



TENNESSEE

# STATE PLAN FOR PUBLIC HEALTH

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Tennessee Department of Health  
Policy, Planning and Assessment  
Division of Health Statistics

Governor: Phil Bredesen

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## FOREWORD

The next few years will offer unique promise for Public Health in Tennessee. With the nation's highlighted emphases and priorities placed on wellness and the declared epidemic of obesity, and on communicable disease preparedness, the *visibility* of the work of the Tennessee Department of Health will continue to increase. However, with potential crises on the horizon, regarding the human and fiscal resources devoted to Public Health, it may be that the upcoming years will also offer unique challenges to the *viability* of the extraordinary level of commitment and investment in Public Health now reflected in the initiatives within the Department.

To prepare for – and to mitigate the impact of – the changing environment in which Public Health may be required to function going forward, the Commissioner and the heads of the Tennessee Department of Health's Bureaus and Offices have strategically identified several specific areas of emphasis, to ensure the sustainability of the outcome-based work of the Department:

- Focusing and prioritizing the Department's core programs; assessing mandated responsibilities, data-driven targeted services, and opportunities for increased effectiveness and efficiency
- Increasing the Department's emphasis on prevention and behavior change; reaching key constituencies, providing culturally-competent communications, and promoting statewide wellness initiatives
- Leveraging Departmental impact through strategic collaboration; effectively communicating Public Health data and priorities, and converting theory into practice
- Securing and maintaining needed financial resources; building and maintaining current resources, while identifying and developing future sources
- Increasing organizational adaptability, through comprehensive workforce development and succession planning

In addition, the following cross-cutting strategic priority will continue to be embedded within the implementation plans for the other five strategic emphases:

- Eliminating racial and ethnic health disparities

The critical relevance of these functional areas of emphasis and administrative execution will be evident, as the reader peruses the following State Plan for Public Health. This document provides a comprehensive representation of the role of Public Health in Tennessee; the vision, mission and goals of the Department of Health; and the associated strategies, approaches and programming in the Department, presently planned and implemented to achieve those purposes.

It is my hope that the far-reaching, multifaceted, protean efforts of the Tennessee Department of Health reflected in this State Plan will contribute positively to Tennessee soon becoming a state - without health disparities - in *one* state of *excellent* health.

Kenneth S. Robinson, M.D.  
*Commissioner, Tennessee Department of Health*

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## INTRODUCTION

Since the mid 1800s, health has been a major concern of the government of the State of Tennessee. Early initiatives and focus areas were crisis oriented, initiated by the then scourges to the citizenry: malaria, yellow fever, and other diseases. From this beginning has evolved a dynamic Department which provides public health services for all of Tennessee's almost 6 million citizens and visitors in all 95 counties.

The ultimate goal of the Tennessee Department of Health is to improve the health status of the people of Tennessee and visitors to the state. This document represents the process of problem identification and establishment of goals and objectives for improvement, through implementation of programs to meet the identified needs. In order to meet that goal, the Department follows the lead of the United States Department of Health and Human Services in its task of protecting the health of all Americans and providing essential human services, especially for those who are least able to help themselves.

The Office of the Surgeon General in the United States Department of Health and Human Services (HHS) has named several public health priorities which include Disease Prevention, Eliminating Health Disparities, Public Health Preparedness, Improving Health Literacy, Organ Donation, Children and Healthy Choices: "50 Schools in 50 States" Initiative, and Bone Health and Osteoporosis.

According to HHS, the priorities for Disease Prevention include overweight and obesity, increasing physical activity, HIV/AIDS, tobacco use, preventing birth defects, and preventing injury. The goal for the Eliminating Health Disparities priority is to eliminate the greater burden of death and disease from breast cancer, prostate cancer, cervical cancer, cardiovascular disease, diabetes mellitus and other illnesses in minority communities.

Through HHS initiatives such as *Steps to a Healthier US*, Healthy Lifestyles and Disease Prevention, and the Small Steps Campaign, the federal government is encouraging American families to take small, manageable steps within their current lifestyle as opposed to drastic changes to ensure long-term health. HHS is also expanding Community Health Centers and the State Children's Insurance Program (S-CHIP), conducting additional research into the problem of health disparities through research institutes such as the National Center on Minority Health and the National Cancer Institute and increasing public awareness and outreach through programs like "Take a Loved One to the Doctor Day" and The Heart Truth Campaign.

The goal of Improving Health Literacy is improving the ability of all Americans to access, understand, and use health-related information and services to make appropriate health decisions. To accomplish that goal, the Office of the Surgeon General/HHS is building a health information system that provides equitable access, developing audience-appropriate information and support services for all segments of the population especially under-served persons, training health

professionals in the science of communication and the use of communication technologies, and ensuring that Surgeon General communications are written in plain language that people can understand.

The Children and Healthy Choices: “50 Schools in 50 States” initiative targets underage drinking, smoking, illicit prescription and over-the-counter drug abuse, childhood and adolescent obesity and unintentional injury. The Office of the Surgeon General/HHS visits at least one school in each of the 50 states to talk with students about the dangers of risky behaviors and the benefits of healthy choices.

The Tennessee Department of Health is the state partner to HHS. Consequently, major funding for the Department comes from federal government grants and contracts (\$272,732,800). One-fourth of the Department’s budget comes from state appropriations (\$143,092,000), with lesser amounts from foundations and other sources (\$118,755,200). Given the Department’s role in both national and state health priorities, it is incumbent upon the state to identify funding sources which both address local need while assuring that these initiatives fit within the guidelines of our multiple funding sources and broad Public Health priorities.

Many of Tennessee’s public health efforts and initiatives are also the result of local community requests, planning and articulation of need by individual counties in Tennessee. Ninety-five County-based Community Health Councils meet on a regular basis and work with their respective 13 Regional Health Offices to identify needs and develop strategies and plans to address these identified needs. The Central Office of the Tennessee Department of Health (TDH) based in Nashville, sets statewide standards and priorities, helps direct local efforts, secures funding, and provides oversight, technical and professional advice and consultation for individual programs in regional and local health departments.

Additionally, the Central Office staff maintains and provides sophisticated statistical/data services and continues to develop access to data through the Internet, an extremely important, emerging medium with which to make information easily available to Tennessee’s citizens.

<http://www2.state.tn.us/health/>

## **Philosophical Foundation**

There is broad consensus that Public Health is truly a system, a social enterprise with its focus on the population as a whole, striving to extend benefits of current knowledge in ways that will have maximum impact on the health status of the entire population in several key areas.<sup>1</sup> These areas are:

- I. Prevention of injury, illness, and the spread of disease
- II. Creation of a healthful environment and protection against environmental hazards
- III. Promotion of healthy behaviors and promotion of mental health

- IV. Response to disasters and assistance to communities in recovery
- V. Promotion of and/or provision of accessible, high quality health services

## **Core Principles of Public Health**

In the book The Future of Public Health, the Institute of Medicine (IOM) defines three core functions of Public Health assessment, policy development, and assurance which serve as the broad framework for governmental Public Health agencies to develop and describe the scope of their activities. To further clarify the responsibilities of governmental Public Health agencies the IOM developed a list of essential Public Health services which delineate the work of governmental Public Health agencies at the state and local level.

The Department's work is structured to address the IOM's ten essential functions of Public Health<sup>2</sup>:

- ❖ **Monitor health status to identify and solve community health problems.**  
Monitor and assess a community's health status. Identify community assets and threats to health and determine current and emerging health needs.
- ❖ **Identify, investigate, control, and prevent health problems and environmental health hazards in the community.**  
Use health laboratories and other resources to investigate disease outbreaks and patterns of environmental health hazards, chronic disease and injury. Identify relationships between environmental conditions and the public's health. Develop and implement prevention and intervention strategies.
- ❖ **Educate the public about current and emerging health issues.**  
Promote and engage in healthy behaviors and lifestyles by making health information available in a variety of formats, styles, languages, and reading levels so it can be effectively communicated to the diverse people in Tennessee. Regularly share and discuss current and emerging health issues with policy makers and decision makers throughout the state (such as health care providers, elected officials, leaders in the corporate and non-profit sectors, and agency and department leaders).
- ❖ **Promote community partnerships to identify and solve health problems.**  
Collaborate with community groups and individuals (including those not traditionally considered connected to "health care") to address local and statewide determined health and environmental issues. Provide needed infrastructure support to build and maintain inclusive viable partnerships. Develop strategies for assessing and engaging the full range of individual and community assets to improve health.
- ❖ **Create policies and plans that support individual and community health efforts.**  
Provide the leadership to drive the development of community health improvement processes, plans, and policies that are consistent throughout the state but address local needs and conditions.



- ❖ **Enforce laws and regulations that protect health and ensure safety.**  
Efficiently and effectively enforce state and local laws and regulations that protect and promote the public's health.
- ❖ **Link people to needed health services.**  
Provide education, outreach, case-finding of people outside the system, referral, care coordination, and other services that promote health that help people better use the public health and health care services to which they have access.
- ❖ **Assure a diverse, adequate, and competent workforce to support the public health system.**  
Lead and support efforts to improve the quality, quantity, and diversity of health professionals in the state. Promote the development of professional education strategies and programs that address state and local health needs.
- ❖ **Evaluate the effectiveness, accessibility, and quality of personal and population-based health services.**  
Regularly evaluate the public health system's performance, processes and outcomes to provide information necessary to define accountability, allocate resources, reshape policies and redesign services.
- ❖ **Conduct research to seek new insights and innovative solutions to health problems.**  
Develop partnerships with colleges, vocational and technical institutions, and universities to broaden the range of public health research (to include, for example, issues and communities that were historically ignored and emerging issues that need attention). Conduct timely scientific analysis of public health issues. Engage testing of innovative solutions at the local and state levels.

# Tennessee Department of Health

## Vision and Mission Statements

### Vision

*All Tennesseans achieve healthy lives.*

### Mission





*To promote, protect and improve the health of people living in, working in, or visiting the State of Tennessee.*

## Five-Year Strategic Goals

The Tennessee Department of Health, as a Cabinet agency of the Executive Branch of state government, works in conjunction with all other state Departments to plan and implement administration policies. One such agency, the Department of Finance and Administration (F&A), whose "...mission is to provide continually improving financial and administrative support services which enhance state government's ability to improve the quality of life for Tennesseans," is the agency with which the Tennessee Department of Health also works to develop a "Tennessee State Health Plan," as has been mandated by the State Legislature.

The Department of Finance and Administration (F&A), believes it is important for all Cabinet agencies in Tennessee State Government to participate in the strategic planning process. For the "2005 Agency Strategic Plans, Five-Year Strategic Plans" document, all such agencies, including the Tennessee Department of Health, have submitted their agency strategic plans. The Finance and Administration plan is agency-wide and its focus is on the most important priorities of each agency head and includes a description of the agency, a mission statement, major goals, strategies, and performance measures.

For that plan, the Department of Health submitted the following goals<sup>3</sup>:

-  By FY 2010, have a diversified public health workforce of qualified, competent, and stable employees who fulfill the mission of this Department by leading by example, teamwork, and providing exemplary services to the citizens of the state.
-  By FY 2010, build statewide partnerships to collaborate in the performance of public health functions and essential services in an effort to utilize the full range of available human and material resources to improve the state's health status. Assist partners and communities to organize and undertake actions to improve the health of the state's communities.
-  By FY 2010, raise public awareness about the importance of a healthy lifestyle, to encourage individuals to take personal responsibility for their health and well being, and to give newborn babies a better start in life. This initiative specifically targets cardiovascular disease, obesity, diabetes, infant mortality, prenatal care, adolescent pregnancy, and the elimination of racial and ethnic health disparities in these areas.
-  By FY 2010, monitor the health status of Tennesseans and identify potential solutions and approaches to address any community problems affecting the health status of citizens. Develop critical capacity building around the conceptualizing, planning, and implementing of the state health plan.

- ✚ By FY 2010, ensure that the critical and essential public and personal health services are delivered to the citizens and visitors of Tennessee ensuring the protection of all the population's health.

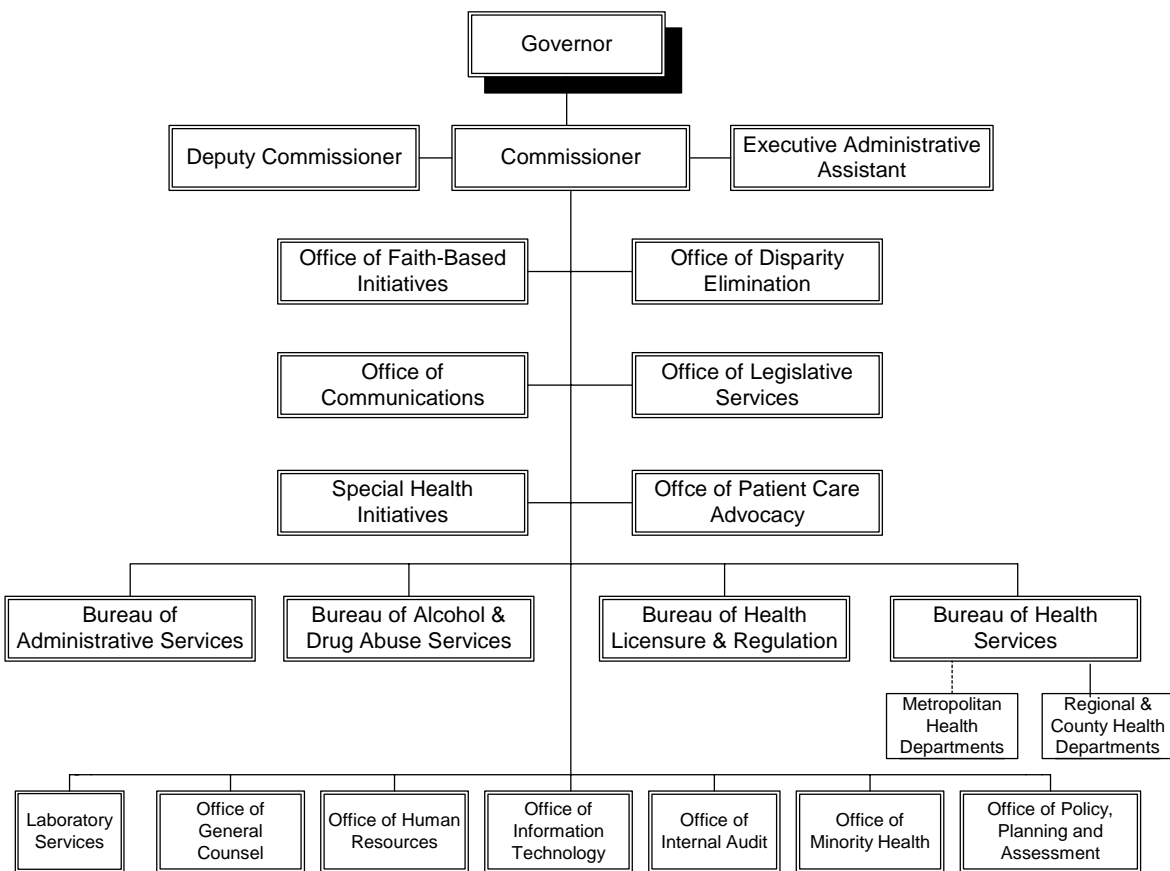
Many Tennesseans are not knowledgeable about health promotion and disease prevention, and many lack appropriate motivation to change their behaviors. The effectiveness of the Department's service delivery and the overall health of Tennesseans may be hampered, if the multiple determinants of health, i.e., socioeconomic, environmental, behavioral, and biological, are not all considered and addressed.

To overcome this obstacle, the Department is developing health promotion and health education materials that motivate and empower Tennesseans to be well informed in order to make positive choices concerning their health and futures. Also, the Department is establishing strategic partnerships among health care providers and local, state, and federal agencies, both public and private, to maximize systemic integration of preventive efforts, and to provide more holistic care. Public Health employees and partners must create synergy in existing programs and structures as well as maximize collaborative efforts, to begin delivering Public Health services with an increasingly holistic approach.

## Organization of the Tennessee Department of Health

The Tennessee Department of Health’s primary mission is “to promote, protect and improve the health of people living in, working in, or visiting the State of Tennessee.” To accomplish this mission, “a network of distributed, heterogeneous, programmatic functions operate within the Department”.<sup>4</sup>

At the state level, the Central Office of the Department assures its critical policy and rule making role from a statewide perspective. In addition, the Central Office has the responsibility for program design, program funding, and for setting program standards. The Department is organized into four bureaus and thirteen Regional offices, as depicted in the chart below:



### Bureaus

#### **Bureau of Administrative Services**

The Bureau of Administrative Services is mandated by TCA 4-3-1801 to maintain the accounts prescribed by the Department of Finance and Administration, prepare the yearly expenditure estimates (budget), and ensure compliance with all state laws, rules, policies and procedures for entering into contracts. It is also responsible for the procurement and payment of goods and services for use

throughout the Department using procedures as prescribed by the Department of Finance and Administration in conjunction with the Department of General Services. Property inventory is also a mandated function performed by Administrative Services.

### **Bureau of Alcohol and Drug Abuse Services**

The Bureau of Alcohol and Drug Abuse Services (BADAS) serves as the single State Authority for receiving and administering federal block grant funding from the United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. State funding for alcohol and drug abuse services is also administered by the Bureau. The Bureau of Alcohol and Drug Abuse Services' scope of responsibilities includes planning, developing, administering, and evaluating a statewide system of substance use, abuse, and addiction services for the general public, persons at risk for substance abuse, and persons abusing substances. These responsibilities are executed through partnerships with other governmental agencies, community organizations, and advocacy groups. Treatment and prevention services are provided by community-based agencies through contracts with the Bureau.

The Bureau's mission is to reduce substance abuse by promoting prevention and by reducing high-risk behaviors through community programs and activities, and to ensure that treatment services are available for all individuals in need. It is the vision of the Bureau to reach all citizens of Tennessee for potential substance use and abuse through effective prevention and to ensure that appropriate treatment services are available statewide.

BADAS contracts with community-based agencies for treatment and prevention services which include: Inpatient Detoxification, Medical/Social Detoxification, Adult Residential, Adult Outpatient, Halfway Houses, Women's Alcohol and Drug Services, Adolescent Outpatient and Day Treatment, Adolescent Residential, HIV/AIDS Outreach, Prevention-Intensive Focus, Community Prevention Initiative, Deaf and Hard of Hearing Initiative, Faith Initiative, Teen Institutes, Regional Training Coordinators and Statewide Clearinghouse. There are a total of 165 providers involved in making these services available.

### **Bureau of Health Licensure and Regulation**

This bureau is responsible for assuring quality in health manpower and health care facilities. The Department helps administer state laws which require health care professionals to meet certain standards. Doctors, nurses, dentists, and twenty-seven other types of health care professionals are licensed by regulatory boards. Disciplinary action is taken if state standards are violated.

Hospitals, nursing homes, ambulatory surgical treatment centers, and other kinds of health care facilities are also licensed by the Department. In addition, facilities are assessed and certified for participation in the federal Medicare and Medicaid programs. Ambulance services and emergency medical personnel across the state are checked to ensure that quality standards are met when emergency medical services are needed, and medical laboratories and personnel are tested and licensed.

## **Bureau of Health Services Administration**

The Bureau of Health Services Administration is responsible for the delivery of Public Health services to the citizens and visitors of Tennessee. At the county level are the Local Health Departments that form the cornerstone of the service delivery system. Under the direction and supervision of the 13 Regional Offices, programs are delivered which cover a wide spectrum of concerns: environmental issues, Public Health actions in response to epidemiological and other emergency events, Public Health intervention through health education, immunization, and of course, health care for individuals. Some County Health Departments provide primary health care services in addition to their preventive health duties and are a vital part of the state's health care network. The six single-county metropolitan Health Departments are administratively linked to the local governments, while contractually creating a seamless, statewide Public Health network with the 89 County Health Departments administered by the Tennessee Department of Health, Bureau of Health Services. (Health Services and Programs are described in detail in another section).

