1. Youth
2. African Americans
3. Persons with CVD and stroke
the *Know Stroke* program was promoted in Houston, Texas and raised awareness about the symptoms of stroke and the need to seek treatment quickly. Stroke Champions were trained and conducted more than 50 large-scale events in Houston, and a total of 27,225 materials were distributed.

2. **Adopt and promote a standardized screening tool** - Through collaborations between health programs, a standardized screening tool has been developed for high blood pressure, high body mass index, increased cholesterol, elevated blood sugar and tobacco use. A *Physician Tool Kit for CVD* was developed and made available online for healthcare sites and practitioners to download and use. The Cardiovascular Health and Wellness Program also mailed 26 tool kits to various healthcare entities, and gave additional tool kits to the Texas Medical Foundation for further distribution. Each tool kit consisted of the AHA Patient Tracking Tool and the Cardiovascular Prescription Pad, which received positive evaluation on their usefulness, quality, and potential impact through a *Prescription Pad Pilot Program Study*. In addition, the kit was mentioned in *Texas Medicine*, published by the Texas Medical Association.

3. **Develop a resource guide with community specific information on available CVD and stroke resources** - There was no progress on the development of a resource guide with community specific information on available resources for patient referrals; however, the CVD Clinical Council will continue to work on this objective since it was agreed upon that there is a need for such a guide.

4. **Use professional educational programs for disease management of CVD and stroke** - Professional educational programs were utilized to ensure that health professionals used current recommendations for disease management and treatment of
hypertension and cholesterol. The *Texas Cardiovascular Quality Recognition Program* was promoted, which recognized hospitals and healthcare providers for their participation in nationally recognized registries or nationally recognized, evidence-based, quality recognition programs for CVD or stroke. The program supported the TMA HeartCare Partnership as well as AHA's GWTG program.

5. **Compile and distribute a physician directory for CVD and stroke**
   - There was no progress on compiling and distributing a directory for physicians that explains the process of accessing assistance programs that help low-income patients obtain free medications to treat hypertension, high cholesterol, and diabetes. It was decided by the CVD Clinical Council that this objective would be discontinued; however, as additional related resources become accessible to the Council, these resources may be reviewed and accepted for website availability.

6. **Increase health professional and public awareness of Medical Nutrition Therapy**
   - The AHA's GWTG program was promoted and supported, which increased health professional's awareness of the appropriate Medical Nutrition Therapy used in the treatment of hypertension and hyperlipidemia. This program worked to identify individuals to lead, develop, and mobilize teams to implement discharge protocols for patients in acute care hospitals. The TDSHS purchased ten GWTG Coronary Artery Disease and ten GWTG Stroke kits, which were made available to hospitals in 2004 and 2005. Currently, GWTG has been accepted by 11 of the 20 targeted hospitals.

7. **Educate patients on lipid status**
   - By promoting TMF’s *LIPID Project*, patients who had identifiable coronary disease or a positive family history were educated to ensure that they knew their lipid status and would seek appropriate early treatment. This was an
ongoing outreach program targeting African Americans who received Medicare/Medicaid. The project aimed to improve lipid testing and management in an underserved seven county area surrounding and including the city of Houston. As a result, African Americans who received appropriate lipid tests increased from 71.1% (baseline) to 84.3%, and the overall disparity rate among the intervention group decreased from 10.7% (baseline) to 4.1%. Additionally, the current Physician Tool Kit for CVD that was developed and promoted assisted in the education of patients on heart disease, family history, lipid status, and early treatment.

8. **Train First Responders on stroke treatments** - Through a small grant from the Stroke Belt Consortium, 80 pre-hospital care CD ROMS were distributed to EMS providers, specifically geared toward training responders on the rapid identification and appropriate treatments for stroke and the use of thrombolytics and other options for therapy in the field. The Council plans to explore future opportunities in this area.