## **Offices**

### **Office of Faith-Based Health Initiatives**

The office of Faith-Based Health Initiatives (FBHI) offers various programs and assistance for faith-based organizations who are interested in developing a health ministry, including training, resources and coordination. The FBHI delivers training and technical assistance for government and community organizations that are developing relationships in the faith community. The initiative also provides a speaker's bureau for organizations who are interested in the faith and health connection, provides a database of congregations with health ministries partnering with the Tennessee Department of Health, and serves as a clearinghouse for faith and health information.

### **Office of Disparity Elimination**

The Disparity Elimination program works in conjunction with the Office of Minority Health to alleviate the differences in health that persist among different segments of the diverse population of Tennessee. Health disparities are differences in "the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates" as defined by the Minority Health and Health Disparities Research and Education Act of 2000. Disparities result not only in a lower overall quality of life among those impacted, but their families and communities as well.

Health issues that result in inordinate mortality rates in minority communities include alcohol and other drug abuse, cardiovascular disease, cancer, violence (includes sexual, child and domestic) and injury, infant mortality, HIV/AIDS, other sexually transmitted diseases and ethnic specific diseases, i.e. sickle cell.

### **Office of Communications**

The goals of this office are to effectively communicate the mission of the Department of Health, clearly define the Department's role and responsibilities, and positively promote better health to the citizens of and visitors to Tennessee.

The office is responsible for internal and external communications, strategic planning and other related projects. The office serves as a clearinghouse for information provided to the media and coordinates with all divisions to disseminate public information. The office is involved in improving communication among employees, constituency and community groups, as well as those in the public health and health care industries. The office provides oversight of marketing and advertising functions, management of promotional campaigns, and development of proactive communications programs. The office oversees publication management, web site and intranet functions. As Departmental liaison to the Governor's Communications Office, the office also provides day to day coordination with the Governor's press office.

### **Office of Legislative Services**

The Legislative Liaison's office handles Departmental requests to change state law. It is the line of contact between the Legislative Branch of Tennessee State Government and the Department of Health. It also represents and promotes the Department's interests within the Legislature.

### **Special Health Initiatives**

This office assures the Department develops and maintains efficient and effective partnerships with agencies within and external to State Government. Grants or contracts issued from the Commissioner's office are developed in this section and HIPAA questions and complaints are processed through this office. This section is the focal contact to the Governor's Office for appointments to the Department's Boards, Advisory Committees and Councils.

### **Office of Patient Care Advocacy**

This office provides assistance pertaining to Long Term Health Care matters. Inquiries and requests for assistance are received from patients, families, Long Term Care facilities, hospitals, medical professionals, and public officials. The goal is to provide guidance and help in seeking appropriate resources and services determined to be in the best interests of the patient. The role of Patient Care Advocate involves expeditious referral to appropriate services, including residential placement and negotiation in order to resolve problems encountered with provision of quality care. Emphasis is placed on the rights of the patient to receive good quality health care.

### **Laboratory Services**

The State Public Health Laboratory and its two regional laboratories across the state provide valuable support for Public Health issues such as newborn testing, disease prevention, and a clean environment. The laboratories provide services to program areas within the Department, local health departments, hospitals, independent laboratories, other state Departments, physicians, dentists, and clinics. In addition, they provide Public Health services that are not available from other sources, such as rabies testing. The labs are a part of the national Laboratory Response Network that is the laboratory component of Homeland Security for analyzing specimens related to terrorism.



### **Office of General Counsel**

This office advises the Commissioner and provides legal representation to the Department in state, legal, and administrative proceedings. It is responsible for reviewing legislation, administrative rules, and policies and procedures affecting the Department.

### **Office of Human Resources**

The Office of Human Resources supports the mission and objectives of the Department of Health by administering and overseeing all of the personnel functions of the agency. This office supports the employment needs of management and employees within the Department of Health and assists job seekers with information pertaining to jobs and benefits. Primary responsibilities in this office include the following: processing employee appointments, promotions, demotions, transfers and salary adjustments; providing policy advice and guidance to employees and management; auditing employee attendance and leave records; providing assistance and information to employees on insurance, retirement, workers' compensation and other benefits; overseeing the correct classification of departmental positions, based on their duties and responsibilities; and ensuring the equitable compensation of employees in specific job classifications across bureau lines. Other responsibilities include providing counseling to managers, supervisors and employees on employee relations issues and working to resolve conflict between co-workers and/or management.

In addition, this office advises departmental employees and managers on the proper application of state and federal employment laws and regulations, including the Americans with Disabilities Act (ADA), the Fair Labor Standards Act (FLSA), the Family and Medical Leave Act (FMLA) and Title VII. The Office of Human Resources prepares and monitors the departmental Affirmative Action Plan (AAP) and ensures compliance with federal and state regulations; attends recruitment and job fairs, as needed, to recruit applicants for hard to fill positions; administers the state's performance evaluation system; ensures that employees receive needed technical, supervisory and administrative training and processes requests for out-service training. Lastly, this office ensures that employees and management are aware of the state Employee Assistance Program (EAP) and participates in annual EAP awareness activities; coordinates employee activities such as blood drives, employee service awards, savings bond drives, state employee charity fund drives and various other activities.

### **Office of Information Technology**

This office is responsible for all information systems support, hardware, software, and web development for the Department including operational services, mainframe and server platforms and client server administration, application development and technical services including hardware and software installation, web development and design, database administration and maintenance of all systems, all health information systems security, and IT system front-end business need for the development of mainframe, mid-range and PC computer systems.

### **Office of Internal Audit**

The mission of the office is to work in partnership with the Bureaus and Divisions to independently appraise their efforts so management will have information to assure individual objectives are met and the vision and mission of the Department are achieved in an efficient and effective manner. The office also provides an avenue for reporting fraud, waste, and abuse of government funds and property within the Department.

The office is responsible for providing information and support to management through internal reviews, investigations, special projects and audits. It is also responsible for monitoring grants provided to “subrecipients” in accordance with Finance and Administration Policy 22.

### **Office of Minority Health**

The Office of Minority Health (OMH), established in 1994 by the Commissioner of the Tennessee Department of Health, was codified by the State Legislature. OMH continues to serve as a central point for the Department on minority health issues and health disparities. The Office provides technical assistance and consultation, promoting the collaboration and coordination of other divisions within the Department and other State Departments, community agencies and organizations to address health concerns of minorities.

The mission of OMH is to promote improved health status of minority citizens of the state. OMH advocates the development of policies, programs and services that appropriately respond to the cultural and ethnic needs of minority Tennesseans.

### **Office of Policy, Planning, and Assessment**

This office provides health statistics and information services to support the Department of Health’s efforts to promote and protect the health of Tennesseans. The traditional Public Health functions of Vital Records are blended with the functions of the Divisions of Health Statistics and of Research and the Office of Cancer Surveillance. Policy, Planning and Assessment maintains databases for the Joint Annual Reports of licensed health care facilities, the Tennessee Cancer Registry, the Birth Defects Registry, vital statistics, hospital claims, and other surveillance systems. The Office prepares and disseminates statistical information and responds to Departmental and public requests for specific statistical and epidemiological data and analyses and Geographic Information Systems (GIS) support.

The Office of Vital Records registers the vital events that occur in Tennessee, to maintain permanent records of the events, issues copies of the records to the public, and in collaboration with the Division of Health Statistics provides information from the records and reports for research and administrative functions. Office duties and responsibilities are stated in Tennessee Code Annotated 68-3-101 et seq., the Vital Records Act of 1977.

The Behavioral Risk Factor Surveillance System (BRFSS) is used to assess the risk of Tennesseans contracting chronic diseases as a result of negative health practices such as smoking, overeating, or lack of physical activity. All fifty states, the District of Columbia and three U.S. territories participate in this ongoing data collection effort to track health risks. BRFSS is the primary source of information on major health risks among Americans. Nationally, BRFSS is coordinated by the Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion.

Legislation establishing the Tennessee Traumatic Brain Injury (TBI) Registry was signed into law in May 1993. Data collection officially began in 1996. Information is available in aggregate form on individuals who sustained a brain injury and who stayed in the hospital for more than one day, and on individuals who died from traumatic brain injury. Patients seen in emergency rooms who were sent home the same day or whose length of stay was less than 24 hours are not included in the Traumatic Brain Injury Registry.

The Department received funding in May 2006 from the Centers for Disease Control and Prevention to establish a Tennessee Pregnancy Risk Assessment Monitoring System (PRAMS) for a period of five years. The PRAMS is a statewide population-based survey of new mothers' behaviors, attitudes and experiences before, during and shortly after pregnancy. The PRAMS will provide data to support efforts to reduce adverse birth outcomes such as prematurity, low birthweight and infant mortality.

The Tennessee Birth Defects Registry (TBDR) originated in an act of the Tennessee General Assembly, T.C.A. 68-5-506. Beginning in July 2003, the TBDR began the transition from the pilot project to providing statewide coverage, and for the first time released statewide counts of 45 major birth defects that are tracked by the National Birth Defects Prevention Network (NBDPN) and the Centers for Disease Control and Prevention (CDC).

Overall, the mission of the TBDR is to: 1) provide annual information on the incidence, prevalence, and trends in birth defects; 2) provide information on the possible association of environmental hazards and other potential causes of birth defects; 3) evaluate current birth-defects prevention initiatives, providing guidance and strategies for improving those initiatives; and 4) provide families of children with birth defects information on public services available to children with birth defects.

The Health Information Tennessee (HIT) web site is a system designed as an interactive means of disseminating public health statistics. Users of the HIT site include regional health councils, community based health organizations, researchers, and the general public. Reports based upon user queries are provided online to the user as an immediate page display and/or in Adobe Acrobat format. The data queried and displayed is in the aggregate form compiled from numerous health related data sets maintained by the Department, including births, deaths, hospitals, nursing homes and population.

The Surveillance, Epidemiology and Evaluation Section conducts epidemiological studies which are used to guide program and policy planning efforts and provides research support for the Department of Health.

The Office of Cancer Surveillance houses the Tennessee Cancer Registry (TCR) and the Tennessee Comprehensive Cancer Control Program (TCCCP). The Tennessee Cancer Reporting Act of 1983 (Tennessee Code Annotated 68-1-1001) enables the Tennessee Cancer Registry to collect information about the incidence of cancer from all health care facilities in the State that diagnose and/or treat cancer. Cancer data includes, at a minimum, patient demographics, identification of the cancer, and the extent of disease at diagnosis. Since 1997, the Tennessee Cancer Registry has received a portion of its funds from the Centers for Disease Control's National Program of Cancer Registries (NPCR) to improve completeness, quality, and timeliness of the cancer data. Each year the Tennessee Cancer Registry processes over 30,000 records that consolidate to approximately 25,000 new cases of cancer per year. The data is compiled and distributed to legislators, other government offices, health care providers and organizations, and researchers to assist in determining the State's health care needs, funding appropriations, high risk and underserved populations.

The Tennessee Comprehensive Cancer Control Program was established in FY 03-04 with CDC grant funding. This program coordinates with the Tennessee Cancer Coalition, a group of over 300 Tennesseans committed to reducing the burden of cancer.

The Records Officer for the Department of Health has responsibilities to develop and implement the Department's Records Management Operating Procedures in accordance with policies, guidelines and regulations established by the Public Records Commission and the Records Management Division of the Department of General Services for the economical and efficient management of records.

## Regional Health Offices

There are local County Health Departments in each of Tennessee's 95 counties, and many of these counties have more than one service delivery location. This is particularly true in the urban areas where many satellite locations are common.

### Counties by Health Department Region

#### EAST TENNESSEE

Anderson  
Blount  
Campbell  
Claiborne  
Cocke  
Grainger  
Hamblen  
Jefferson  
Loudon  
Monroe  
Morgan  
Roane  
Scott  
Sevier  
Union

#### NORTHEAST

Carter  
Greene  
Hancock  
Hawkins  
Johnson  
Unicoi  
Washington

#### SOUTHEAST

Bledsoe  
Bradley  
Franklin  
Grundy  
McMinn  
Marion  
Meigs  
Polk  
Rhea  
Sequatchie

#### MID-CUMBERLAND

Cheatham  
Dickson  
Houston  
Humphreys  
Montgomery  
Robertson  
Rutherford  
Stewart  
Sumner  
Trousdale  
Williamson  
Wilson

#### SOUTH CENTRAL

Bedford  
Coffee  
Giles  
Hickman  
Lawrence  
Lewis  
Lincoln  
Marshall  
Maury  
Moore  
Perry  
Wayne

#### WEST

Benton  
Carroll  
Chester  
Crockett  
Decatur  
Dyer  
Fayette  
Gibson  
Hardeman  
Hardin  
Haywood  
Henderson  
Henry  
Lake  
Lauderdale  
McNairy  
Obion  
Tipton  
Weakley

#### UPPER CUMBERLAND

Cannon  
Clay  
Cumberland  
DeKalb  
Fentress  
Jackson  
Macon  
Overton  
Pickett  
Putnam  
Smith  
Van Buren  
Warren  
White

#### MEMPHIS/SHELBY

Shelby

#### JACKSON/MADISON

Madison

#### NASHVILLE/DAVIDSON

Davidson

#### CHATTANOOGA/HAMILTON

Hamilton

#### KNOXVILLE/KNOX

Knox

#### SULLIVAN

Sullivan

At the core of service delivery in the County Health Departments is the local Public Health Nurse whose traditional role has been greatly enhanced and expanded over the years. Others, including physicians, environmentalists, health educators, and social workers, round out the team, depending on location, need and/or available resources.

The Tennessee Department of Health has implemented a process to assist Tennessee communities and local and regional health departments in fulfilling the mission of public health. If we are to improve the conditions that affect the health of all citizens, we must begin in local communities dealing with local conditions. The needs and problems of one community may be very different from other communities, even those in close proximity.

A grassroots initiative has been implemented in Tennessee to examine communities, assess needs, and develop programs that will improve the quality of life for its citizens. Community Diagnosis, a community-based, community-owned process, is utilized to assess the health status of Tennesseans. All 95 counties in Tennessee have developed a Health Council, which is a broad-based group representative of the community in terms of geography, race, sex, age, profession and institutional factors. An initiating group identifies representatives from health care systems, government agencies, local civic organizations, industrial development organizations, small businesses, school systems, and various health professions both physical and mental, mental retardation agencies, alcohol and drug programs and consumers to serve as members of the county council.

Each Council reviews an extensive amount of data relating to their respective county as county-specific information about health status, health resources, economy, and demographics for each county is essential for understanding existing health problems in the community. The Council may utilize additional data from sources within the county, such as community groups, courts, law enforcement, and schools. In addition, several Councils have gathered additional primary data from focus groups, community forums, and public meetings.

At the conclusion of review of all data from the Community Diagnosis process, the Council identifies key health issues. The group often attempts to collect any additional available data on these issues before they prioritize according to size, seriousness, and effectiveness of intervention. A final overall ranking is then achieved and issues are targeted for intervention strategies. In addition, the County Health Councils provide local stakeholders leadership to identify statewide public health priorities critical to the mission and goals of the Tennessee Department of Health.

The community priorities and the defined appropriate interventions are summarized in a Community Diagnosis Status Report. This document serves as a building block for future assessment and planning activities.

The status reports and much of the information used in the community assessments are available for all community residents in Tennessee at <http://hit.state.tn.us/> website that has internet addresses where one may find county specific data along with a listing of health priorities as set by each of the County Health Councils.

Regional Health Offices provide supervision, direction and day-to-day administrative and fiscal support for each of the local Health Department directors and staff within their regions.

# **Health Status of Tennesseans**

## **People of Tennessee**

Some of the most widely used indicators of health status in Tennessee are infant mortality rates, premature birth rates, low birthweight rates, and coronary heart disease, cerebrovascular disease, and diabetes mellitus death rates. Inferences are made regarding the health status of certain populations from these data and conclusions may be drawn indicating that the population has a relatively good or poor health status.

To fully understand the initiatives and programs which have been developed by the Department, it is important to have an overview of the state of health of the people of Tennessee.

## **Behavioral Risk Factor Survey Data**

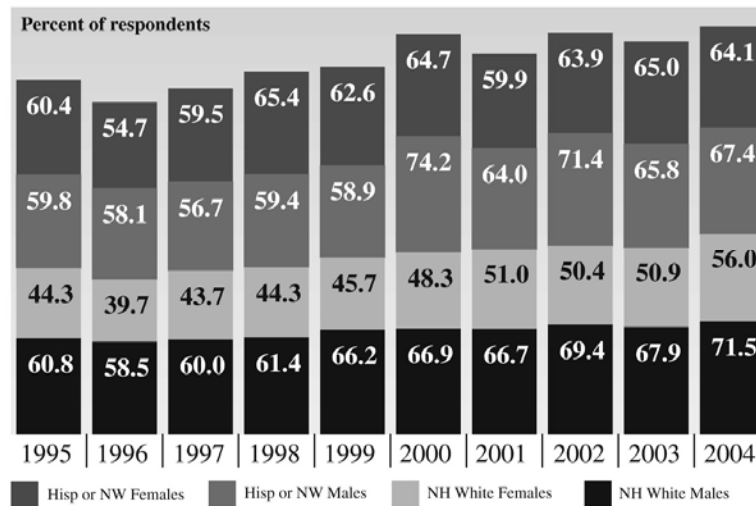
The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based computer-assisted telephone interviewing effort conducted in cooperation with the Centers for Disease Control and Prevention. Since 1984, surveys of adults from randomly selected households throughout the State have been done every month. Questions are constructed to determine the behaviors of individuals that will affect their risk of developing chronic diseases that may lead to premature mortality and morbidity. The data collected helps to identify high risk populations that can be targeted for intervention programs. The data can also be used to track changes over time of prevalence of risk factor behaviors and related diseases, and can assess the impact of health promotion and prevention intervention programs. Currently, every state in the country, the District of Columbia, and three U.S. territories are members of this surveillance system.

In 2004, Tennessee conducted 3,783 interviews. Approximately 20,550 unique telephone numbers and 76,104 call attempts to those numbers were required to complete these interviews.

Being overweight/obese is a risk factor for heart disease, cancer, stroke, and diabetes. Overweight/obese is defined as to include all respondents to weight and height questions that had a computed body mass index greater than or equal to 25.0. Responses to the BRFSS indicate the prevalence of overweight/obesity has definitely increased over the time period 1995-2004, and this increase has occurred primarily in the non-Hispanic white population. For all race and gender subgroups, the prevalence of being overweight/obese (64.1 percent of the total population in 2004) is above the Healthy People 2010 Objective of less than 40 percent overweight or obese. Tennessee's goal is to reduce the black (80.1%) – white (52.3%) difference in adult overweight or obesity prevalence from 28% in 2002 to 14% in 2010 (a 50% reduction).



**Percent of Respondents Who Reported Overweight/Obesity\*  
By Race and Gender, Tennessee, 1995-2004**

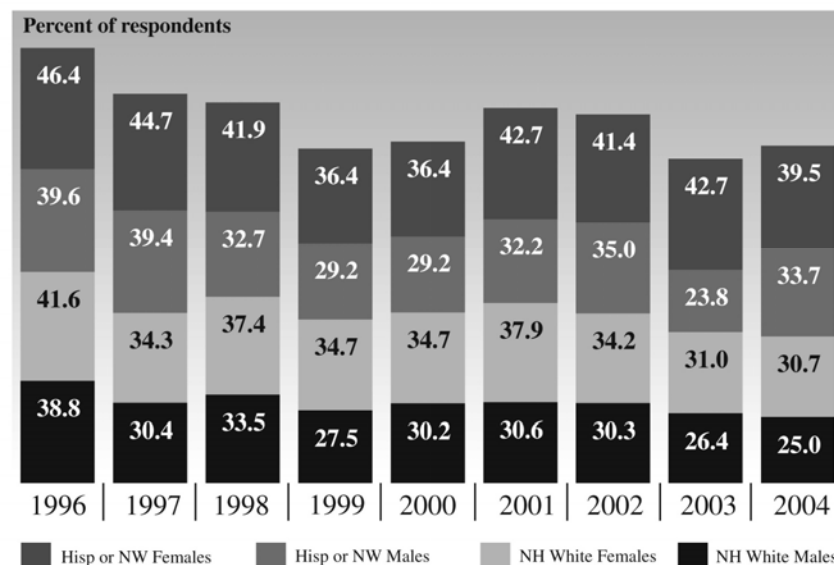


\*Includes all respondents to weight and height questions that had a computed body mass index greater than or equal to 25.0.

Source: Tennessee's Behavioral Risk Factor Surveillance System

Physical activity and fitness are good health habits for promoting a healthy life and a preventive lifestyle. Of the population surveyed from 1996-2004, females of both race/ethnicity subcategories reported a higher percentage of physical inactivity than males. Analysis of trend data showed that overall there was a downward trend in the percent of respondents who reported no leisure-time physical activity during the time period 1996-2004. It is hoped that people are becoming aware of the benefits of physical activity and fitness. The 2010 Healthy People Objective is to reduce the percent of adults who engage in no leisure-time physical activity to 20 percent. The 2004 percentage for the population in Tennessee as a whole is 29.7, which is above this objective.

**Percent of Respondents Who Reported No Physical Activity  
By Race and Gender, Tennessee, 1996-2004**



Source: Tennessee's Behavioral Risk Factor Surveillance System

## State Mortality Data

Mortality statistics are generally used as one of the significant indicators for needed changes in individual behavior, or present red flags for investigation into environmental concerns. Additionally they are used to help evaluate health care delivery systems and resources. From these data, strategies for needed interventions can be developed. Leading causes of death in Tennessee are diseases of the heart, cancer, stroke, accidents, chronic lower respiratory disease, diabetes mellitus, and Alzheimer's disease in that order. In this discussion of leading causes of death, the statistics are based solely on the underlying cause of death.

### LEADING CAUSES OF DEATH (ICD-10 CODES) BY RACE WITH RATES PER 100,000 POPULATION RESIDENT DATA, TENNESSEE, 2004

Cause	Total	Rate	White	Rate	Black	Rate
Total Deaths	55,645	943.6	47,270	983.8	8,150	820.3
1. Diseases of heart (I00-I09, I11, I13, I20-I51)	14,981	254.0	12,735	265.0	2,190	220.4
2. Malignant neoplasms (C00-C97)	12,558	212.9	10,739	223.5	1,769	178.1
3. Cerebrovascular diseases (I60-I69)	3,669	62.2	3,082	64.1	567	57.1
4. Accidents (V01-X59, Y85-Y86)	3,120	52.9	2,726	56.7	365	36.7
Motor vehicle accidents (V02-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0-V89.2)	1,372	23.3	1,193	24.8	159	16.0
5. Chronic lower respiratory diseases (J40-J47)	2,982	50.6	2,775	57.8	204	20.5
6. Diabetes mellitus (E10-E14)	1,880	31.9	1,458	30.3	417	42.0
7. Alzheimer's disease (G30)	1,612	27.3	1,459	30.4	151	15.2

Source: Tennessee Department of Health, Office of Policy, Planning and Assessment, Division of Health Statistics

### Total Deaths

During 2004, deaths to Tennessee residents numbered 55,645 a decrease of 2.8 percent from the 57,220 deaths in 2003. The 2004 crude death rate of 943.6 per 100,000 population decreased 3.7 percent from the rate of 979.8 in 2003. In 2004, the 47,270 deaths among the white race showed a decrease of 2.6 percent from the 48,516 deaths in 2003, while the 8,150 deaths among blacks decreased 4.2 percent from the 8,503 deaths during 2003. For the white race in 2004, the death rate of 983.8 per 100,000 white population decreased 3.4 percent from the rate of 1018.2 for the preceding year. The 2004 death rate of 820.3 per 100,000 population for blacks decreased 5.3 percent from the rate of 866.4 in 2003.

### Diseases of Heart

Diseases of heart, the leading cause of death in the state during 2004, accounted for 14,981 deaths, corresponding to a crude death rate of 254.0 per 100,000 population. Deaths due to this cause in 2004 showed a decrease of 5.7 percent from the 15,891 deaths in 2003, while the rate decreased by 6.7 percent from the 2003 rate of 272.1. Among the white population, deaths from this cause numbered 12,735 with a rate of 265.0; among the black population, there were 2,190 deaths with a rate of 220.4. The death rate for the white population

decreased 5.7 percent from 281.1 in 2003. The rate for the black population also showed a decrease of 12.1 percent from the 2003 rate of 250.8 per 100,000 population.

### **Malignant Neoplasms**

Malignant neoplasms (cancer) of all types claimed the lives of 12,558 Tennesseans in 2004. Cancer was responsible for 22.6 percent of all deaths in the state in 2004, and was the second leading cause of death. The crude rate for cancer in Tennessee was 212.9 deaths per 100,000 population. The number of deaths in 2004 reflected a decrease of 0.3 percent from the 12,595 deaths in 2003, while the death rate decreased 1.3 percent from the rate of 215.7 during the preceding year. The white population experienced 10,739 deaths from this cause, corresponding to a rate of 223.5, while deaths of black persons numbered 1,769 with a rate of 178.1. Comparable death rates for the white population and the black population in 2003 were 225.9 and 182.1, respectively; thus, the death rate for whites decreased 1.1 percent from 2003 to 2004, while the rate for blacks decreased 2.2 percent.

### **Cerebrovascular Disease**

In 2004, deaths from cerebrovascular diseases (stroke), the third leading cause of death, numbered 3,669, corresponding to a crude death rate of 62.2 per 100,000 population. Among the white population, deaths from this cause numbered 3,082 with a crude death rate of 64.1; among the black population, there were 567 deaths with a rate of 57.1. The death rate for the white population decreased 6.8 percent, while the rate for the black population also showed a decrease of 3.9 percent from the comparable rate in 2003.

### **Accidents**

Accidents including motor vehicle accidents, the fourth leading cause of death, resulted in the deaths of 3,120 Tennessee residents during 2004, corresponding to a crude death rate of 52.9 per 100,000 population. The number of deaths showed an increase of 4.3 percent over the 2,990 deaths in 2003, while the rate increased 3.3 percent over the rate of 51.2 for the preceding year. Among the white population, deaths from this cause numbered 2,726 with a rate of 56.7. Among the black population, there were 365 deaths with a rate of 36.7. The death rate for the white population increased 2.2 percent from 55.5 in 2003. The rate for the black population also showed an increase of 13.6 percent over the 2003 rate of 32.3 per 100,000 population.

There were 1,372 deaths of Tennessee residents due to motor vehicle accidents or 23.3 per 100,000 population. The number of deaths was 5.7 percent greater than the number of 1,298 in 2003. In 2004, of the 1,372 deaths, 1,193 were white and 159 were black. The death rate of 24.8 for the white population increased 4.2 percent from 23.8 in 2003. The rate of 16.0 for the black population was 7.4 percent higher than the rate of 14.9 for 2003.

### **Chronic Lower Respiratory Diseases**

Chronic lower respiratory diseases, which ranked as the fifth leading cause of death in 2004, accounted for 2,982 deaths, giving a crude death rate of 50.6 per 100,000 population. The rate in 2004 was 3.6 percent lower than the rate of 52.5 for this group of causes in 2003. There were 2,775 white deaths and 204 black deaths in 2004. The white rate of 57.8 was 3.3 percent lower than the rate of 59.8 in 2003. The black rate of 20.5 was 5.1 percent lower than the 2003 rate of 21.6 per 100,000 population.

### **Diabetes Mellitus**

In 2004, there were 1,880 deaths of Tennessee residents with diabetes mellitus designated as the underlying cause of death. Diabetes mellitus was the sixth leading cause of death, with a crude death rate of 31.9 per 100,000 population. The number of deaths increased 1.4 percent over the number of 1,854 for 2003, while the rate increased 0.6 percent over the rate of 31.7. In 2004, of the 1,880 deaths, 1,458 were white and 417 were black. The death rate of 30.3 for the white population was 0.3 percent lower than the 2003 rate of 30.4. The black rate of 42.0 was 2.7 percent higher than the rate of 40.9 in 2003.

### **Alzheimer's Disease**

There were 1,612 deaths from Alzheimer's disease in 2004, corresponding to a crude death rate of 27.3 per 100,000 population. In 2004, Alzheimer's disease was the seventh leading cause of death. The 2004 death rate for this cause showed an increase of 8.8 percent over the rate of 25.1 in 2003. This cause accounted for 1,459 deaths in the white population, while 151 deaths were reported in the black population. The white rate of 30.4 was 8.2 percent higher than the rate of 28.1 in 2003. The black rate of 15.2 was 21.6 percent higher than the 2003 rate of 12.5 per 100,000 population.

The following chart depicts the leading causes of death in Tennessee. They are grouped by age categories for each cause. Additional data may be found online at the Division of Health Statistics website:

<http://www2.state.tn.us/health/statistics/index/html>

### LEADING CAUSES OF DEATH BY AGE GROUPS

Age Group	United States 2002*	Tennessee 2004
Younger Than 1 Year	<ul style="list-style-type: none"> <li>Congenital Malformations, Deformations and Chromosomal Abnormalities</li> <li>Disorders Related to Short Gestation and Low Birthweight, not Elsewhere Classified</li> <li>Sudden Infant Death Syndrome</li> <li>Newborn Affected by Maternal Complications of Pregnancy</li> <li>Newborn Affected by Complications of Placenta, Cord and Membranes</li> </ul>	<ul style="list-style-type: none"> <li>Disorders Related to Short Gestation and Low Birthweight, not Elsewhere Classified</li> <li>Congenital Malformations, Deformations and Chromosomal Abnormalities</li> <li>Sudden Infant Death Syndrome</li> <li>Accidents (unintentional injuries)</li> <li>Newborn Affected by Maternal Complications of Pregnancy</li> </ul>
1-4 Years	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Congenital Malformations, Deformations and Chromosomal Abnormalities</li> <li>Assault (Homicide)</li> <li>Malignant Neoplasms</li> <li>Diseases of Heart</li> </ul>	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Malignant Neoplasms</li> <li>Diseases of Heart</li> <li>Congenital Malformations, Deformations and Chromosomal Abnormalities</li> <li>Assault (Homicide)</li> </ul>
5-14 Years	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Malignant Neoplasms</li> <li>Congenital Malformations, Deformations and Chromosomal Abnormalities</li> <li>Assault (Homicide)</li> <li>Intentional Self-Harm (Suicide)</li> </ul>	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Malignant Neoplasms</li> <li>Congenital Malformations, Deformations and Chromosomal Abnormalities</li> <li>Assault (Homicide)</li> <li>Chronic Lower Respiratory Diseases</li> </ul>
15-24 Years	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Assault (Homicide)</li> <li>Intentional Self-Harm (Suicide)</li> <li>Malignant Neoplasms</li> <li>Diseases of Heart</li> </ul>	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Assault (Homicide)</li> <li>Intentional Self-Harm (Suicide)</li> <li>Diseases of Heart</li> <li>Malignant Neoplasms</li> </ul>
25-44 Years	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Malignant Neoplasms</li> <li>Diseases of Heart</li> <li>Intentional Self-Harm (Suicide)</li> <li>Assault (Homicide)</li> </ul>	<ul style="list-style-type: none"> <li>Accidents (unintentional injuries)</li> <li>Diseases of Heart</li> <li>Malignant Neoplasms</li> <li>Intentional Self-Harm (Suicide)</li> <li>Assault (Homicide)</li> </ul>
45-64 Years	<ul style="list-style-type: none"> <li>Malignant Neoplasms</li> <li>Diseases of Heart</li> <li>Accidents (unintentional injuries)</li> <li>Cerebrovascular Diseases</li> <li>Diabetes Mellitus</li> </ul>	<ul style="list-style-type: none"> <li>Malignant Neoplasms</li> <li>Diseases of Heart</li> <li>Accidents (unintentional injuries)</li> <li>Chronic Lower Respiratory Diseases</li> <li>Diabetes Mellitus</li> </ul>
65 Years and Older	<ul style="list-style-type: none"> <li>Diseases of Heart</li> <li>Malignant Neoplasms</li> <li>Chronic Lower Respiratory Diseases</li> <li>Influenza and Pneumonia</li> <li>Alzheimer's Disease</li> </ul>	<ul style="list-style-type: none"> <li>Diseases of Heart</li> <li>Malignant Neoplasms</li> <li>Cerebrovascular Diseases</li> <li>Chronic Lower Respiratory Diseases</li> <li>Alzheimer's Disease</li> </ul>

\*Latest year for which data are available.

Source: Tennessee Department of Health, Office of Policy, Planning and Assessment, Division of Health Statistics

Years of potential life lost can be reduced by improving the health status of all Tennesseans.

**YEARS OF POTENTIAL LIFE LOST PRIOR TO AGE 75 YEARS,  
BY RACE, SELECTED CAUSES OF DEATH  
TENNESSEE RESIDENT DATA,  
2004**

Cause	Total	White	Black
All Causes	536,225	410,442	121,111
Malignant Neoplasms	109,461	88,816	20,082
Diseases of Heart	94,603	72,693	21,291
Accidents And Adverse Effects	87,486	74,680	11,676
Certain Perinatal Conditions	24,742	13,201	11,019
Suicide	23,430	21,406	2,127
Assault (Homicide)	16,696	7,804	8,642
Chronic Lower Respiratory Diseases	15,832	13,964	1,853
Cerebrovascular Disease	14,965	10,254	4,338
Diabetes Mellitus	14,715	10,498	4,196
Congenital Anomalies	12,232	8,755	3,254

Source: Tennessee Department of Health, Office of Policy, Planning and Assessment, Division of Health Statistics.

## Healthy People 2010 Goal Comparison and Health Status of Tennesseans

The Department's current areas of focus come from the needs of and risk to the population as a whole.

### Infant Mortality

For the year 2002, the state's infant mortality rate was twice the recommended rate put forth by the Healthy People 2010 Objective 16-1c of 4.5 infant deaths per 1,000 live births. The 2002 infant mortality rate experienced by resident black infants of 18.4 infant deaths per 1,000 live births was more than two and a half times the rate for resident white infants of 7.1 infant deaths per 1,000 live births.

Based upon data for 2004, the total infant mortality rate was 8.6 infant deaths per 1,000 live births. The infant mortality rate experienced by resident black infants of 17.4 infant deaths per 1,000 live births was over twice the rate for resident white infants of 6.4 infant deaths per 1,000 live births in the state. Tennessee's goal for 2010 is to reduce the total infant mortality rate to 7.0 per 1,000 live births, and reduce the difference in the rates of black and white infant deaths to 5.6.

### Prenatal Care

Healthy People 2010 Objective 16-6a recommends that the percent of mothers beginning care in first trimester of pregnancy should be 90 percent or greater. Tennessee natality data for the year 2002 indicate that the percent of mothers beginning care in first trimester of pregnancy was 80.4 percent of the resident births for that period. The percent of white mothers beginning care in first trimester of pregnancy was 83.7 percent; the percent of black mothers beginning

care in first trimester of pregnancy for the same period was 69.3 percent.

Nationally recommended changes to the birth certificate were implemented in Tennessee on January 1, 2004. The collection of prenatal care information changed significantly, thus prenatal care statistics for 2004 are not comparable to those of earlier years. Tennessee natality data for the year 2004 indicate that the percent of mothers beginning care in first trimester of pregnancy was 70.6 percent of the resident births for that period. The percent of black mothers beginning care in first trimester of pregnancy was 54.8 percent; the percent of white mothers beginning care in first trimester of pregnancy for the year 2004 was 74.2 percent. Tennessee's goal for 2010 is to increase the proportion of mothers beginning care in the first trimester to 90 percent, and reduce the difference in the proportion of black and white first trimester prenatal care initiation to 7.0 percent.

Healthy People 2010 Objective 16-6b recommends that the percent of mothers receiving adequate care should be 90 percent or greater. (Or equivalently the percent receiving inadequate or no care should be less than 10 percent.) Tennessee natality data for the year 2002 indicate that mothers received inadequate or no care in 8.3 percent of the resident births for that year. The percent of black mothers receiving inadequate or no care was 14.8 percent; slightly over twice the percent of 6.5 for white mothers receiving inadequate or no care in that time period.

Tennessee natality data for the year 2004 indicates that mothers received inadequate or no care in 9.1 percent of the resident births for that year. The percent of black mothers receiving inadequate or no care was 16.8 percent; slightly over twice the percent of 7.3 for white mothers receiving inadequate or no care in that time period. Tennessee's goal for 2010 is to decrease the proportion of mothers with inadequate or no care to 10 percent, and reduce the difference in the proportion of black and white mothers with no or inadequate prenatal care to 5.3 percent. In 2004, Tennessee exceeded the 2010 goal for total births, but the difference in the proportion of black and white with no or inadequate prenatal care was higher than the 2010 objective.

### **Low Birthweight**

Healthy People 2010 Objective 16-10 recommends that the percent of low birthweight births (less than 2,500 grams or 5 pounds, 8 ounces) should be less than 5.0 percent. Tennessee natality data for the year 2002 indicate that the percent of low birthweight resident births was 9.2 percent. The percent of low birthweight births for resident black mothers in the year was 14.6 percent, 1.9 times as high as the equivalent percent of 7.7 for white mothers in the time period.

Tennessee natality data for the year 2004 indicate that the percent of low birthweight resident births was 9.4 percent. The percent of low birthweight births for resident black mothers in the year was 14.5 percent, 1.8 times as high as the equivalent percent of 8.2 for white mothers in the time period.

## **Adolescent Pregnancy**

Healthy People 2010 Objective 9-7 recommends that the adolescent pregnancy rate for females aged 15-17 be reduced to less than 43 pregnancies per 1,000 females in that age cohort. The Tennessee adolescent pregnancy rate for females 15-17 for the year 2002 was 35.6 pregnancies per 1,000 females which is less than the Healthy People 2010 Objective. However, in the year 2002, the black adolescent pregnancy rate for females aged 15-17 was 63.6, 2.3 times as high as the equivalent rate for white females of 28.2.

The Tennessee adolescent pregnancy rate for females 15-17 for the year 2004 was 33.3 pregnancies per 1,000 females which is less than the Healthy People 2010 Objective. Yet, in the year 2004, the black adolescent pregnancy rate for females aged 15-17 was 59.4, still 2.3 times as high as the equivalent rate for white females of 26.2. Tennessee's goal for 2010 is to reduce the adolescent pregnancy rate for females 15-17 to 16.2 per 1,000 females, and reduce the difference in black and white pregnancies to 17.7 per 1,000 for females age 15-17.

## **Diabetes Mellitus**

In 2002, Tennessee was ranked 9th as having the highest age-adjusted mortality rate for diabetes mellitus among states in the nation. Healthy People 2010 Objective 5-5 recommends that the age-adjusted mortality rate for diabetes mellitus related deaths be reduced to less than 45 deaths per 100,000 population. For the year 2002, the age-adjusted mortality rate for diabetes mellitus related deaths in Tennessee was 88.2 deaths per 100,000 population. For the black population the age-adjusted rate for 2002 was 158.2 deaths per 100,000, nearly twice that of the age-adjusted mortality rate for the white population of 79.5 per 100,000 population for diabetes mellitus for the same time period.

For the year 2004, the age-adjusted mortality rate for diabetes mellitus related deaths in Tennessee was 87.9 deaths per 100,000 population. For the black population the age-adjusted rate for the year 2004 was 148.1 deaths per 100,000, 1.8 times that of the age-adjusted mortality rate for the white population of 80.5 per 100,000 population for diabetes mellitus for the same time period.

Note: The diabetes related measure used in the Healthy People 2010 objective differs from the one usually presented in group cause mortality data. It includes not only deaths where diabetes mellitus was determined to be the underlying cause, but also includes all deaths where diabetes mellitus was indicated as one of the multiple or contributing causes on the death certificate. Hence, this measure will be much greater than and should not be confused with traditional diabetes mellitus underlying cause of death.

## **Heart Disease**

In 2002, Tennessee was ranked 7th as having the highest age-adjusted mortality rate for diseases of heart among states in the nation with an age-adjusted rate of 284.7. Healthy People 2010 Objective 5-5 recommends that the age-adjusted mortality rate for coronary heart disease be reduced to less than 166 deaths per 100,000 population. Coronary heart disease is a subset of the group diseases of heart. For the year 2002, the age-adjusted mortality rate for coronary heart disease in Tennessee was 230.8 deaths per 100,000 population.