9. **Promote physician education on stroke treatment** - This activity promoted physician education of state-of-the-science treatment of stroke through educational programs with the AHA’s Acute Stroke Treatment Program (ASTP), which aimed to increase the number of hospitals initiating plans to become Primary Stroke Centers. One hundred hospitals implemented the program with the use of kits that were distributed to key hospital professionals through workshops, meetings, volunteer committee activity, and AHA staff/hospital partnerships. Additionally, ten GWTG Stroke program kits were made available to hospitals and assisted in physician education.

10. **Promote medical student education regarding the optimal prevention and treatment of heart disease and stroke** - No
specific educational programs have been targeted to medical students.

11. Utilized media campaigns for stroke awareness - The council utilized media campaigns and stroke related educational materials through the HOT Campaign, which had a tie-in to the National Wear Red Day and consisted of an educational prevention kit. The program was promoted on the council web site and via electronic fliers distributed throughout the state. As a result, 44 sites held a combination of educational and Wear Red events on or around February 4, 2005 – National Wear Red Day.

12. Target Mexican American women due to their high incidence of the CVD and stroke risk factors of high blood pressure and diabetes - The Heart of Texas (HOT) Women campaign was developed to reach all women, but was targeted to health care sites that see predominately Hispanic women. Specific sites included the DSHS Breast & Cervical Cancer Control Program contractors and primary care site contractors.

Five Years

1. Set expectation of a periodic health exam - The CVD Clinical Workgroup set the expectation of a periodic health exam for all individuals to include a strong emphasis on preventative care by seeking support of the AHA, TMA, TDH and managed healthcare organizations. This was accomplished with the promotion and implementation of the GWTG program, Texas Cardiovascular Quality Recognition Program, the Physician Tool Kit, and the HOT Campaign.

2. Emphasize the importance of addressing the need for therapeutic lifestyle changes and promoting reimbursement for preventative services - Through the GWTG program, hospitals have become

Clinical Prevention and Treatment Services
Accomplishments 2002-2005
more aware of the standards of care physicians must follow for the primary and secondary prevention of CVD and stroke.

3. Increase the number of patients with stroke symptoms who arrived at the emergency department within three hours - The Know Stroke program was implemented in Houston, Texas. This program raised awareness about the symptoms of stroke and the need to seek treatment quickly. Stroke Champions were trained and conducted more than 50 large-scale events in Houston, and a total of 27,225 materials were distributed. In addition, the ASTP aimed to increase the number of hospitals initiating plans to become Primary Stroke Centers.
Texas Plan to Reduce Cardiovascular Disease and Stroke

Future Activities
In May 2005, each council work group was asked to recommend and refine action steps for Texas based on those previously noted in 2002. The following action steps are work group recommendations for the next three to five years.

Surveillance, Data and Outcome Management

Goal: To assimilate current data, monitor trends over time, evaluate effectiveness (including cost-effectiveness) of programs and policies, and recommend new programs for enhancing outcomes.

Action Steps:

1. Collect and review data to identify populations at high risk. Identify data sources that collect information such as cholesterol or high blood pressure readings, height and weight measurements, level of physical activity and nutritional intake, etc.

2. Collect and review health provider data to identify current practices for management of high cholesterol, high blood pressure, smoking, physical activity, nutrition management, etc.

3. Maintain current information in the cardiovascular disease and stroke surveillance system.
**Health Education and Outreach**

**Goal:** To promote awareness and behaviorally-based health education to achieve cardiovascular health in Texas

**Action Steps:**

1. Promote evidence-based standards and model programs for awareness campaigns and behaviorally-based health education for cardiovascular health (CVH) and related risk factors (e.g., nutrition, physical activity, tobacco). Examples would include a campaign to target the male population through collaboration with the East Texas (Longview) *Women in Red, Men in Black* campaign and/or other similar community programs and campaigns that have shown success or made an impact on the population served. The Council will also continue to support and develop new awareness campaigns to occur on an annual cycle promoting consistent program messages such as the *Heart of Texas Women* campaign in February, the Heart Disease and Stroke Prevention worksite wellness program in the spring, and the Cholesterol Education Program in September.