For 2002, the age-adjusted mortality rate for coronary heart disease for the black population in Tennessee was 288.7 per 100,000 population, nearly a third higher than that of the age-adjusted mortality rate of the white population of 223.9 per 100,000 population for the same time period.

For the year 2004, the age-adjusted mortality rate for coronary heart disease in Tennessee was 202.2 deaths per 100,000 population. For 2004, the age-adjusted mortality rate for coronary heart disease for the black population in Tennessee was 253.2 per 100,000 population, nearly a third higher than that of the age-adjusted mortality rate of the white population of 196.2 per 100,000 population for the same time period.

### **Cerebrovascular Diseases**

In 2002, Tennessee was ranked third as having the highest age-adjusted mortality rate for cerebrovascular diseases among states in the nation with an age-adjusted rate of 70.8. Healthy People 2010 Objective 12-7 recommends that the age-adjusted mortality rate for cerebrovascular diseases be reduced to less than 48 deaths per 100,000 population. For 2002, the age-adjusted mortality rate for cerebrovascular diseases for the black population in Tennessee was 98.8 per 100,000 population, 1.5 times as high as that of the age-adjusted rate of the white population of 67.1 per 100,000 population for the same time period.

For the year 2004, the age-adjusted mortality rate for cerebrovascular diseases in Tennessee was 63.1 deaths per 100,000 population. For 2004, the age-adjusted mortality rate for cerebrovascular diseases for the black population in Tennessee was 86.0 per 100,000 population, 1.4 times as high as that of the age-adjusted rate of the white population of 60.1 per 100,000 population for the same time period.

## ***Better Health: It's About Time!***

While Tennesseans have numerous health needs, specific priority areas which can have the most positive impact on the future health of Tennesseans have been identified by the Department of Health using local and regional assessments, community planning activities, and national goals.

The Department has chosen to give special emphasis to these health problems in the *Better Health: It's About Time!* initiative.

*Tennessee's Better Health: It's About Time!* initiative focuses on the importance of a healthy lifestyle, encourages individuals to take personal responsibility for their health and wellness, and provides information on the importance of giving newborn babies a better start to life<sup>5</sup>.

*Better Health: It's About Time!* means that it's time to improve the health status of the state and eliminate health disparities for all Tennesseans. Healthy lifestyle choices, including regular exercise, a nutritious diet, giving up tobacco use, and getting preventive health care, can help to achieve the goal of a longer and healthier life. Factors affecting the health of newborn babies include maternal care, and chronic illnesses of mothers such as diabetes and hypertension.

*It's About Time* all Tennesseans worked together to improve their health. Eliminating health disparities will require both individual and collective action. Despite improvements in the overall health of the state's population, racial and ethnic minorities are more likely than whites to have poor health and premature death. Racial and ethnic populations in Tennessee consist primarily of African Americans, American Indians, Hispanics, and Asian/Pacific Islanders. These minority population groups often experience poor health due to unhealthy lifestyles, limited prevention measures, and inadequate access to health care.

Challenging individuals to make healthier food choices, increase physical activity, and lose extra pounds, can make a positive long term health difference. Raising awareness about the importance of a healthy **LifeStart** and **LifeStyle** is a beginning in the challenge to "*Better Health*" for all Tennesseans. **LifeStart** and **LifeStyle** target areas are listed below.

### **LifeStart**

- Adolescent Pregnancy
- Infant Mortality
- Low Birthweight
- Inadequate Prenatal Care
- First Trimester Care

### **LifeStyle**

- Heart Disease
- Cerebrovascular Disease
- Diabetes Mellitus
- Obesity

State, regional and local collaborations are needed for the initiative to be effective and sustaining. At the state level, the Department has established significant collaborations with:

- The faith community; through the health education of clergypersons, the formal creation and training of interfaith-health partnerships, and the development of contracts with faith-based intermediaries
- Statewide community-based organizations, business entities and health-related agencies
- Pivotal, local stakeholders in counties with data-driven priority needs

Regions are developing regional partnership plans to enable the initiative to move forward. Each county health department has selected at least one **LifeStart** and one **LifeStyle** selective and promoted those selectives to the entire community. Selective choices have included maternal smoking cessation, safe sleep, school health, and chronic disease prevention. Each region has a focused approach on obesity. Comprehensive programs and activities focus on obesity prevention for both adults and adolescents. A large majority of community health councils chose obesity as their top priority.

Search Your Heart is a faith based initiative designed to lower a group's risk of developing heart disease and stroke. Developed by the American Heart Association, the program aims to promote risk factor reduction and awareness of the signs and symptoms of heart disease and stroke in minority communities. The program has been implemented in churches throughout the state focusing on African American congregations to address the disparities this group sees in the diagnosis and treatment of heart disease and stroke, as well as the hospitalization and death rates.

Each region has in place a worksite wellness program for Health Department employees. Although each region is unique, all programs encourage healthy lifestyle behaviors including exercise.

The Tennessee Department of Health published a data book in November, 2005 for Tennessee's *Better Health* Initiative that includes Tennessee population characteristics, **LifeStart** and **LifeStyle** data and topics, Behavioral Risk Factor Surveillance Survey data, and Healthy People 2010 goal attainment.

## Hospital Utilization Data

Tennessee's Hospital Discharge Data System gives information on inpatient discharges. The number of discharges, average charge, and average length of stay are shown for diseases of heart, cerebrovascular diseases, and diabetes mellitus. Inpatient discharges are based on hospitalizations with an ICD-9-CM code for the principal diagnosis for each of the **LifeStyle** indicators. The average charge is the base charge for the hospitalization, while the length of stay is a measurement of the time spent in the hospital. It is based on the date of admission and the date of discharge.

**HOSPITAL DISCHARGES, BY SELECTED DIAGNOSIS, BY ICD-9-CM CODE,  
BY AVERAGE CHARGE AND AVERAGE LENGTH OF STAY  
TENNESSEE, RECORDED DATA, 2004**

Principal Diagnosis	Discharges	Average Charge	Average Length of Stay
Diseases of heart (391-392.0,393-398,402,404, 410-416,420,429)	57,126	\$35,462.07	4.8
Cerebrovascular disease (430-438)	24,570	\$21,258.84	5.9
Diabetes mellitus (250)	13,030	\$14,362.55	4.7

Source: Tennessee Department of Health, Office of Policy, Planning and Assessment, Division of Health Statistics

The following sections describe the present data and goals of *the Better Health: It's About Time!* initiative. Additional information may be found on the Tennessee Department of Health website at:

<http://www.tennessee.gov/health/itsabouttime/index.htm>.

## LifeStart

### **Adolescent Pregnancy**

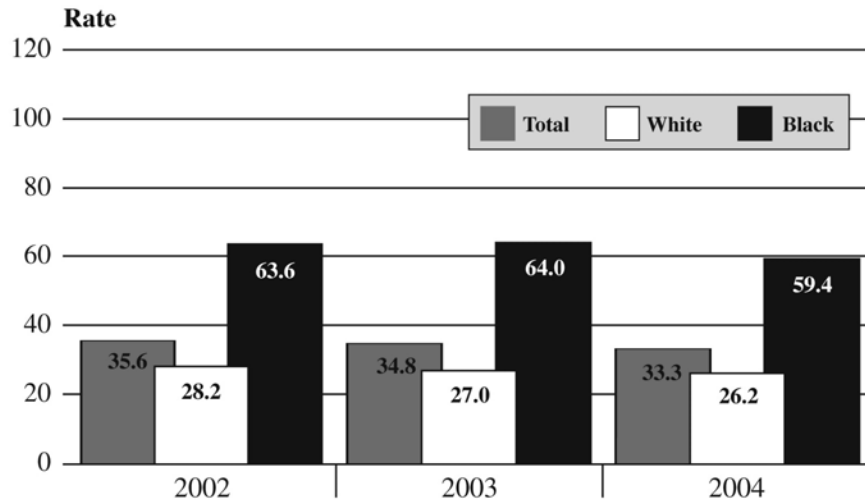
Healthy People 2010 Objective 9-7 recommends that the adolescent pregnancy rate for females aged 15-17 be reduced to less than 43 pregnancies per 1,000 females in that age cohort. In 2004, in Tennessee, the adolescent/teen pregnancy rate for females aged 15-17 was 33.3 pregnancies per 1,000 females in that age cohort. This rate is the lowest reported in recent history and is part of a long continuum of decline in this area of public health concern. The adolescent pregnancy rate for females 15-17 has not only been declining for all females in this age cohort but for both white females and black females simultaneously, although the rate for black females, 59.4 pregnancies per 1,000 females aged 15-17, remains over twice as high as the rate for white females of 26.2 pregnancies per 1,000 females. The reduction of adolescent pregnancy remains an ongoing success story in Tennessee, even though greater improvements are anticipated.

#### **Factors that contribute to adolescent pregnancy:**

- ❖ Low self esteem
- ❖ Lack of family and community support
- ❖ Lack of involvement in school and recreational activities (after-school programs)
- ❖ Use of alcohol and other drugs
- ❖ Limited knowledge about sex and sexuality
- ❖ Poverty
- ❖ Lack of positive outlook for future

**Tennessee's goal for 2010 is to reduce the pregnancy rate for the age group of 15-17 years to 16.2 per 1,000 females, and reduce the difference in the rate between black and white pregnancies for females 15-17 years of age to 17.7.**

### Adolescent Pregnancy (15-17) Rates Per 1,000 Female Population, By Race Resident Data, Tennessee, 2002-2004



Source: Division of Health Statistics

The total number of pregnancies in 2004 was 93,418 giving a rate per 1,000 females aged 15-44 of 75.0. There was little change from the number of total pregnancies of 93,530 in 2003 which also had a rate of 75.0. The total number of pregnancies for white women in 2004 was 69,011 with a pregnancy rate per 1,000 female population of 70.2 and for black women the number and rate was 21,825 and 91.9. The equivalent numbers and rates in 2003 were 68,292 and 69.3 for white women and 22,666 and 95.7 for black women.

The number of teen pregnancies for women aged 10-19 in 2004 was 12,562 giving a rate per 1,000 females in that age cohort of 31.5. This was a slight decrease from the number and rate of 12,875 and 32.6 in 2003. The rate for teenage pregnancies for black women aged 10-19 in 2004 was almost twice as high as that for the white women (47.4 and 27.1, respectively). This was also a slight decrease for each race group from the equivalent 2003 rates of 49.5 and 27.8 respectively.

Of particular public health concern is the occurrence of teen pregnancy in younger adolescent age categories. In 2004 there were 284 pregnancies to women aged 10-14 producing a pregnancy rate for that age cohort of 1.4. The number and rate in that age cohort for white women was 108 and 0.7 and for black women 169 and 3.8. The equivalent numbers and rates in 2003 were 325 and 1.6 for all races, 133 and 0.9 white women, and 183 and 4.2 for black women. Again, the number and rate in each race category for this age cohort decreased slightly in 2004 from that in 2003.

For the age cohort of women aged 15-17 the numbers and rates of pregnancies were 3,879 and 33.3 for all races, 2,357 and 26.2 for white women, and 1,464 and 59.4 for black women.

Equivalent numbers and rates for these age and race cohorts in 2003 were 4,020 and 34.8 for all races, 2,415 and 27.0 for white women, and 1,553 and 64.0 for black women. Again, the numbers and rates in each race category for this age cohort decreased slightly in 2004 from that in 2003.

Teenage pregnancy data for 2004 indicated there was a slight improvement over the data values in 2003 in the reduction of both the volume and intensity of this major public health issue. In 1990 the number of pregnancies to women aged 10-19 was 18,261 with a rate of 53.2 pregnancies per 1,000 women in that age cohort; in 2004 there were 12,562 pregnancies to women aged 10-19 with a rate of 31.5 pregnancies per 1,000 women in that age cohort. This constitutes a reduction in the number of pregnancies of 31.2 percent and a reduction in the pregnancy rate of 40.8 percent from 1990 to 2004. Thus it can be concluded that slow, but steady, progress has occurred in this area of public health concern.

## **Services to Prevent and Reduce Adolescent Pregnancy**

The Tennessee Department of Health has programs that work with communities and families to support the prevention and reduction of adolescent pregnancies.

### **Abstinence Education**

The Department's abstinence education program administers several community and school-based sites equipping youth with information on abstinence and making positive, beneficial decisions. In addition, the program offers informational brochures for parents who are interested in learning how to talk with their children about abstinence, as well as brochures for youth regarding abstinence, building resistance skills, avoiding negative peer pressure, how alcohol and other drugs affect decision making and building self-esteem.

### **Tennessee Adolescent Pregnancy Prevention Program (TAPPP)**

TAPPP has three primary goals: (1) to promote community awareness and involvement in adolescent pregnancy and parenting issues, (2) to facilitate collaboration among various sectors of the community to enhance and increase prevention efforts and (3) to coordinate, improve and expand services available to pregnant and parenting adolescents. There are eleven regional and metropolitan TAPPP coordinators for the state.

### **Teen Hotline**

The Department of Health contracts with United Neighborhood Health Services for the operation of a hotline for teenagers or others who have questions or need information about teen pregnancy, sexuality, sexually transmitted diseases, birth control, relationships and personal decision making.

### **Family Planning Program**

The Family Planning Program provides comprehensive family planning services, including medical examinations, laboratory tests, education and counseling and contraceptive supplies. These services include Pap smears, screening and treatment for sexually transmitted diseases, breast exams and screening for anemia. Services are available for any person of reproductive age in all 95

counties at 130 clinic sites through local and metropolitan health departments and private non-profit agencies. Fees for services are charged based on the income and the number in the family. No charges are made to clients at or below the federal poverty level.

**Black Health Initiative Programs**

The Office of Minority Health funds community based organizations that develop demonstration projects targeting African American and Hispanic youth ages 10 to 19 and offer structured activities focusing on education, health care, violence reduction, appropriate social development, substance abuse prevention and employment and business skills.

**Intensive Focus Prevention Programs**

The Bureau of Alcohol and Drug Abuse Services' structured intensive 8-12 session programs targeting youth up to age 18 who may be at risk for developing alcohol, tobacco, or other drug use problems. Programs are age-specific, developmentally appropriate, and culturally sensitive, and include a parent/care giver component.

## Low Birthweight

Babies that are low birthweight (less than 2,500 grams or 5 pounds, 8 ounces) are at greater risk for infant mortality. Tennessee natality data for the year 2004 indicated that the percent of low birthweight resident births was 9.4 percent. The percent of low birthweight births for resident black mothers in the year was 14.5 percent, 1.8 times as high as the equivalent percent of 8.2 for white mothers in the time period.

### Facts about low birthweight in Tennessee

- ❖ The percent of low-weight births increased from 1994-2003.
- ❖ Blacks had the highest percent of births that were low-weight for the 10 year period from 1994-2003.
- ❖ The 2003 black low birthweight percentage was almost two times the white percentage.
- ❖ Low birthweight is a primary indicator of infant survival.

### Factors that lead to low birthweight

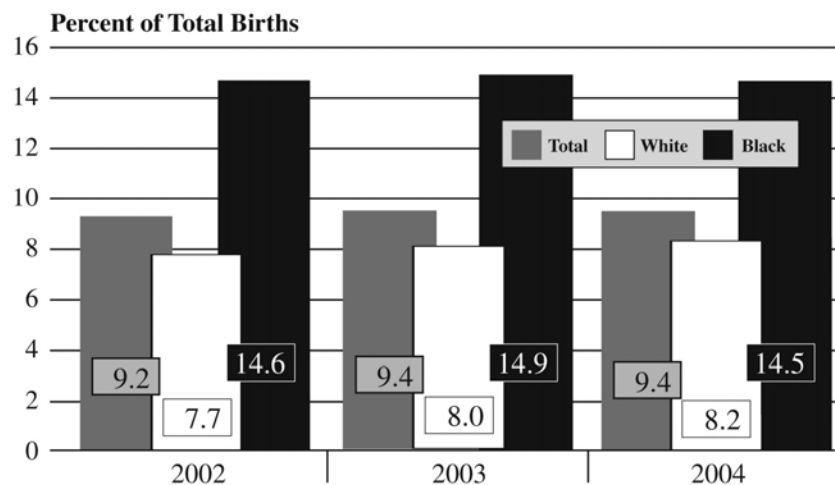
- ❖ Inadequate fetal growth
- ❖ Poor weight gain for a given duration of pregnancy
- ❖ Poor maternal nutrition

### Activities to prevent/reduce low birthweight

- ❖ Educate pregnant women about nutrition and weight gain
- ❖ Provide prenatal care for low income, at-risk pregnant women

The Healthy People goal for 2010 is to reduce the percent of births that are low birthweight (less than 2,500 grams) to 5.0 percent.

**Percent of Low-Weight Births  
By Race, Resident Data  
Tennessee, 2002-2004**



Source: Division of Health Statistics



## **Services to Prevent and Reduce Low Birthweight Infants**

The Tennessee Department of Health has programs that work with communities and families to support the prevention and reduction of low birthweight infants.

### **Prenatal Care**

All local health department clinics provide prenatal education, screening for presumptive eligibility for TennCare and Women, Infant and Children (WIC) program referrals. Women with positive pregnancy tests receive a referral to an obstetric provider in their community. Service coordination including home visiting is also available to support pregnant women throughout their pregnancy.

### **Maternal and Child Health Home Visiting Programs**

#### **Help Us Grow Successfully (HUGS)**

Help Us Grow Successfully is a home-based program across the state where staff assists pregnant women, postpartum women up to two years and infants and children up to age six in gaining access to medical, social, and educational services.

#### **Child Health and Development (CHAD)**

CHAD is a home-based program available in several counties for pregnant women and children ages birth to six years. CHAD helps prevent or reduce abuse, neglect and developmental delays by providing parental support and education services.

#### **Healthy Start**

Healthy Start is an intensive home visiting program for first time parents. Its goals are health promotion and child abuse prevention. Eligible families may begin the program during the third trimester of pregnancy through the child turning four months of age. Families may remain in the program until the child is five years of age.

#### **Women, Infants, and Children (WIC)**

Food, nutrition counseling and access to health services are provided to low-income women, infants and children under the Special Supplemental Nutrition Program for Women, Infants, and Children, popularly known as WIC. WIC provides federal funds to Tennessee to provide supplemental foods, health care referral, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women and to infants and children who are found to be at nutritional risk.

#### **Smart Moms**

WIC clinics provide smoking cessation services for pregnant women.

## Prenatal Care

Healthy People 2010 Objective 16-6a recommends that the percent of mothers beginning care in first trimester of pregnancy should be 90 percent or greater. Nationally recommended changes to the birth certificate were implemented in Tennessee on January 1, 2004. The collection of prenatal care information changed significantly, thus prenatal care statistics for 2004 are not comparable to those of earlier years. Tennessee natality data for the year 2004 indicate that the percent of mothers beginning care in first trimester of pregnancy was 70.6 percent of the resident births for that period. The percent of black mothers beginning care in first trimester of pregnancy was 54.8 percent; the percent of white mothers beginning care in first trimester of pregnancy for the year 2004 was 74.2 percent.

Healthy People 2010 Objective 16-6b recommends that the percent of mothers receiving adequate care should be 90 percent or greater. (Or equivalently the percent receiving inadequate or no care should be less than 10 percent.) Tennessee natality data for the year 2004 indicate that mothers received inadequate or no care in 9.1 percent of the resident births for that year. The percent of black mothers receiving inadequate or no care was 16.8 percent; slightly over twice the percent of 7.3 for white mothers receiving inadequate or no care in that time period.