2. Implement or coordinate with an existing annual awards program to identify outstanding CVH promotion programs in Texas for schools, worksites, healthcare sites and communities.

3. Assess readiness of Texas schools, worksites and communities to implement behaviorally-based health education and provide training and technical assistance for implementation of best practices.

...continued next page
Future Activities

Texas State Plan to Reduce Cardiovascular Disease and Stroke

4. Disseminate results of statewide surveillance such as Behavioral Risk Factor Surveillance System (BRFSS), Youth Risk Behavior Survey (YRBS), School Physical Activity and Nutrition Project (SPAN), Youth Tobacco Survey, and School-based Nutrition Monitoring.

5. Support and participate in development of conferences that provide education and skill building sessions on strategies to prevent heart disease and stroke, including risk factor identification and reduction, control and treatment.

Community Policy and Environmental Change

Goal: Create local champions that can bring groups together to develop a local comprehensive plan to promote cardiovascular health and stroke prevention through policy and environmental changes.

Texas Objective: Increase the proportion of worksites that provide comprehensive employer sponsored health programs that address physical activity, nutrition, weight management and tobacco use cessation; schools that offer comprehensive school health; and communities that offer programs and facilities for physical activity.

Action Steps:

1. Continue assessment of policy and environmental supports within metro, medium and small size cities to approach for development of a local comprehensive cardiovascular disease prevention program. Recognize achievement for meeting best practice recommendations.
2. Develop community specific baseline data and track community results and activities through development of a database on community indicators at TDH that corresponds with HP 2010 objectives for target communities.

3. Create collaborative partnerships to develop community task groups that include the public sector, private sector, political sector and media to deliver cardiovascular health promotion and disease prevention messages to their respective setting.

4. Promote evidenced-based best practices for policy and environmental changes for reduction of risk factors for heart disease and stroke with all Texas communities and worksites.

5. Promote evidenced-based best practices for policy and environmental changes for reduction of risk factors for heart disease and stroke with all Texas communities and worksites.

6. Promote statewide adoption of coordinated school health programs in conjunction with the Texas Education Agency.

7. Help enforce zero tolerance for smoking on school campuses.

8. Encourage adoption and improved enforcement of city smoking ordinances.
Goal:

Educate the public and health care providers on the risk factors for CVD and stroke and work to ensure that screening, diagnosis and appropriate treatment are provided. Specifically, the risk factors include: high blood pressure, high cholesterol, tobacco, physical inactivity, poor nutrition, obesity and diabetes.

1. Promote community involvement in screening and distributing risk factor educational materials through the American Heart Association, county health departments, local medical societies, the American Diabetes Association, Texas Dietetic Association, hospital outreach programs and other community health-oriented groups.

2. Work with the community health programs and professional organizations listed above to develop a resource guide with community specific information on available resources for patient referrals. The guide will address options for obtaining medical treatment recommended during screening and resources to assist with stopping smoking and therapeutic lifestyle changes.

3. Utilize professional educational programs to ensure that disease management and treatment of hypertension and cholesterol by health professionals meets the current recommendations of nationally recognized guidelines.

4. Work with EMS providers to train first responders on stroke treatment evaluation and rapid transport protocols.


6. Target Mexican American women due to their high incidence of the CVD and stroke risk factors of high blood pressure and diabetes. Increase the awareness of high blood pressure among Mexican Americans to increase its treatment and control.
Cardiovascular Disease in Texas:
Selected Statistics for Cardiovascular Disease and Stroke
Cardiovascular Disease and Stroke in Texas

Selected Statistics for Cardiovascular Disease and Stroke in Texas

Cardiovascular disease (CVD) refers to a group of diseases that target the heart and blood vessels and is the result of complex interactions between multiple inherited traits and environmental issues including diet, body weight, blood pressure, and lifestyle habits. Common forms include heart disease, stroke, and congestive heart failure.

A major cause of CVD is atherosclerosis, a general term for the thickening and hardening of the arteries. It is characterized by deposits of fatty substances, cholesterol, and cellular debris in the inner lining of an artery. The resulting buildup is called a plaque. These plaques can partially or completely occlude a vessel and may lead to heart attack or stroke.

The most prevalent forms of heart disease and stroke, in which narrowed or blocked arteries result in decreased blood supply to the heart or brain are referred to as ischemic heart disease and ischemic stroke. According to Texas hospital discharge data for 2003, almost 66 percent of all CVD related diagnosis were due to ischemic heart disease (32.3%), ischemic and hemorrhagic stroke (16.7%), and congestive heart failure (16.7%).

Heart disease and stroke are not only the number one and number three killers in the nation and Texas (respectively), but together they are the number one drain on health care resources. According to the American Heart Association, 70,100,000 Americans are estimated to have one or more types of
cardiovascular disease. CVD accounted for 38 percent of all deaths or 1 of every 2.6 deaths in the United States in 2002. Additionally, about 4.9 million Americans live with the debilitating effects of congestive heart failure. In 2002, 970,000 Americans were discharged from shortstay hospitals with a first-listed diagnosis of congestive heart failure. Of these, about 74 percent were age 65 and older.

The American Heart Association has estimated that CVD will cost Americans $393.5 billion in medical expenses and lost productivity in 2005.

In Texas, cardiovascular disease claims more than 55,000 lives each year. It has been the leading cause of death in Texas since 1940 and currently accounts for 2 out of every 5 deaths. Combined hospital charges for ischemic heart disease, hemorrhagic stroke, ischemic stroke and congestive heart failure were $9.2 billion in 2003.

The first appearance of heart disease is all too often sudden and devastating. The CDC estimates that each year, 43,717 Texans die of heart disease in an emergency department or before reaching a hospital, accounting for 60% of all cardiac defects. Brain death and permanent death start to occur in just 4 to 6 minutes after someone experiences cardiac arrest. Cardiac arrest can be reversed if it’s treated within a few minutes with an electric shock to the heart to restore a normal heartbeat (defibrillation). A victim’s chances of survival are reduced by 7 to 10 percent with
CVD accounts for 2 out of every 5 deaths in Texas.

Every hour:
More than 6 Texans will die from CVD

Every day:
More than 150 Texans will die from CVD

This year:
More than 55,800 Texans will die from CVD

More than 9,000 of these deaths will happen to Texans between 40 and 64 years of age, resulting in more than 122,000 years of potential productive life lost in Texas before age 65.

Source:
Vital Statistics Unit,
Texas Department of State Health Services, 2003

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Cardiovascular Disease and Stroke in Texas

Selected Statistics for Cardiovascular

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every minute that passes without defibrillation. Few attempts at resuscitation succeed after 10 minutes.7

The average cost of coronary artery bypass totals $60,853 per patient not including rehabilitation and lost productivity.2

Approximately 10 to 20 percent of bypass surgeries are repeat surgeries, and after 10 years, up to 50 percent of bypass grafts will become occluded.8 Looking at stroke costs, within 30 days of an acute event, the average cost was $13,019 for mild ischemic strokes and $20,346 for severe ischemic strokes.2

While the number of actual deaths from CVD and stroke have increased due to an aging population, mortality rates (ratio between mortality and the population) for CVD and stroke have been declining for many years. Factors affecting this decline may include more effective medical treatment, more emphasis on reducing controllable risk factors and better treatment for heart attack and stroke patients.9 Nonetheless, CVD continues to be the major cause of death, particularly among Texas’ minority populations. The highest mortality rate is found among the African American population, both in Texas and in the U.S.