### **Facts about prenatal care in Tennessee**

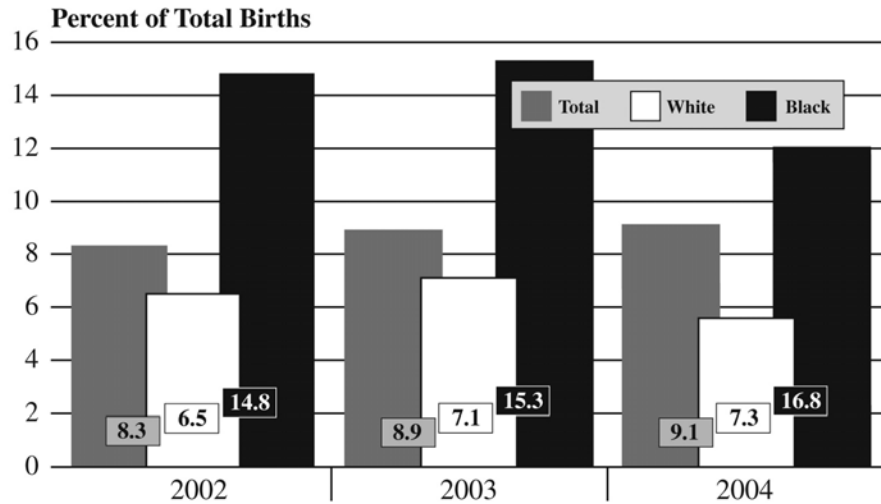
- ❖ Prenatal care consists of a series of outpatient visits to a physician as well as laboratory screening and diagnostic imaging.
- ❖ Tennessee was ranked better than most states in access to prenatal care, ranking 21st in this area in 2005 (based on 2003 data).

### **Factors contributing to inadequate prenatal care**

- ❖ Lack of medical insurance
- ❖ Lack of convenient access to care
- ❖ Delay in seeking care
- ❖ Lack of strong family support
- ❖ Teenage mother

Tennessee's 2010 goal is to reduce the difference in inadequate or no prenatal care between whites and blacks to 5.3 percent.

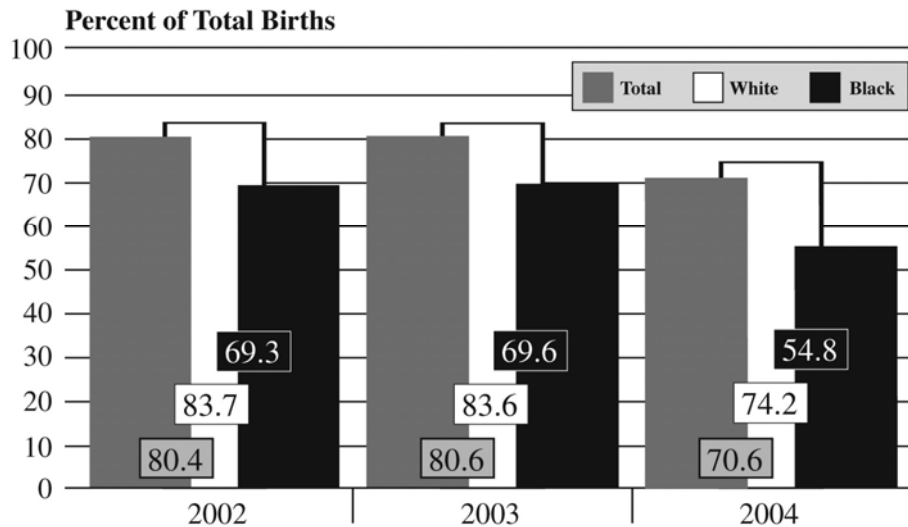
### Percent of Births With Inadequate or No Prenatal Care, By Race Resident Data, Tennessee, 2002-2004



Source: Division of Health Statistics  
Nationally recommended changes to the birth certificate were implemented in Tennessee on January 1, 2004. The collection of prenatal care information changed significantly, thus prenatal care for 2004 is not comparable to that of earlier years.

Tennessee's 2010 goal is to reduce the difference in first trimester prenatal care initiation between whites and blacks to 7.0 percent.

### Percent of Births With Prenatal Care Initiated In the First Trimester, By Race Resident Data, Tennessee, 2002-2004



Source: Division of Health Statistics  
Nationally recommended changes to the birth certificate were implemented in Tennessee on January 1, 2004. The collection of prenatal care information changed significantly, thus prenatal care for 2004 is not comparable to that of earlier years.

## **Services to Increase the Percent of Women Who Initiate Care in the First Trimester**

The Tennessee Department of Health is committed to ensuring that all expectant mothers receive adequate and timely prenatal care. Tennessee's goal is to increase the proportion of pregnant women who initiate prenatal care in the first trimester of pregnancy from 80.4% in 2002 to 90.0% in 2010. The Department has a number of services that work with communities and families to support mothers and babies having healthy outcomes.

All local health department clinics provide pregnancy testing, prenatal education, screening for presumptive eligibility for TennCare, and WIC program referrals. Women with positive pregnancy tests receive a referral to an obstetric provider in their community. Service coordination, including home visiting, is also available to support pregnant women throughout their pregnancy. Selected counties across the state provide full service obstetrical care for pregnant women.

### **Perinatal Regionalization**

The perinatal regionalization program was established to provide for the diagnosis and treatment of certain life-threatening conditions of pregnant women and newborn infants. The five regional perinatal centers across the state have made this specialized care available by providing a statewide mechanism to health care providers for consultation and referral of high risk patients; transport of these patients, if necessary; personnel skilled in high risk perinatal care; post-graduate education for physicians, nurses, and other medical personnel; and site visits to local hospitals.

### **Help Us Grow Successfully (HUGS)**

Help Us Grow Successfully (HUGS) is a home-based program where staff assists pregnant women, postpartum women for up to two years and infants and children up to age six in gaining access to medical, social, and educational services. HUGS services are available throughout the state.

## **Infant Mortality**

In Tennessee during 2004, there were 686 resident infant deaths. The infant mortality rate of 8.6 per 1,000 live births decreased 6.5 percent from the rate of 9.2 in 2003. White infant deaths decreased from 424 deaths in 2003 to 396 deaths in 2004, while black infant deaths decreased from 291 deaths in 2003 to 274 deaths in 2004. The corresponding infant mortality rates in 2004 were 6.4 for whites and 17.4 for blacks, while the 2003 rates were respectively 7.0 and 18.0. The 2004 black infant death rate was 2.7 times the white rate. In 2004, there were 398 male infant deaths and 288 female infant deaths.

### **Facts about Infant Mortality in Tennessee**

- ❖ Based on 2004 data, Tennessee's infant mortality rate was ranked 48th in the nation.<sup>6</sup>

- ❖ The 2004 Tennessee infant mortality rate for black babies (17.4 deaths per 1,000 live births) was 2.7 times the rate for white babies (6.4 per 1,000 live births).
- ❖ Both black and white babies whose mothers are Tennessee residents have a greater chance of dying in the first year of life than their counterparts in other Region IV states.

**Factors that lead to increased infant mortality**

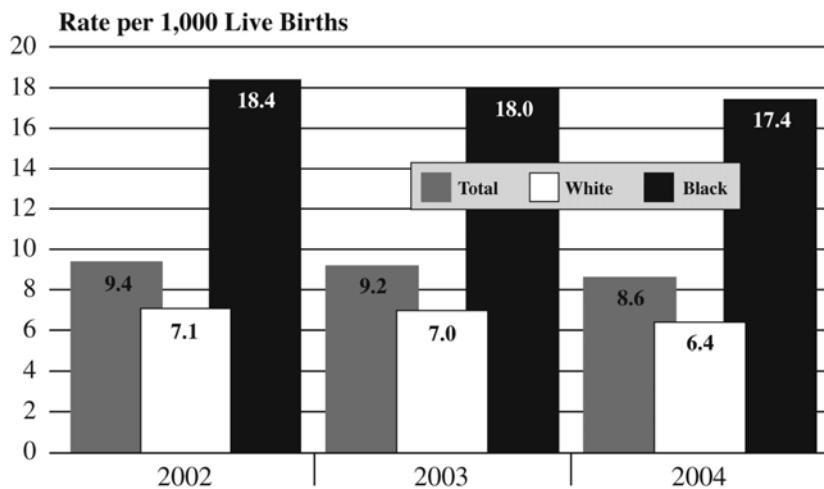
- ❖ Teenage pregnancy
- ❖ Use of alcohol, tobacco and other drugs
- ❖ Mothers with less than a high school education
- ❖ Maternal infections during pregnancy
- ❖ Pre-term deliveries
- ❖ Low-birth weight babies
- ❖ Poverty

**Activities to prevent/reduce infant mortality**

- ❖ Early and regular prenatal care
- ❖ Planned pregnancies
- ❖ Strong, positive family support
- ❖ Regular exercise
- ❖ Avoidance of alcohol and drugs
- ❖ Placing babies on their backs to sleep

**Tennessee’s goal for 2010 is to reduce the infant mortality rate to 7.0 and reduce the difference in the infant mortality rate between black and white to 5.6.**

**Infant Death Rates Per 1,000 Live Births  
By Race, Resident Data, Tennessee, 2002-2004**



Source: Tennessee Department of Health, Office of Policy, Planning and Assessment, Division of Health Statistics

## **Services to Prevent and Reduce Infant Mortality**

The Tennessee Department of Health has programs that work with communities and families to support the prevention and reduction of infant mortality.

### **Early Periodic Screening Diagnosis and Treatment (EPSDT)**

Local Health Departments in all 95 counties provide well-child EPSDT exams for infants from birth to age 21. These exams provide an important opportunity to identify health problems early, assure that children are properly immunized and provide parents with information on infant growth, development and care.

### **Healthy Start**

Healthy Start is an intensive home visiting program for first time parents. Its goals are health promotion and child abuse prevention. Eligible families may begin the program during the third trimester of pregnancy through the child turning four months of age. Families may remain in the program until the child is five years of age.

### **Genetics and Newborn Screening**

The Genetics and Newborn Screening program provides access to genetic screening, diagnostic testing, and counseling services for individuals and families who have or are at risk for genetic disorders. The newborn screening program screens all babies born in Tennessee for certain genetic conditions and then refers those identified for further diagnosis and treatment. Most babies born in Tennessee can receive hearing screening shortly after birth.

### **Women, Infants, and Children (WIC)**

Food, nutrition counseling and access to health services are provided to low-income women, infants and children under the Special Supplemental Nutrition Program for Women, Infants, and Children, popularly known as WIC. WIC provides federal funds to Tennessee to provide supplemental foods, health care referral, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women and to infants and children who are found to be at nutritional risk.

### **Help Us Grow Successfully (HUGS)**

Help Us Grow Successfully (HUGS) is a home-based program where staff assists pregnant women and postpartum women for up to two years and infants and children up to age six in gaining access to medical, social, and educational services. HUGS services are available throughout the state.

### **Child Health and Development (CHAD)**

CHAD is a home-based program available in several counties for pregnant women and children ages birth to six years. CHAD helps prevent or reduce abuse, neglect and developmental delays by providing parent support and education services.

The *Baby Line* is a toll-free telephone service available to answer questions and provide information about services available to help parents care for their babies.

## LifeStyle

### Inpatient Hospitalization

Tennessee's 2002 inpatient hospitalization age-adjusted rate for heart disease was 1,191 per 100,000 population. This rate decreased to 1,165 per 100,000 population in 2004. Tennessee's goal is to reduce the statewide heart disease age-adjusted inpatient hospitalization rate from 1,165 per 100,000 in 2004 to 970 per 100,000 in 2010. The goal also includes reducing the black (1,260/100,000) – white (1,097/100,000) difference in the heart disease age-adjusted inpatient hospitalization rate from 163/100,000 in 2004 to 138/100,000 in 2010.

The 2002 age-adjusted inpatient hospitalization rate for cerebrovascular diseases (stroke) was 347 per 100,000 population. This rate decreased to 320 in 2004. Tennessee's goal is to reduce the statewide cerebrovascular disease age-adjusted inpatient hospitalization rate from 320 per 100,000 in 2004 to 299 per 100,000 in 2010. The goal also includes reducing the black (416/100,000) – white (293/100,000) difference in the cerebrovascular disease age-adjusted inpatient hospitalization rate from 123/100,000 in 2004 to 82/100,000 in 2010.

In 2002, Tennessee's inpatient hospitalization age-adjusted rate for diabetes mellitus was 149 per 100,000 population. This rate increased to 153 in 2004. Tennessee's goal is to reduce the statewide diabetes mellitus age-adjusted inpatient hospitalization rate from 153 per 100,000 in 2004 to 107 per 100,000 in 2010. The goal also includes reducing the black (339/100,000) – white (119/100,000) difference in the diabetes mellitus age-adjusted inpatient hospitalization rate from 220/100,000 in 2004 to 105/100,000 in 2010.

**INPATIENT HOSPITALIZATION AGE-ADJUSTED RATES, PER 100,000 POPULATION  
FOR DIABETES MELLITUS, HEART DISEASE, AND CEREBROVASCULAR DISEASE (STROKE)  
TENNESSEE, 2002-2004 AND 2010 GOALS**

Disease		2002 (Baseline)	2003	2004	2010 Goals
<b>Diabetes Mellitus</b>	Total	149	151	153	107
	Black	328	339	339	--*
	White	117	119	119	--
	Black-White Difference	211	220	220	105
<hr/>					
<b>Heart Disease</b>	Total	1,191	1,188	1,165	970
	Black	1,375	1,414	1,260	--
	White	1,097	1,127	1,097	--
	Black-White Difference	278	287	163	138
<hr/>					
<b>Stroke</b>	Total	347	335	320	299
	Black	476	473	416	--
	White	311	309	293	--
	Black-White Difference	165	164	123	82

\*--No 2010 goals were set for these groups.

## **Heart Disease and Cerebrovascular Disease**

For the year 2004, the age-adjusted mortality rate for heart disease in Tennessee was 253.9 deaths per 100,000 population. The 2004 heart disease age-adjusted mortality rate for the black population was 322.1 per 100,000 population; 1.3 times that of the age-adjusted mortality rate for the white population of 245.5 for the same time period.

In 2004, the age-adjusted mortality rate for cerebrovascular disease in Tennessee was 63.1 deaths per 100,000 population. For 2004, Tennessee's black age-adjusted mortality rate for cerebrovascular disease was 86.0 per 100,000 population; 1.4 times as high as that of the age-adjusted rate for the white population of 60.1 per 100,000 population.

### **Factors that contribute to heart disease and stroke**

- ❖ Untreated hypertension (high blood pressure)
- ❖ Overweight and obesity
- ❖ High cholesterol
- ❖ Lack of regular physical activity (exercise)
- ❖ Diets high in fat
- ❖ Tobacco smoking increases the risk for cardiovascular disease two to four times.

### **Suggestions to prevent and control heart disease and stroke**

- ❖ Eat a low salt, low fat diet. Avoid saturated (animal) fats
- ❖ Seek regular, quality medical care
- ❖ Increase physical activity (exercise)
- ❖ Avoid tobacco use
- ❖ Manage stress

## **Services to Prevent and Reduce Heart Disease and Stroke**

The Tennessee Department of Health has programs that work with communities and families to support the prevention and reduction of heart disease and stroke.

### **Governor's Council on Physical Fitness and Health**

The Governor's Council on Physical Fitness and Health was created in order to address the health and fitness needs of all Tennesseans and to promote healthy lifestyles for the state's citizens. The Council is also charged by the Governor to serve as a clearinghouse for information on health and physical fitness programs and make recommendations for such legislation as may be necessary and appropriate to further their goals.

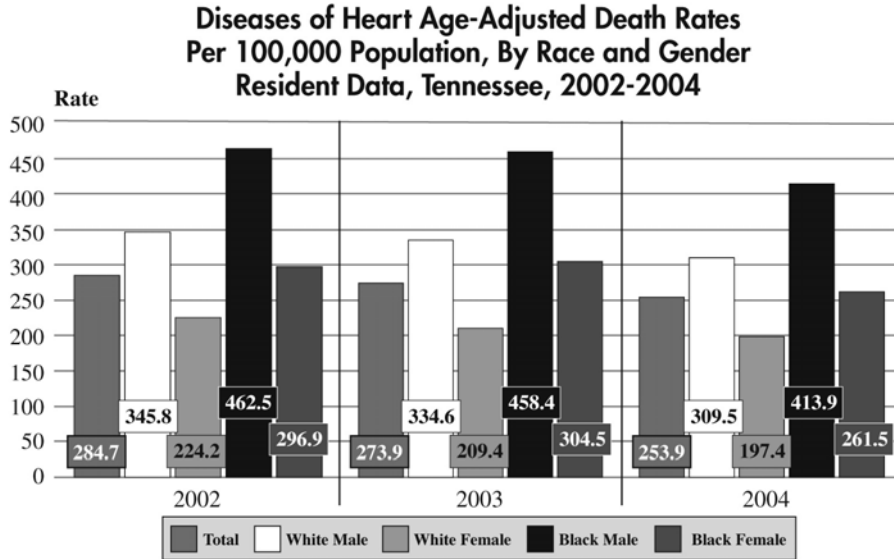
### **Tennessee Heart Disease and Stroke Prevention Program**

The Tennessee Heart Disease and Stroke Prevention Program seeks to lessen the burden of heart disease and stroke and improve the cardiovascular health of Tennesseans through changes in policy and environment. This program promotes heart healthy lifestyles and addresses individuals, targeted risk groups and whole populations. The emphasis is on prevention with awareness as a primary focus.



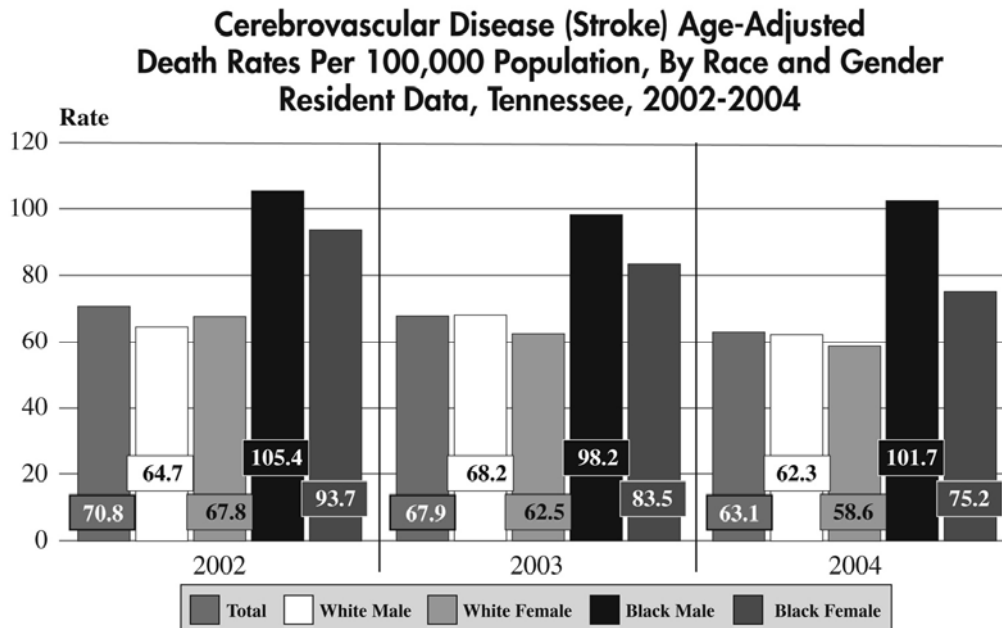
There is a coordinated effort between state, public, private and volunteer health agencies being developed.

The age-adjusted death rate for diseases of heart decreased 10.8 percent from 2002 to 2004 for the total population. The rates for both white and black males were greater than the rates for white females and black females for the 3-year period.



ICD-10 (I00-I09, I11, I13, I20-I51)  
Source: Division of Health Statistics

The cerebrovascular disease age-adjusted death rate for the total population decreased 10.9 percent from 2002 to 2004. The rates for black males and black females were higher than the rates for white males and white females for the 3-year period. Overall black males had the highest age-adjusted death rates for cerebrovascular disease.



ICD-10 (I60-I69)  
Source: Tennessee Department of Health, Division of Health Statistics

## **Diabetes Mellitus**

The 2004 age-adjusted mortality rate for diabetes mellitus deaths in Tennessee was 31.5 deaths per 100,000 population. For the black population the age-adjusted rate for the year 2004 was 61.1 deaths per 100,000 population, 2.2 times the age-adjusted mortality rate for the white population of 27.8 for the same time period.