In Texas, the 2003 age-adjusted mortality rate for ischemic heart disease among African Americans was 211 per 100,000, compared to 170 per 100,000 for whites and 139.3 per 100,000 for Hispanics. Additionally, the 2003 mortality rate for stroke among African Americans was 90.2 per 100,000, compared to 58.6 per 100,000 for whites and 48.3 per 100,000 for Hispanics.4

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### ISCHEMIC HEART DISEASE

Texas, 1999-2002

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall</th>
<th>Males</th>
<th>Females</th>
<th>Whites</th>
<th>Afr Amer</th>
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<td>88</td>
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<td>2001</td>
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<td>88</td>
<td>102</td>
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<td>141</td>
<td>88</td>
<td>102</td>
<td>134</td>
<td>104</td>
</tr>
</tbody>
</table>
For more information about cardiovascular disease and stroke, visit the American Heart Association web site at
http://www.americanheart.org

*Age-adjusted to the 2000 US standard population

Source:
Texas Bureau of Vital Statistics.
Cardiovascular Disease and Stroke in Texas

References

1. Texas Hospital Inpatient Discharge Public Use Data File, Texas Health Care Information Council, Austin, Texas.


5. Texas Hospital Inpatient Discharge Public Use Data File.


Appendix A:

Healthy People 2010 Objectives Relating to CVD and Stroke

Healthy People 2010 (HP2010), the prevention agenda for the nation, focuses on 28 areas representing the most significant preventable threats to health in the United States. The objectives that follow include the HP2010 objectives that directly address CVD and stroke as well as those addressing risk factors for CVD and stroke.

Each objective includes the national baseline and target. Where data is available, Texas baselines and data sources are indicated.

For planning purposes, objectives are organized by council work groups most closely related to each objective, although progress on these objectives will often be dependent on activities supported by different combinations or all of the work groups. Acronyms for data sources are explained in the table at the end of this Appendix A.

Numbering of objectives corresponds to order in which they appear in the HP2010 documents found at the web site below:

Healthy People 2010 Objectives - CVD and Stroke

Cardiovascular Disease

12.1 Reduce coronary heart disease deaths.
Baseline: 208 deaths per 100,000 (NVSS 1998) (age-standardized to 2000)
Target: 166 deaths per 100,000; 20% improvement

Texas Baseline: 173.4 per 100,000 (BVS 1998) (age-standardized to 2000)
White: 175.9 per 100,000
Black: 214.1 per 100,000
Hispanic: 145.3 per 100,000

12.7 Reduce stroke deaths.
Baseline: 60 deaths per 100,000 (NVSS 1998) (age-standardized to 2000)
Target: 48 deaths per 100,000; 20% improvement

Texas Baseline: 62.6 per 100,000 (BVS 1998) (age-standardized to 2000)
White: 60.8 per 100,000
Black: 91.8 per 100,000
Hispanic: 52.8 per 100,000

High Blood Pressure

12.9 Reduce the proportion of adults with high blood pressure.
Baseline: 28% of adults aged ≥20 years (NHANES 1988-94) (age-standardized to 2000)
Target: 16%

Texas Baseline: 23.7% of adults aged ≥20 years (BRFSS 1999)

High Blood Cholesterol

12.13 Reduce the mean total blood cholesterol levels among adults.
Baseline: mean 206 mg/dL among adults aged ≥20 years (NHANES 1988-94) (age-standardized to 2000)
Target: 199 mg/dL

12.14 Reduce the proportion of adults with high total blood cholesterol levels.
Baseline: 21% of adults aged ≥20 years with total blood cholesterol levels ≥240 mg/dL (NHANES 1988-94) (age-standardized to 2000)
Target: 17%

Texas Baseline: 30.8% of adults aged ≥20 years with total blood cholesterol levels >240 mg/dL (BRFSS 1999)
Physical Activity

22.1 Reduce the proportion of adults who engage in no leisure-time physical activity.
Baseline: 40% of adults aged 18 years and older engaged in no leisure-time physical activity (NHIS1997)(age adjusted to the year 2000 standard population)
Target: 20%

Texas Baseline: 27.8% of adults aged 18 years and older engaged in no leisure-time physical activity (BRFSS 1999)