### **Facts about diabetes**

- ❖ Type II diabetes is by far the most common form of diabetes, accounting for 90 to 95 percent of all diagnosed cases in the U.S. Type I diabetes accounts for five to 10 percent of diagnosed cases in the United States. Gestational diabetes occurs transiently among four percent of pregnant women.
- ❖ Type II diabetes is linked to obesity, physical inactivity, prior history of gestational diabetes and impaired glucose tolerance.
- ❖ African-Americans and Hispanic/Latino-Americans are two to three times more likely to have diabetes as compared to white adults.
- ❖ Millions of Americans have or may be at risk for developing diabetes and not even know.
- ❖ Complications of diabetes include eye disease, kidney disease, nervous system disease, amputations, cardiovascular disease, pregnancy complications and increased flu and pneumonia related deaths.
- ❖ Lifestyle changes can greatly reduce the severity of diabetes and associated complications.

### **Suggestions to prevent and control diabetes**

- ❖ Regular visits with a health care provider
- ❖ Increased, regular physical activity (exercise)
- ❖ A balanced diet low in fat and sugar, high in fiber and high fiber fruits and vegetables

## **Services to Prevent and Reduce Incidence of and Death from Diabetes**

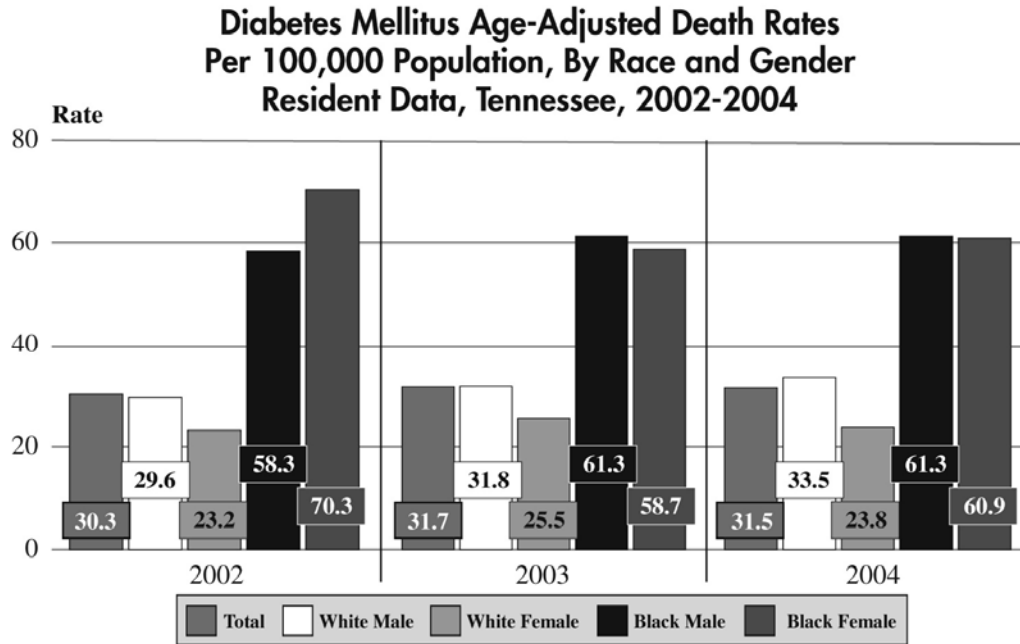
The Tennessee Department of Health has programs that work with communities and families to support the prevention and reduction of diabetes.

### **Diabetes Control**

The Diabetes Control Program seeks to reduce the burden of diabetes in Tennessee by use of strategies that focus on community interventions, health communications and health care systems changes. The Diabetes Advisory Council, composed of representatives from private health care, public health, non-profit agencies, and consumer groups, provides technical assistance. The Council developed a diabetes medical record which is being used by health care professionals and insurers throughout Tennessee as a tool to assist in quality diabetes management.

The Community Services Division took the lead on the *Better Health: It's About Time!* initiative in regard to diabetes, partnering the chronic disease programs together on joint goals and objectives.

From 2002 to 2004, the diabetes mellitus age-adjusted death rate increased 4.0 percent for the total population. The rates for black males and black females were 2 to 3 times higher than the rates for white males and females for the 3-year period.



ICD-10 (E10-E14)  
Source: Tennessee Department of Health, Division of Health Statistics

## **Selected Initiatives**

### **Disparity Elimination**

The Institute of Medicine (2002) and Agency for Healthcare Research Quality (2002) report that differences in health care access, quality, and health outcomes remain significantly compromised for particular groups of Americans<sup>7</sup>. The Tennessee Department of Health has defined health disparity as “a difference in health status, health care access, quality, and utilization that occurs because of social, race, ethnicity, income, education, gender, geographic location, or disability and is fundamentally unfair in policy design and practice.”

Health parity is one of the cornerstones of the administration of Commissioner Kenneth S. Robinson, MD. To that end, in 2003, an executive level position was created within the administration devoted to eliminating disparity and achieving health parity for vulnerable Tennesseans. Within the Strategic Plan for the Department of Health, Goal 3 is “raise public awareness about the importance of a healthy lifestyle, to encourage individuals to take personal responsibility for their health and well being, and to give newborn babies a better start in life. This initiative specifically targets cardiovascular disease, obesity, diabetes, infant mortality, prenatal care, and adolescent pregnancy, and the elimination of racial and ethnic health disparities in these areas.”

The Office of Disparity Elimination works in conjunction with the Office of Minority Health to alleviate the differences in health that persist among different segments of the diverse population of Tennessee. Health disparities are differences in “the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates” as defined by the Minority Health and Health Disparities Research and Education Act of 2000. Disparities result not only in a lower overall quality of life among those impacted, but their families and communities as well.

The term 'minority' has come to describe a cross section of special concerns that arise from race, ethnic background, gender, rural and urban living. Racial and ethnic populations in Tennessee consist primarily of African American, American Indians, Hispanics and Asian/Pacific Islanders. Minority Health focuses on those health issues that cross culture, race and ethnic boundaries. Minority populations often experience poor health due to unhealthy lifestyles, limited prevention measures and inadequate access to health care.

It is the need to correct these realities that has made this a priority of the United States Public Health Service, and a special initiative of the Tennessee Department of Health. The Department's Office of Minority Health has a leading role in highlighting and influencing strategies for addressing these health disparities. Priorities for elimination of these disparities are Infant Mortality, Prenatal Care, Adolescent Pregnancy, Diabetes, Heart Disease and Stroke, mirroring the Department's population-wide priorities.

Health issues that result in inordinate mortality rates in minority communities include alcohol and other drug abuse, cardiovascular disease, cancer, violence (sexual, child and domestic) and injury, infant mortality, HIV/AIDS, other sexually transmitted diseases and ethnic specific diseases, i.e. sickle cell anemia.

### **Health Education and Promotion**

Unhealthful behaviors are something the Tennessee Department of Health realizes is a major impediment to good health. The leading causes of death have behavioral implications. The diseases that lead to death sometimes reflect unhealthy choices people make such as cigarette smoking, being overweight, not exercising, and accidents due to alcohol abuse. Health is also affected by access to care, geographic location, disability, and education.

In addition to the traditional programs in the Tennessee Department of Health, many initiatives that also affect health and produce better health outcomes have been developed to better serve Tennesseans. A description of some of those programs follows.

### **Worksite Wellness Program**

The central office of the Tennessee Department of Health is committed to improving the health of employees by offering a structured Worksite Wellness Program that increases awareness on healthy lifestyle choices, provides health-related education, and develops strategies that encourage physical and mental well-being. This program was one of the initial components of the *Better Health: It's about Time!* initiative. Each rural regional and local health department as well as the central office implemented wellness programs.

The Worksite Wellness Programs relate to two of the Department's Strategic Plan goals, the first goal of having "a diversified public health workforce of qualified, competent, and stable employees who fulfill the mission of this Department by leading by example, teamwork, and providing exemplary services to the citizens of the state" and the third goal of raising public awareness about the importance of a healthy lifestyle and encouraging individuals to take personal responsibility for their health and well being.

The goals of the program are to facilitate a results-oriented worksite health promotion initiative that will educate employees about the importance of making healthy lifestyle choices by increasing awareness of the benefits and behaviors associated with wellness and making healthy lifestyle choices and establishing employee health and wellness as an important part of employee well-being.

The program is based on a 12-week cycle of activities focusing on better nutrition by following the CDC's 5 a Day program (eating 5 or more servings of fruit and/or vegetables every day), participating in regular physical activity at least 150 minutes per week (the participant must record 150 minutes per week and no activity for less than 15 minutes per session can be counted), and receiving health screenings. To foster sustainability of the worksite wellness, employees may participate multiple times in the program.

The effectiveness of the Central Office Wellness Program is evaluated by use of the Adult Health Report Card. Each person who pledges has an initial screening and subsequent screenings on a quarterly basis for 12 months. Employees who have been compliant and have completed the worksite wellness program will receive as an incentive one full day (7.5 hours) of paid administrative leave agreed upon by the supervisor. Although the program lasts 12 weeks, employees may begin the program again with the same guidelines and accrue more than 7.5 hours of administrative leave.

The success stories of this program are both evident and abundant. A log of compliant employees is kept in the central office. The incentive of the administrative day off has been a worthwhile investment that has yielded significant health-related and employee-satisfaction related returns.

### **Faith-Based Health Initiatives**

The office of Faith-Based Health Initiatives (FBHI) offers various programs and assistance for faith-based organizations who are interested in developing a health ministry, including training, resources and coordination. The FBHI delivers training and technical assistance for government and community organizations that are developing relationships in the faith community. The initiative also provides a speakers bureau for organizations who are interested in the faith and health connection, provides a database of congregations with health ministries partnering with the Tennessee Department of Health, and serves as a clearinghouse for faith and health information.

The goals of FBHI are to:

- ❖ Reduce health disparities in the state of Tennessee through the collaborative efforts of FBHI and the *Better Health: It's About Time!* initiative
- ❖ Identify opportunities, document participation, and sustain relationships between public health and faith communities for active collaborations
- ❖ Connect TDH resources with faith communities to promote healthy practices.

As communicated in the second goal of the Department's Strategic Plan, the Department values partnerships with the faith community because they can provide sustained social support in implementing and maintaining healthy behaviors, can communicate healthy messages to congregation members as well as hard-to-reach family members, and have expertise in mobilizing volunteers.

### **Healthcare Safety Net/Primary Care**

The Healthcare Safety Net/Primary Care effort was spawned by the state's necessity for reorganization and change to TennCare. TennCare was created in 1994 to replace Tennessee's original Medicaid program and it provides healthcare services to 1.2 million Tennesseans through a network of contracted managed care companies.

On January 24, 2005, Governor Phil Bredesen established the Task Force on the Healthcare Safety Net by Executive Order. In so doing, the Governor noted that while county health departments, community and faith-based clinics, safety net hospitals and other commercial and non-commercial healthcare outlets are vital to Tennessee's healthcare safety net, development of the safety net had been limited since the inception of the TennCare program in 1994. The Task Force was charged with the responsibility of examining the state of the healthcare safety net in Tennessee and recommending to the Governor short-term and long-term options for strengthening it.

Among the recommendations was the significant, statewide expansion of the capacity of local health departments to provide primary care services. This recommended expansion provides for increased access to a safety net of services for acute, episodic care. This proposed expansion would provide the best care possible, reduce unnecessary use of the emergency room, and prevent unnecessary hospitalizations. Therefore an effort to expand and strengthen primary care within local health departments is underway.

The expansion of primary care services is included in the Department's Strategic Plan as Goal 5 to "ensure that the critical and essential public and personal health services are delivered to the citizens and visitors of Tennessee ensuring the protection of all the population's health".

### **Tennessee Comprehensive Cancer Control Program**

The Tennessee Comprehensive Cancer Control Program is a new program established in FY 03-04 with grant funding from the Centers for Disease Control and Prevention (CDC). This program coordinates with the Tennessee Comprehensive Cancer Control Coalition, a group of over 300 Tennesseans committed to reducing the burden of cancer, to facilitate and support the implementation of the Tennessee Comprehensive Cancer Control Plan for 2005-2008.

The mission of the program is to measurably reduce the burden of cancer on the citizens of Tennessee by implementing a collaborative statewide plan driven by data, science, capacity and outcomes.

The goals of the program are:

- ❖ To reduce the incidence of cancer by providing clear, concise, and effective prevention efforts including messages and intervention strategies.
- ❖ To detect cancer at an earlier stage when successful treatment is more likely.
- ❖ To increase the availability, accessibility, quality and equity of treatment for those diagnosed with cancer.
- ❖ To improve quality of life by promoting support, resources and services for the patient, family members and caregivers.
- ❖ To improve end of life care by promoting support, resources and services for the patient and family members.

- ❖ To continually enhance data collection capacity of the Tennessee Cancer Registry (TCR), so that completeness, timeliness and quality meet existing professional standards and data utilization becomes an integral part of cancer control.
- ❖ To evaluate the extent to which the goals and objectives of the Coalition are achieved and develop implementation plans for future work.
- ❖ To encourage the development and implementation of research and research findings to reduce cancer incidence and mortality.
- ❖ To promote participation in clinical trials among priority populations.
- ❖ To encourage the study and communication of accurate information to citizens regarding environmental and occupational exposure and cancer risk.

The Tennessee Comprehensive Cancer Control Program exemplifies the Department's work to achieve Goal 2 in the Strategic Plan, that is "to build statewide partnerships to collaborate in the performance of public health functions and essential services in an effort to utilize the full range of available human and material resources to improve the state's health status and assist partners and communities to organize and undertake actions to improve the health of the state's communities."

### **Newborn Screening**

Tennessee has a comprehensive genetics program that provides access to genetic screening, diagnostic testing, and counseling services for individuals and families who have, or are at risk for, genetic disorders. Two major aspects of the program are newborn screening for early detection for genetic/metabolic disorders and newborn hearing screening for early detection of hearing loss.

Newborn screening allows for early diagnosis of metabolic disorders, followed by appropriate medical treatment. All babies born in Tennessee are screened for certain genetic conditions. If any of the tests are abnormal showing a possible disorder, the Department of Health follows up with the baby's doctor to initiate retesting, confirmation and treatment from a specialist if necessary. Early diagnosis and treatment can make the difference between a child leading a relatively normal life or having more significant developmental delays, long-term health care needs, or even death.

The Early Hearing Screening Detection and Intervention (EHDI) Project establishes a sustainable, centralized tracking and surveillance system; integrates the EHDI with the newborn screening programs; and conducts applied research using the information collected. This system tracks service provision, assesses service needs, coordinates services, manages the services more effectively and efficiently analyzes epidemiological information and trends, and plans for future needs and policies regarding children's health care.



The newborn screening program relates to Goal 5 of the Department's Strategic Plan "to ensure that the critical and essential public and personal health services are delivered to the citizens and visitors of Tennessee ensuring the protection of all the population's health."

## **Health Services and Programs**

Departmental programs are the means by which the attainment of vision and mission statements will be achieved. The Tennessee Department of Health has a large number of programs which are funded by a variety of sources. The Tennessee Department of Health makes extensive use of the Internet and Intranet to make important health improvement tips and program information available. For the general public, at the Tennessee Department of Health's website, <http://www.state.tn.us/health/>, one will find an attractive, inviting, and easy to navigate website. There is access to data, programs, health tips and initiatives, news articles, etc.

One of the major strengths of the Tennessee Department of Health is its wide diversity of programs with a central point of delivery for them. This simply means for the individual consumer, that it is possible to participate in many programs through a single point of entry into the health care system...and this is their local Health Department.

It is important to note that at the core of every Health Department activity there are the following guiding principles:

- Cooperation and collaboration or joining hands with many, is the best way to maximize resources in order to accomplish the common good.
- The desire to eliminate health disparities as "...these result not only in a lower overall quality of life among those impacted, but their families and communities as well."<sup>8</sup>
- Public Health must serve each individual consumer and taxpayer by protecting the collective health of the citizens of the state and use resources judiciously in so doing.

Therefore, programs are designed and implemented to address need. They are directed toward the promotion, protection and improvement of the health of people living in, working in, or visiting the state of Tennessee. These program areas have spent time in the planning process describing their purpose, establishing goals and objectives, listing their important initiatives and determining what still needs to be accomplished.

Details regarding these Tennessee Department of Health services/programs are found on the following pages.

Abstinence Education Program	HIV and STD Prevention Services
Adolescent Health	HIV Surveillance and Data Management
Alcohol and Drug Abuse Services	Immunization Program
Arthritis	Injury Prevention and Control Program
Bioterrorism Hospital Preparedness	Laboratory Services
Breast and Cervical Screening Program	Minority Health
Bureau of Health Licensure and Regulation	Nutrition Services
Child Fatality Review	Office of Nursing
Child Health and Development Program	Office of Rural Health
Childhood Lead Poisoning Prevention Program	Oral Health Services
Children's Special Services	Pharmacy Services
Community Prevention Initiative	Physical Activity and Health
Coordinated School Health	Primary Care
Diabetes Prevention and Control Program	Public Health Emergency Preparedness
Early Childhood Comprehensive Systems	Quality Management
Early Periodic Screening, Diagnosis and Treatment	Rape and Sexual Assault Prevention Program
Emerging Infections Program	Renal Disease Program
Environmental Epidemiology	Ryan White Services
Epidemiology and Laboratory Capacity	State Hemophilia Program
Families First Home Visiting Program	Sudden Infant Death Syndrome Program
General Environmental Health	TB Elimination Program & Laboratory
Health Access Program	TB Epidemiological Studies Consortium
Healthy Start Program	Tobacco Use Prevention and Control Program
Heart Disease and Stroke Prevention Program	Traumatic Brain Injury Program
Help Us Grow Successfully (HUGS)	Women's Health/Genetics

# ABSTINENCE EDUCATION PROGRAM

## INTRODUCTION

The purpose of the Abstinence Education Program is to 'enable the State to provide abstinence education, and at the option of the State, where appropriate, mentoring, counseling, and adult supervision to promote abstinence from sexual activity with a focus on those groups which are most likely to bear children out of wedlock.'

## FACTS

The law defines abstinence education as an educational or motivational program which:

- a. has as its exclusive purpose, teaching the social, psychological, and health gains to be realized by abstaining from sexual activity;
- b. teaches abstinence from sexual activity outside marriage as the expected standard for all school age children;
- c. teaches that abstinence from sexual activity is the only certain way to avoid out of wedlock pregnancy, sexually transmitted diseases, and other associated health problems;
- d. teaches that a mutually faithful, monogamous relationship in the context of marriage is the expected standard of human sexual activity;
- e. teaches that bearing children out of wedlock is likely to have harmful psychological and physical effects;
- f. teaches that bearing children out of wedlock is likely to have harmful consequences for the child, the child's parents, and society;
- g. teaches young people how to reject sexual advances and how alcohol and drug use increases vulnerability to sexual advances; and
- h. teaches the importance of attaining self-sufficiency before engaging in sexual activity.

## GOAL

The overall goal of the Tennessee Abstinence Education Program is to reduce the teenage pregnancy rate.

## OBJECTIVES

- ✚ Reduce the pregnancy rate among females in the 15-17 year old age group by .7/1,000 per calendar year.
- ✚ Reduce the proportion of adolescents in the 9<sup>th</sup>-12<sup>th</sup> grades engaging in sexual intercourse by 1% per calendar year.
- ✚ Reduce the incidence of youth 15-19 who have contracted selected sexually transmitted diseases by 1% per calendar year.
- ✚ Reduce the rate of births to female teenagers aged 15-17 by 1% per calendar year.
- ✚ Reduce the pregnancy rate for 15-17 year olds in the counties with abstinence projects by 1% per calendar year.
- ✚ Distribute a minimum of 120,000 articles of educational material throughout the state annually.
- ✚ Reduce the pregnancy rate among females in the 15-17 year old age group by .7/1,000 per calendar year.
- ✚ Sponsor and co-host the statewide *Celebrating Healthy Choices for Youth Conference* annually.

## Where Tennessee Is Today/Initiatives/Accomplishments

All funding for Title V, Abstinence Education is provided by the Department of Health and Human Services, Administration for Children and Families (ACF) through the Tennessee Department of Health. Currently, Tennessee funds and works in partnership with 16 community based abstinence education projects across the State.

According to information from the Tennessee Department of Health-Health Statistics, pregnancy rates in many of the counties where there are funded projects have decreased in recent years. This is due to a concerted effort of the state abstinence program and other state and community-based agencies.

Approximately 50,000 youth are served annually. Projects are charged with providing curricula and activities focusing on abstinence until marriage and life skills. Each project must also facilitate one or more additional components known to promote youth development. These activities may include, but are not limited to public speaking, drama/dance skits, community service, volunteerism, t-shirt and billboard/bus plaque design contests, sports leagues, peer and adult mentoring, and college tours. Projects include a Boys and Girls Club; a Girl Scout Troop; Crisis Pregnancy Support Centers; a community center; hospital, faith and school based programs.

An annual, statewide 'Tennessee Celebrating Healthy Choices for Youth Conference' is conducted to which many persons and agencies interested in teen pregnancy and sexually transmitted disease prevention and character / asset development are invited.

Nationally known speakers on abstinence and character building present information from their experiences and data. Topics include various areas of interest such as working with underserved youth, involving males in the abstinence discussion, decision-making skills, diversity, drug abuse prevention, healthy relationships, grant writing, character education, internet safety, and bullying prevention.

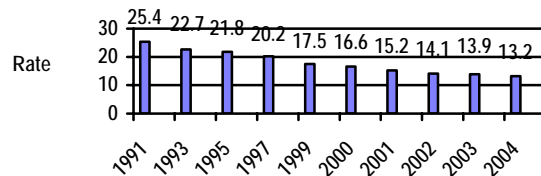
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Each event has been warmly received and has generated excitement regarding the promotion of healthy life styles among our youth. For additional information and registration contact the National Center for Youth Issues at (800) 477-8277, ext.112 or go to [www.ncyi.org](http://www.ncyi.org).

The adolescent (10–17) pregnancy rate in Tennessee for 2004 was 13.2, the lowest since the Department of Health began collecting such data in 1975. The following graph illustrates the decline in the state's adolescent pregnancy rate over the last thirteen years.

**PREGNANCY RATES PER 1,000 FEMALES AGED 10-17, TENNESSEE, 1991-2004**



Source: Tennessee Department of Health

In order to serve as a resource for youth service/youth development agencies, parents/guardians or individuals across the state, educational brochures are made available at no cost upon request. Topics range from parent-child communication, the importance of sexual abstinence, building self-esteem, resisting negative peer pressure, the effects of alcohol and other drugs on decision-making, etc. Brochures are available in English and in Spanish, when available. For a request form, fax your request with a complete mailing address to (615) 741-1063 or e-mail [yvette.mack@state.tn.us](mailto:yvette.mack@state.tn.us)

Sexually Transmitted Diseases (STDs): STDs are a threat to the health of the state's youth. According to the Centers for Disease Control and Prevention, the most common STDs among adolescents are chlamydia, gonorrhea, and syphilis. A major cause of infertility is tubal damage from chlamydia re-infections.

**STD RATES PER 100,000 FOR AGED 15-19 TENNESSEE, 1998-2004**

Year	Chlamydia	Gonorrhea	Syphilis
1998	1,632	956	17
1999	1,625	853	12
2000	1,639	880	13
2001	1,666	743	3
2002	1,657	680	3
2003	1,965	636	3
2004	1,996	563	2

Source: Tennessee Department of Health STD/HIV Program

### What Still Needs to be Accomplished

- ✚ Continue to fund eligible community-based abstinence education/youth development projects through Request for Grant Proposals
- ✚ Continue to devote resources to assist Tennessee's youth in developing healthy decision making skills and becoming more well-rounded individuals and contributing family and community members

# ADOLESCENT HEALTH

## INTRODUCTION

Tennessee's Initiative to Improve Adolescent and Young Adult Health by the Year 2010 is a collaborative effort to improve the health, safety, and well-being of adolescents and young adults (ages 10-24). Partners include adolescent health regional representatives, state program directors that work with the adolescent population, other state department program directors (Department of Education, Mental Health and Developmental Disabilities, Department of Children's Services), and state epidemiologists. Issues that are addressed include access to health care, health disparities, positive youth development, reproductive health, mental health, unintentional injury prevention, violence prevention, substance abuse prevention, and chronic disease prevention.

## FACTS

### Mortality Rates

- The overall mortality rate for adolescents and young adults ages 10-24 has been gradually declining since 1994.
- Unintentional injury remains the overwhelming leading cause of death (51%) for youth and young adults ages 10 to 24 years of age followed by homicide (14%) and suicide (8%).

### Mentally Healthy Youth

- According to the Tennessee Middle School Health Survey 2001-2002, which was distributed to 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> graders, 7.2% said they had attempted suicide. Also, 18% said they had felt desperate enough to consider suicide and 2.6% reported getting medical treatment because of a suicide attempt.

### Unintentional Injuries

- Unintentional injuries kill about 125 Tennessee youth annually.
- For adolescents and young adults ages 10 to 24, both nationally and in Tennessee, over three-quarters of unintentional injury deaths are motor vehicle-related.
- The rate of adolescent deaths due to all types of injuries has increased over the last decade. From 1999-2002 there were 1,880 deaths. This represents an increase of 69 deaths from 1995-1998 and an increase of 100 deaths since 1991-1994.

### Intentional Injuries

- Overall, the rate of homicides for youth ages 10-24 has declined from 13.9% in 1994 to 9.3% in 2003.

## GOALS

1. Elevate state and community focus and commitment to the health, safety, and well being of adolescents, young adults and their families.
2. Increase access to quality health care, including comprehensive general health, oral health, mental health and substance abuse prevention and treatment services.
3. Improve health and safety outcomes in areas defined by the Healthy People 2010, 21 Critical Health Objectives for Adolescent Health.
4. Eliminate health disparities among adolescents and young adults.
5. Promote positive youth development for all adolescents and young adults.

## OBJECTIVES

- ✚ In order to improve access to health care, a confidentiality tool kit will be developed and distributed to all public health clinics by July 2007.
- ✚ In order to promote positive youth development, a Department of Health youth advisory committee will be established by December 2007.
- ✚ In order to build and strengthen partnerships outside of public health, a state adolescent health advisory committee will be established by July 2007.
- ✚ In order to build public support for investment in youth, the adolescent health annual report will be distributed to policymakers and members of the media by June 2006.

- Every 4 days a child or youth in Tennessee is killed by gunfire. (In 2002, among youth ages 10-24, there were 115 firearms deaths by homicide; 47 firearms deaths by suicide; 15 firearm deaths deemed accidental, and 4 undetermined firearm deaths.)

### **Substance Free Youth**

#### Alcohol Abuse

- According to the 2003 Tennessee Youth Risk Behavior Survey, 75% of all Tennessee high school students have tried alcohol at least once.
- Forty-five percent of all high school students report having one or more drinks of alcohol on one or more of the 30 days preceding the survey.
- One third of all Tennessee 12th graders and nearly one-fourth of all 10th graders admitted to binge drinking.

#### Drug Abuse

- In 2003, 43.4% of all Tennessee high school students reported having used marijuana one or more times during their lifetime compared to 40.2% nationally.
- Twenty-four percent of all high school students reported past-month use of marijuana compared to 22% nationally.

### **Tobacco Free Youth**

- Every year, 14,600 Tennessee youth under 18 years of age become daily smokers. At this rate, 128,300 Tennessee youth alive today will die an early, preventable death because of a decision made as a child.
- Tennessee has experienced a decline in the number of high school students who report ever trying a cigarette. In 1993, 74.9% of all high school students had tried whereas in 2003 it was down to 61.8%. However, Tennessee is still higher than the national average of 58.4%.

### **Healthy Sexual Development**

- Tennessee teen birth rates have declined by 22.3 % between 1991 and 2001. However it is important to note that teen birth rates are substantially higher in the United States and Tennessee compared to other developed countries.
- Among Tennessee teens 15-17 years old, the birth rate has declined from a high of 57.9 per 1,000 in 1993 to 34.8 in 2003. This represents a 39.9% decline in rate since 1993.

### **OBJECTIVES** (continued)

- ✚ In order to reduce infant mortality, an adolescent health brochure will be developed and distributed by TenderCare outreach staff to all adolescents whose homes they visit as part of a TenderCare outreach visit by December 2006.
- ✚ In order to improve access to mental health services, the director of adolescent health will partner with the mental health policy academy committee and the Substance Abuse and Mental Health Services Administration (SAMSHA) adolescent health access to drug treatment grant committee to achieve grant goals by October 2009.

### Healthy Diets and Physically Fit Youth

- According to 2003 Tennessee Youth Risk Behavioral Survey (Tennessee YRBS) results, 15% of Tennessee's high school students are overweight; the national average is 13.5%.

## Where Tennessee Is Today/Initiatives/Accomplishments

Adolescent and Young Adult Health program staff serve as a resource to Tennessee communities in addressing and assessing strengths and risks related to adolescent health status through:

- \* Consultation and training
- \* Assessing teen health status
- \* Publishing adolescent health data
- \* Promoting youth involvement in decisions and planning programs to address their needs
- \* Fostering collaborations among individuals, programs and systems that serve youth
- \* Advocating for the needs of Tennessee's youth and young adults
- \* Addressing health disparities among adolescents and young adults
- \* Increasing public awareness about the needs and strengths of Tennessee's youth and young adults

Specifically, Tennessee's Initiative to Improve Adolescent and Young Adult Health by the Year 2010 has established an **adolescent health leadership committee** comprised of public health directors who work with the adolescent population and **adolescent health regional representatives**. **This committee has developed a five-year strategic plan to address adolescent health concerns. The regional adolescent health representatives have provided** regional adolescent health trainings.

An **adolescent health survey** of all public health clinics as well as school nurses and wellness teachers was developed and implemented. A **state—level systems capacity for adolescent health needs assessment** has been conducted. An **adolescent health data report** will be distributed in May 2006 to policymakers, adolescent health program staff as well as other adolescent health stakeholders. **Adolescent youth health guides** were distributed to approximately 100,000 young people through contacts working in schools, faith community, and youth organizations. Adolescent health educational materials have been distributed to each region. **Adolescent health fact sheets** were developed and made available via the Department's web site. A SAMSHA youth suicide prevention grant proposal was written in partnership with the Tennessee Department of Mental Health and Developmental Disabilities. Tennessee was one of 13 states to receive the SAMSHA funding. The adolescent health web site was updated. Asset building training was provided to ten Coordinated School Health Program teams.

Five **adolescent health e-newsletters** were written and distributed to all adolescent health contacts statewide. The director of adolescent health has provided consultation and developed training materials for the Early, Periodic Screening, Diagnosis and Treatment. (EPSDT) Outreach committee. Throughout the year, technical assistance information has been shared with adolescent health contacts statewide via email. Workshops have been presented at both state and national conferences.



## What Still Needs to be Accomplished

- ✚ Ensure access to mental health services: Assure availability of services for early identification of, and intervention with, at-risk adolescents.
- ✚ Support parents in effective parenting of adolescent children: Help families reach their potential as irreplaceable positive influences in the lives of teens.
- ✚ Develop dedicated funding for adolescent health: In order to adequately address the multiple needs of “at risk” adolescents and young adults, dedicated funding for adolescent health should be established.
- ✚ Address health disparities among adolescents and young adults with a focus on gender issues: Male adolescents and young adults often report higher degrees of risk-taking than females. However, few policies and programs are designed to meet young men’s unique needs.
- ✚ Ensure/Improve access to health services with an emphasis on promoting Tennessee’s confidentiality laws: Assure the availability of health services for “at-risk” adolescents and young adults. Also, address confidentiality issues since the most common reason adolescents do not access preventive health care is due to confidentiality concerns.
- ✚ Maintain reproductive health as a priority: Focus on reducing teen pregnancy, HIV, AIDS and sexually transmitted diseases among adolescents and young adults.
- ✚ Build/strengthen partnerships outside of public health: Partner with all sectors of society to address adolescent and young adult health issues.
- ✚ Develop a uniform statewide data collection system that would provide county specific data: Uniform data is needed by county as well as by region and state levels to determine program priorities and resource allocation.
- ✚ Build public support for investment in youth: A great deal is known about how to address the opportunities for positive youth development and to reduce the potential for adverse consequences of adolescent risk-taking. Adequate long-term investment will always be required, and the voting public must see the purpose and value of investing its scarce resources.
- ✚ Involve youth in policy formation and program implementation: Use teens’ firsthand knowledge of school, peer and community environments in forming policies that impact youth.

# ALCOHOL AND DRUG ABUSE SERVICES

## INTRODUCTION

The Bureau of Alcohol and Drug Abuse Services (BADAS) of the Tennessee Department of Health serves as the single state authority for receiving and administering federal block grant funding from the United States Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. State funding for alcohol and drug abuse services is also administered by the Bureau. The Bureau of Alcohol and Drug Abuse Services' scope of responsibilities includes planning, developing, administering, and evaluating a statewide system of substance use, abuse, and addiction services for the general public, persons at risk for substance abuse, and persons abusing substances. These responsibilities are carried out through partnering with other governmental agencies, community organizations, and advocacy groups. Treatment and prevention services are provided by community based agencies through contracts with the Bureau.

The Bureau's mission is to reduce substance abuse by promoting prevention and by reducing high risk behaviors through community programs and activities, and to ensure that treatment services are available for all individuals in need. It is the vision of the Bureau to reach all citizens of Tennessee for potential substance use and abuse through effective prevention and to ensure that appropriate treatment services are available statewide.

## FACTS

One out of ten Americans is dependent upon alcohol and/or illegal drugs which poses a significant public health concern.

Alcohol remains the most abused substance in Tennessee.

Nearly 67% of adolescents reported using marijuana in 2002.

Treatment does work. After treatment, clients report their quality of life improves in several ways, i.e. employment, school, health status, domestic violence, and involvement with the criminal justice system. An external evaluation showed 68.8% of persons receiving services from BADAS funded treatment providers were abstinent 6 months after admission. The percentage of those working full-time tripled. Marked declines in arrests were seen.

## GOALS

1. Diversity of programming and cultural competency in every area.
2. Additional grant opportunities.
3. Partner with key stakeholders.
4. Best Practices in program development.

## OBJECTIVES

- ✚ Actively monitor all funded providers to assure that quality services are provided.
- ✚ Increase participation by faith communities.
- ✚ Plan a Prevention Summit with key agencies and stakeholders.
- ✚ Provide additional funding to agencies that agree to use best practice models.
- ✚ Actively pursue new programming based on community needs.
- ✚ Utilize a Gantt Chart to assure goals are met in a timely manner.

## Where Tennessee Is Today/Initiatives/Accomplishments

Adolescent Residential Treatment – These services are designed to restore the life-functioning skills of chemically dependent youth ages 13-18.

Adolescent Day Treatment – Adolescent day treatment provides care and treatment during the day and/or evening hours for youth ages 13-18 who abuse alcohol and other drugs.

Co-Occurring Disorders Project – The co-occurring programs are designed to serve individuals with co-occurring psychiatric and substance abuse disorders.

Halfway-Houses – This program provides care and treatment for persons who abuse alcohol and other drugs and are in need of transitional living.

Medical Detoxification – This 24-hour a day, 7 day-a-week program provides residential service for persons who abuse alcohol and other drugs and whose medical needs are paramount.

Outpatient Treatment Services – Outpatient treatment provides screening and evaluation, assessment, counseling, education, referral, and other services for alcohol, tobacco, and other drug related problems.

Pregnant Substance Abusers – Services vary from intensive outpatient to residential treatment programs serving pregnant and post-partum women and their infants.

Residential Rehabilitation – This service provides 24 hour-a-day, 7-day-a-week services for persons who abuse alcohol and other drugs, who are not in need of detoxification, but are in need of a structured environment.

Social Setting Detoxification (Non-Medical Detoxification) – This residential setting provides 24-hour-a-day, 7-day-a-week services for persons who abuse alcohol and other drugs and are in need of detoxification. The services provide motivational counseling for those undergoing mild to moderate withdrawal.

Women's Intensive Outpatient Programs – These programs are designed to meet the unique needs of women, using a holistic approach.

Alcohol and Drug Addiction Treatment (ADAT) Program for DUI offenders – This program provides resources and manages a review, referral, approval and payment process for treatment and care of alcohol and drug addicted persons ordered to treatment by a judge. The program has grown to over 900 client approvals a year with a \$5 M budget. An external evaluation of persons receiving services from ADAT showed 69.9% of ADAT-DUI clients were abstinent 6 months following admission to treatment. Only 28.6% remained unemployed. 84.5% felt their physical health had improved.

Shelby County Drug Court Pilot Program – This program funds and oversees a three-year pilot program in the Shelby County Drug Court whereby DUI violators of probation are assessed and placed into a yearlong outpatient treatment program and receive yearlong follow-up.

Contract Monitoring Program – ADAT provides coordination and oversight of the State's contract monitoring compliance program for over sixty Bureau-funded agencies comprising more than 200 programs.

ADAT Ignition Interlock Program – Staff worked with Department of Safety to develop and implement an ignition interlock program.

Drug Court Advisory Board – The Director of ADAT serves as an ex-officio member of the Drug Court Advisory Board.

The Faith Initiative – This initiative seeks to involve the faith community in the prevention of problems by enhancing protective factors which guard against substance abuse.

Intensive Focus Prevention Programs – These programs are structured, intensive programs with a minimum of 12 sessions, targeting youth up to 18 years of age who may be at risk for developing alcohol, tobacco, or other drug use problems.

The Tennessee Teen Institute – This is a week-long training and personal development program, which seeks to prepare students for a leadership role in the development of alcohol and community-based prevention programming.

Life Development Center – This is a wilderness program. Activities are provided to meet people’s needs to feel capable, significant, influential and in control of their lives.

HIV/AIDS Outreach – These programs provide outreach to persons who abuse alcohol and drugs to educate them about prevention in contracting HIV and importance of testing. Services are provided at jails, schools, and in the community.

Homeless Policy Academy – This program supports state and local policymakers and stakeholders in developing a collaborative State-level action plan.

The Deaf and Hard of Hearing Program - This program provides support for prevention services for the deaf and hard of hearing population.







### Contracted Services

<u>Service Types</u>	<u>Number of Providers Offering the Service</u>
Inpatient Detoxification	3
Medical/Social Detoxification	10
Adult Residential	20
Adult Outpatient	24
Halfway Houses	12
Women’s A&D Services (includes a range of services)	16
Adolescent Outpatient & Day Treatment	11
Adolescent Residential	5
HIV/AIDS Outreach	8
Prevention-Intensive Focus	29
Community Prevention Initiative	27

Other contracted services include: Deaf & Hard of Hearing Initiative, Faith Initiative, Teen Institutes, Regional Training Coordinators and Statewide Clearinghouse.

Services and providers are located throughout the State.

### What Still Needs to be Accomplished

-  Implementation of Access to Recovery Grant, including hiring staff and developing web-based voucher system. (Accomplished)
-  Implementation of Gambling Initiative. (Accomplished)
-  Continue to assure that there is a diversity of programming and cultural competency in every area.
-  Advocate for increased state funding. (Accomplished and on-going)
-  Seek additional grant opportunities.
-  Develop a strategy and have regularly scheduled meetings between Finance and Systems and Treatment Consultants. (Accomplished)

- ✚ Partnering with key stakeholders. (Plan a Prevention Summit with key agencies and stakeholders). (Accomplished)
- ✚ Broaden vision to embrace the Recovery Movement. (Accomplished and on-going)
- ✚ Adhere to best practices in program development. (Providing additional funding to agencies that agree to use best practice models)
- ✚ Actively review all funded providers to assure that quality services are provided.
- ✚ Actively provide technical assistance and consultation to funded agencies.
- ✚ Develop a quarterly HIV/AIDS Provider meeting. (On-going)
- ✚ Increase participation of faith communities, including clergy training. (Accomplished)
- ✚ Maintain strong, active, solution-oriented "Treatment Advisory Committee" and "Adolescent Advisory Committee." (Accomplished and On-going)
- ✚ Actively pursue new programming based on community and treatment needs. (Advocating for addiction and recovery issues).
- ✚ Utilize a Gantt chart to assure goals are met in a timely manner.