22.2 Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day.
Baseline: 15% of adults aged 18 years and older engaged in moderate physical activity for at least 30 minutes 5 or more days per week (NHIS 1997)
Target: 30%

Texas Baseline: 21.5% of adults aged 18 years and older engaged in moderate physical activity for at least 30 minutes 5 or more days per week (BRFSS 2000)

Nutrition/Obesity

19.1 Increase the proportion of adults who are at a healthy weight.
Baseline: 42% of adults aged 20 years and older were at a healthy weight (NHANES 1988-94) (age-adjusted to the year 2000 standard population)
Target: 60%

Texas Baseline: 60.8% of adults aged 20 years and older were at a healthy weight (BRFSS 2000)

19.2 Reduce the proportion of adults who are obese.
Baseline: 23% of adults aged 20 years and older were identified as obese (NHANES 1988-94) (age-adjusted to the year 2000 standard population)
Target: 15%

Texas Baseline: 25.3% of adults aged 20 years and older were identified as obese (BRFSS 2000)

19.3 Reduce the proportion of children and adolescents who are overweight or obese.
(NHANES)  
Baseline: Aged 6 to 11 11% Target 5%
Aged 12 to 19 11% Target 5%
Aged 6 to 19 11% Target 5%
Tobacco

27.1 Reduce tobacco use by adults.
Baseline: Cigarette smoking by adults aged 18 and older, (NHIS)1998, 24%
Target: 12%

Texas Baseline: 22% of adults aged 18 and older smoked cigarettes (BRFSS 2000)

27.2 Reduce tobacco use by adolescents. (Students grades 9-12)
Baseline: Tobacco products (past month), (YRBSS) 1999, 40%
Target: 21%

Texas Baseline: Tobacco products (past month), (TXYTS) 1998, 43%

Health Education and Outreach

High Blood Pressure, High Blood Cholesterol, Nutrition/Obesity, Physical Activity and Tobacco

7.2 Increase the proportion of middle, junior high, and senior high schools that provide comprehensive school health education to prevent health problems in the following areas: tobacco use and addiction, unhealthy dietary patterns, and inadequate physical activity.

12.2 (Developmental) 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.

12.4 (Developmental) 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.

12.8 (Developmental) Increase the proportion of adults who are aware of the early warning symptoms and signs of a stroke.

Community Policy and Environmental Change

Nutrition/Obesity

19.16 Increase the proportion of worksites that offer nutrition or weight management classes or counseling.
Baseline: 50% of worksites with ≥50 employees (NWHPS 1998-99)
Target: 85%
Physical Activity

22.13 Increase the proportion of worksites offering employer-sponsored physical activity and fitness programs.
Baseline (NWHPS 1998-99) (varies by employee size)
Target: 75%

22.11 (Developmental) Increase the proportion of the Nation’s public and private schools that provide access to their physical activity spaces and facilities for all persons outside of normal school hours (that is, before and after the school day, on weekends, and during summer and other vacations).
Target: 75%

22.8 Increase the proportion of the Nation’s public and private schools that require daily physical education for all students.
Middle and junior high - YRBSS 1994 Baseline: 17% Target: 25%
Senior high 2% 5%

Tobacco

27.11 Increase smoke-free and tobacco-free environments in schools, including all school facilities, property, vehicles and school events.
Baseline: 37% of middle, junior high, and senior high schools (SHPPS 1994)
Target: 100%

27.12 Increase the proportion of worksites with formal smoking policies that prohibit smoking or limit it to separately ventilated areas.
(See list for baseline for selected community sites, NWHPS)
Target: each site in 51 states and districts

27.14 Reduce the illegal buy rate among minors through enforcement of laws prohibiting the sale of tobacco products to minors.
States and Districts 1998 Baseline (SSER): 0 Target: 51
Territories : 0 Target: All

27.15 Increase the number of States and the District of Columbia that suspend or revoke State retail licenses for violations of laws prohibiting the sale of tobacco to minors.
States and Districts 1998 Baseline (STATE): 34 Target: 51

27.16 (Developmental) Eliminate tobacco advertising and promotions that influence adolescents and young adults.

27.19 Eliminate laws that preempt stronger tobacco control law.
States (STATE)1998 Baseline: 30 Target: 0
27.8 Increase insurance coverage of evidence-based treatment for nicotine dependency.
Managed care organizations (ATMCS) 1998 Baseline: 75% Target: 100%
State Medicaid programs: 24% 51%
All Insurance (developmental)

Clinical Prevention and Treatment Services

1.3 (Developmental) Increase the proportion of persons appropriately counseled about health behaviors.

12.3 (Developmental) Increase the proportion of eligible patients with heart attacks who receive artery-opening therapy within an hour of symptom onset.

12.5 (Developmental) Increase the proportion of persons with witnessed out-of-hospital cardiac arrest who are eligible and receive their first therapeutic electrical shock within 6 minutes after collapse recognition.

12.6 Reduce hospitalizations of older adults with heart failure as the principal diagnosis.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Baseline 1997</th>
<th>Target</th>
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<tr>
<td>65-74 years</td>
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<td>6.5/1000</td>
</tr>
<tr>
<td>75-84 years</td>
<td>26.9/1000</td>
<td>13.5/1000</td>
</tr>
<tr>
<td>≥85 years</td>
<td>53.1/1000</td>
<td>26.5/1000</td>
</tr>
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</table>

High Blood Pressure

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 high or normal.
Baseline: 90% of adults aged ≥18 (NHIS) (age-standardized to 2000)
Target: 95%

Texas Baseline: 92.4% of adults aged ≥18 had their blood pressure measured (BRFSS 2000)

12.10 Increase the proportion of adults with high blood pressure whose blood pressure is under control.
Baseline: 18% of adults aged ≥18 with high blood pressure had it under control in 1988-94 (NHANES) (age-standardized to 2000)
Target: 50%

12.11 Increase the proportion of adults with high blood pressure who are taking action (for example, losing weight, increasing physical activity, and reducing sodium intake) to help control their blood pressure.
Baseline: 72% of adults aged ≥18 with high blood pressure were taking action to control it in 1998 (NHANES) (age-standardized to 2000)
Target: 95%
High Blood Cholesterol

12.15 Increase the proportion of adults who have had their blood cholesterol checked within the preceding 5 years.
Baseline: 68% of adults aged ≥18 (NHIS) (age-standardized to 2000)
Target: 80%

Texas Baseline: 69% of adults aged ≥18 have had their blood cholesterol checked in preceding 5 years (BRFSS 2000)

12.16 (Developmental) Increase the proportion of persons with coronary heart disease who have their LDL-cholesterol level treated to a goal of less than or equal to 100.

Nutrition/Obesity

19.17 Increase the proportion of physician office visits made by patients with a diagnosis of cardiovascular disease, diabetes, or hyperlipidemia that include counseling or education related to diet and nutrition.
Baseline: 42% of physician office visits in 1997 (NAMCS)
Target: 75%
### Healthy People 2010 Objectives - CVD and Stroke Data Sources

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>NVSS</td>
<td>National Vital Statistics System</td>
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<td>BVS</td>
<td>Texas Bureau of Vital Statistics</td>
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<td>NHANES</td>
<td>National Health and Nutrition Examination Survey</td>
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<td>BRFSS</td>
<td>Behavioral Risk Factor Surveillance System</td>
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<td>NHIS</td>
<td>National Health Interview Survey</td>
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<td>YRBSS</td>
<td>Youth Risk Behavior Surveillance System</td>
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<td>National Worksite Health Promotion Survey</td>
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<td>SHPPS</td>
<td>School Health Policies and Programs Study</td>
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<td>State Synar Enforcement Reporting</td>
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<td>State Tobacco Activities Tracking and Evaluation System</td>
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<td>Addressing Tobacco in Managed Care Survey</td>
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