# ARTHRITIS

## INTRODUCTION

Arthritis and related diseases affects one out of every three Tennesseans, which is approximately 1.5 million citizens. Tennessee must identify and implement proven programs that are effective in addressing the pain and disability associated with this disease. Arthritis is the leading cause of disability in the United States.

## FACTS

There are over 100 forms of arthritis.

One out of every three Tennesseans (approximately 36%) have some form of arthritis

An estimated 6,000 children have some form of juvenile arthritis.

Arthritis is the leading cause of disability in the United States.

\$51.1 billion were direct costs nationally (i.e., due to medical expenditures)

\$35.1 billion were indirect costs nationally (i.e., due to work loss)

The partnership between the Department of Health and the Arthritis Foundation Tennessee Chapter (AFTC) serves all 95 counties in Tennessee, and is actively working to better the lives of the 1.5 million citizens living with this disease.

## GOALS

1. To improve the lives of Tennesseans living with arthritis and other related diseases.
2. To raise awareness and knowledge of this disease.
3. To empower Tennesseans living with arthritis and their families, through education, support, resources and treatment for disease management necessary for appropriate control of arthritis.
4. To partner with other chronic disease programs within the Tennessee Department of Health, as well as other local and national organizations to increase reach and awareness.

## OBJECTIVES

- ✚ Increase early diagnosis and appropriate management of arthritic conditions by 2010.
- ✚ Improve/increase self-management attitudes and behaviors for persons living with arthritis and their care-givers by 2010.
- ✚ Decrease pain and disability associated with arthritic conditions among people affected with this disease by 2010.
- ✚ Improve physical, psychological, and work functions for people living with arthritis by 2010.

## Where Tennessee Is Today/Initiatives/Accomplishments

Tennessee continues to increase awareness through creating new partnerships.

By partnering with other chronic disease programs within the Tennessee Department of Health awareness and education regarding arthritis is increasing to a broader population base. There is more and more national evidence that most chronic diseases are inter-related one compounding another.

Through partnerships the amount of participants and the knowledge of resources, education, and treatment have increased.

By partnering with other local and national organizations, the mission of the arthritis program is broadened to populations that would not necessarily be aware of the correlation between diseases.

## What Still Needs to be Accomplished

- ✚ To strengthen existing partnerships and increase participation by people living with arthritis in the evidence-based programs offered through the partnership of the Tennessee Department of Health, the Arthritis Foundation Tennessee Chapter, and The Centers for Disease Control.
- ✚ To increase awareness further by building new partnerships with a diverse group of entities and organizations that addresses similar diseases and work toward improving the health status and lives of Tennesseans.

# BIOTERRORISM HOSPITAL PREPAREDNESS PROGRAM

## INTRODUCTION

A Health Resources and Services Administration federally funded program to prepare Tennessee hospitals to respond to a chemical, biological, radiological, nuclear or explosion (CBRNE) terrorist attack or other public health emergencies.

## FACTS

The National Bioterrorism Hospital Preparedness Program (NBHPP) has 16 Critical Benchmarks (CBM) and 6 Cross-Cutting Critical Benchmarks (CCCBM) that the Tennessee Bioterrorism Hospital Preparedness Program (TBHPP) hospitals are striving to meet prior to August 31, 2007.

## GOALS

1. Tennessee will meet the following 16 NBHPP Critical Benchmarks by August 31, 2007.

CBM #1: Financial Accountability

CBM #2-1: Surge Capacity - Beds

CBM #2.2: Surge Capacity – Isolation Capacity

CBM #2.3: Surge Capacity – Health Care Personnel

CBM #2.4: Surge Capacity – Advance Registration System

CBM #2.5: Surge Capacity – Pharmaceutical Caches

CBM #2.6: Surge Capacity – Personal Protective Equipment

CBM #2.7: Surge Capacity - Decontamination

CBM #2.8: Surge Capacity – Behavioral Health

CBM #2.9: Surge Capacity – Trauma and Burn Care

CBM #2.10: Surge Capacity – Communications and Information Technology

CBM #3: Emergency Medical Services

CBM #4-1: Hospital Laboratories

CBM #4-2: Surveillance

CBM #5: Education and Preparedness Training

CBM #6: Terrorism Preparedness Exercises

2. Tennessee will meet the following 6 NBHPP Cross-Cutting Critical Benchmarks by August 31, 2007.

CCCBM #1: Incident Management



**GOALS** (continued)

CCCBM #2: Joint Advisory Committee for CDC and HRSA Cooperative Agreement.

CCCBM #3: Laboratory Connectivity

CCCBM #4: Laboratory Data Standard

CCCBM #5: Jointly Funded Health Department/Hospital Activities

CCCBM #6: Preparedness for Pandemic Influenza

**Where Tennessee Is Today/Initiatives/Accomplishments**

- CBM #1: Accomplished and being maintained.
- CBM #2-1: Met the required 500 per million population surge capacity beds.
- CBM #2-1: Met the required isolation capacity of 75% of hospital with one Negative Pressure Isolation Room (NPIR).
- CBM #2-6: Met the required Personal Protective Equipment (PPE) CBM.
- CBM #3: Met the required EMS requirement; but, the TBHPP will continue to make improvements during FFY 2005 and 2006.
- CBM #5: Met the required education standard and will continue to make improvements during federal fiscal year FFY 2005 and 2006.

- CBM #2-7: Met the required decontamination CBM.
- CBM #2-8: The Tennessee CDC Bioterrorism Preparedness Program has taken the lead in meeting the behavioral health standard and the TBHPP is continuing to support the implementation of the requirements needed to meet this standard.
- CBM #2-9: The requirement has been met and this CBM has been moved to CBM #2-1
- CCCBM #2: Tennessee has met this CCCBM through the joint cooperation and sharing of information between the CDC and the Health Resources and Services Administration (HRSA) Advisory Committees.
- CCCBM #5: The Tennessee Department of Health (TDH), CDC, and Health Resources and Services Administration (HRSA) Bioterrorism Preparedness Programs have developed a Joint Terrorism Preparedness Exercise and Education Program to address all of the areas of CBRNE Preparedness. CDC Bioterrorism Preparedness Program has taken the lead on Behavioral Health Response Preparedness and the TBHPP is supporting this effort. The TBHPP Hospital contracts also require that all hospitals perform syndromic surveillance and report suspect cases to TDH Regional Health Departments.
- CCCBM #6: The TDH, CDC, and HRSA Bioterrorism Preparedness Program are jointly working with the TDH on the development of a Pandemic Influenza Plan. The TBHPP Hospital Contracts allow hospitals to use the grant funds to prepare their hospitals to respond to a Pandemic Influenza.

## What Still Needs to be Accomplished

- ✚ CBM #2-1: In Federal Fiscal Year (FFY) 2005 the surge capacity goal was increased from 15% above the current daily average staffed bed capacity to 20% and in FFY 2006 the goals will be 25%.
- ✚ CBM #2-2: In FFY 2006 the requirement is for 100% of all hospitals to have one negative pressure isolation room (NPIR) in the hospital.
- ✚ CBM #2-3 and #2-4: In FFY 2005, Tennessee will begin the implementation of the Emergency System for the Advanced Registration of Volunteer Health Professionals (ESAR-VHP) and complete the program implementation by August 31, 2007.
- ✚ CBM #2-5: In FFY 2005, Tennessee will establish the State Pharmaceutical Caches in 11 different strategic locations across the state and as necessary add to this cache in FFY 2006.
- ✚ CBM #2-6: In FFY 2005 and 2006, Tennessee will continue to allow hospitals to purchase additional PPE based on their Hazard Vulnerability Analysis that includes their increase risk of a chemical, radiological or biological terrorist attack in their community.
- ✚ CBM #2-7: In FFY 2005 and 2006, Tennessee will continue to allow hospitals to renovate their fixed decontamination facilities or purchase mobile decontamination units to achieve the decontamination levels needed in their community based on the hospital's hazard vulnerability of a chemical attack.
- ✚ CBM #2-10: In FFY 2005 and 2006, Tennessee is in the process of implementing a statewide Hospital Resource Tracking System, Patient Tracking System, Regional Communication Centers and a Hospital/Public Health electronic and voice communication system in the 8 Emergency Medical Service regions in Tennessee to meet the requirements of this CBM.
- ✚ CBM #4-1: A Hospital Bioterrorism Laboratory Coordinator has been hired by the State Laboratory and this Coordinator is continuing to work with hospitals on terrorism preparedness education and exercises. The Coordinator has developed a listing of laboratory equipment, supplies and education material that the hospital laboratories can purchase to improved their level of laboratory terrorism preparedness.
- ✚ CBM #4-2: At this time, Tennessee has not developed an electronic statewide Syndromic Surveillance System; but, all hospitals as requested are performing and reporting Syndromic Surveillance information to the regional and state public health department.
- ✚ CBM #5: A statewide hospital terrorism education program was developed and presented on Bioterrorism in FFY 2003 and Blast and Burn Explosion Terrorism in FFY 2004. A program on Chemical Terrorism will be presented in FFY 2005 and a Radiological and Nuclear Terrorism Program will be presented in FFY 2006. These programs will cover all of the CBRNE Terrorism Preparedness areas.
- ✚ CBM #6: Each year the Terrorism Preparedness Exercise requirements are being met through the Joint Homeland Security/TDH Terrorism Preparedness Exercise Program contract that TDH has with Homeland Security. The terrorism preparedness tabletop and full scale exercises will continue through July 2007.
- ✚ CCCBM #1: The Hospital Terrorism Preparedness contracts with the Tennessee acute care hospitals require that all hospitals implement the Hospital Emergency Incident Command System that is in compliance with the National Incident Management System (NIMS) by August 31, 2006. This will meet the requirement of this CCCBM.
- ✚ CCCBM #3 and 4: In relationship to the hospital laboratory portion of these standards, the Hospital Laboratory Preparedness Coordinator is continuing to work with hospitals to establish better systems of communication between the hospital and the state laboratory and standards for hospitals on shipping bioterrorism suspect specimens from the hospitals.

## BREAST AND CERVICAL SCREENING PROGRAM

### INTRODUCTION

The Tennessee Breast and Cervical Screening Program administers the statewide cancer screening program for older, uninsured or underinsured women who meet the financial eligibility requirements. The program provides community and professional education, enrollment, screening and diagnosis in all 95 counties of the state. Women who need treatment for breast or cervical cancer or precancerous conditions receive these services through a special TennCare waiver program. All enrolled women are contacted annually for re-screening. Those responding are recertified to assure continuing eligibility.

### FACTS

This is a Center for Disease Control (CDC) funded program involving all states, territories and over 40 native American tribes. All county health departments and 16 community based nonprofit health centers are points of entry into the program. Women must meet the eligibility guidelines and be 50 years old and older for breast screening and 40 years old or older for cervical screening. Younger women who need diagnostic services after the initial screening can also be enrolled. Over 350 specialty providers provide diagnostic services. Almost 6,000 women were served in FY 2005.

### GOALS

1. Reduce breast and cervical cancer morbidity and mortality by:
  - a. Continuing to serve at least 6,000 women annually.
  - b. Recalling women who were screened in the previous year for annual re-screening.
  - c. Providing community education and outreach to inform all women of the importance of these screening tests.
  - d. Targeting and reaching the never or rarely screened women as measured by not having a Pap test or mammogram in 5 or more years.
2. Refer and enroll all eligible diagnosed women in TennCare for treatment.

### OBJECTIVES

- ✚ By 2010, increase to at least 20 percent the number of new program enrollees who are defined as never or rarely screened women. (Defined as 5 or more years since they have had a Pap test)
- ✚ By 2010, establish on-going community education campaigns in the ten counties with the highest mortality rates for cervical cancer so that more women seek preventive screening.
- ✚ By 2010, establish an on-going departmental in-service training program with a certificate of completion for public health nurses performing clinical breast exams prior to referral for mammography.

## Where Tennessee Is Today/Initiatives/Accomplishments

The state program was reorganized in 2002 to improve efficiency and effectiveness of reaching the target audience. As a result, the program is now serving 3 times the number of women that it served in 2002. (FY 2002 – 1,968 women served; FY2005- 5,986 served)

The Women's Health Initiative which includes a group of the state mammography centers is providing mobile mammography services in partnership with the program in areas where women do not have access to mammography.

A special initiative called Team Up Tennessee, involves 11 counties in eastern Tennessee that have higher than expected mortality rates from breast or cervical cancer. The state program is partnering with the state Extension Service, the American Cancer Society and others to provide community education and screening services in an attempt to reverse these statistics. Baseline data on the number screened in these counties in 2003 is being used to measure impact.

The TennCare waiver program for treatment began in July 2002 and more than 3,000 diagnosed women have received treatment for breast or cervical cancer.

As a CDC funded program, program data is submitted semi-annually and analyzed to see if Tennessee is reaching national standards for efficiency, effectiveness, reaching the target audience and providing services according to the national guidelines. Tennessee now meets or exceeds 5 of the 10 core indicators and has almost reached the standards set for three of the remaining five. This is important because it indicates that we are providing quality services to these uninsured women. Accomplishment of these standards also affects CDC funding.

## What Still Needs to be Accomplished

- ✚ Improve financial resources by receiving an increased allocation from CDC based on program performance.
- ✚ Advocate for a state appropriation to support services. The program estimates that only 10-15% of eligible women are served. (2005)
- ✚ Continue to use data to target and measure the impact of special initiatives.

# BUREAU OF HEALTH LICENSURE AND REGULATION (BHLR)

## INTRODUCTION

The function of the Bureau of Health Licensure and Regulation is to provide oversight and enforcement of laws and regulations; provide for licensure of health professionals and health care facilities, and support for the provision of emergency medical services.

Health Care Facilities (HCF) protects the public through licensing health care facilities and certifying providers for participation in federal Medicare and/or Medicaid programs. Health Care Facilities monitors facility compliance with state minimum standards and federal standards of care and conditions of participation through conducting facility surveys, and complaint and unusual incident investigations to assure that quality health care is provided to the citizens of the state.

The Emergency Medical Services (EMS) program is the single state agency responsible for the oversight of the pre-hospital emergency medical care and medical transportation systems in the state. It regulates both the public and private emergency services industry through licensing ambulance services and EMS personnel (paramedics, emergency medical technicians, first responders, and emergency medical dispatchers). This program also conducts industry complaint investigations against EMS services and personnel, coordinates a statewide EMS data collection system, and is responsible for statewide, multi-agency emergency medical disaster planning, training, and operations as identified in the Tennessee Emergency Management Plan prepared in conjunction with the Tennessee Management Agency.

Health Related Boards (HRB) has the responsibility to safeguard the public by regulating and enforcing standards of practice for all health professionals in Tennessee. This is accomplished by setting forth standards for initial licensure for all health professionals, setting a scope of practice for each profession, and promulgating rules for regulation of the standards. In addition, this program is responsible for investigating complaints against Tennessee health care providers and, ultimately, disciplining those who would violate the scope of practice acts set forth within statutes for each profession.

## FACTS

### Health Care Facilities

In 2005, **1,733** complaints were registered against licensed health care facilities and were investigated.

**7,175** unusual incidents were reported by licensed facilities & investigated.

**\$34,580** in State civil penalties were assessed against nursing homes in 2005.

There are **33,652** licensed Certified Nurse Aides in the state.

**102** individuals were placed on the Abuse Registry.

There were **3,708** licensed health facilities in the state during 2005.

## GOAL I

Create a more efficient, effective and focused Bureau

### OBJECTIVE

✚ Acquire, coordinate and optimize the use of technology and information exchange

#### Strategies:

1. Develop a paperless system of licensure files, survey report files and complaint process by 2007.
2. Continue to work on implementation of new licensing system (MARS) by 4-1-07.
3. Continue to provide timely licensure information, disciplinary information, and survey information on Department's website.
4. Evaluate annually new information to add to website.
5. Review policies and procedures annually and correct those that need to be updated.
6. Implement a tracking system to monitor Board and Department rules.

**Health Related Boards**

At the end of 2005 there were **178,599** active licensed health care professionals. This is a 6% growth from 2004.

RNs	<b>69,073</b>
Advance Practice Nurses	<b>5,193</b>
LPNs	<b>26,600</b>
MDs	<b>18,344</b>

**75** rulemaking hearings were conducted during 2005 for the health professional boards. The most significant rules promulgated were Office Based Surgery rules from Medical Board.

**45.7%** of license renewals were done over the web.

**200** screening panels were conducted during 2005 for health professional boards.

**Emergency Medical Services**

At the end of 2005 there were **17,636** active licensed emergency medical professionals

First Responders	<b>4,225</b>
EMT Basic	<b>3,438</b>
EMT IV	<b>5,660</b>
Paramedic	<b>4,077</b>
EM Dispatch	<b>236</b>

There are **160** Licensed Ambulance Services.

**1,144** ambulance permits were issued in 2005.

**38** new complaints were filed against EMS professionals or services.

**Health Related Boards Investigations**

**2,043** complaints were filed against health care professionals

**1,224** complaints were investigated

**1,908** complaints were closed after review.

**Personnel Data 2005**

	<b><u>HRB</u></b>	<b><u>HCF</u></b>	<b><u>EMS</u></b>
Vacancy rate:	4%	6%	5%
Turnover rate:	8%	10%	5%

7. Develop comprehensive planning strategies annually targeting continuous quality improvement.

8. All divisions within the Bureau will perform annual reviews of performance measures, by December 30<sup>th</sup> of each year.

**OBJECTIVE**

✚ Enhance career employee's path and training to create opportunities for employees to achieve their highest potential.

**Strategies:**

1. Complete supervisory and management training for appropriate staff within 6 months of new role.
2. Monitor personnel vacancies and turnovers annually by each division.

**GOAL II**

Protect the Public Health and Safety of Citizens in Tennessee.

**OBJECTIVE**

✚ Monitor, assess and enforce health care laws and regulations.

**Strategy:**

1. Evaluate annually the rules and regulations, promulgated by the Health Related Board for timeliness and effectiveness.

**OBJECTIVE**

✚ Improve monitoring of the surveying process for health facilities.

**Strategies:**

1. Monitor the predictability of surveys on a monthly basis.
2. Monitor annually the timeliness of conducting surveys within a nine to fifteen month timeframe.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Developed Advance Directives/Universal Do Not Resuscitate Forms as directed by law.

New forms developed in English and Spanish, conducted numerous educational sessions, developed a website that provides information on Health Care Decision Act of 2004, advance directive forms and frequently asked questions.

Awarded Injury Prevention & Control Grant

A five (5) year grant was awarded to the Bureau in the amount of \$120,000/yearly. Expectations of the grant include:

- *Developing a State Injury Prevention Surveillance & Control Plan*
- *Conducting Annual Educational Symposium*
- *Coordinating a coalition of State agencies & stake holders to oversee the efforts of Injury Prevention & Control.*

Awarded a Trauma Registry Grant

The grant provides funding for a registrar, hardware and software that could accept a web based reporting system from trauma centers both adult & pediatric facilities in Tennessee. Also this will provide assistance in updating the State Trauma Care System.

Rural Access to Emergency Devices (RAED) Grant

This grant provided automated external defibrillators in local emergency response agencies in rural areas.

Regional Medical Communication Centers

The Bureau received federal grant monies from the Hospital Bioterrorism Grant to assist in developing the EMS Regional Medical Communication Network, and to purchase radio, telephone and computer communications for all hospital providers in the regions including health departments and Emergency Medical Services.

Ambulance Run Reporting System (EMITS)

In March 2005, EMITS was developed. This system is a web based EMS run reporting system which collects data in accordance with the National Emergency Medical Service Information System data set. The system will allow monitoring of pre-hospital care and generate reports to establish how emergency medical services in Tennessee are functioning.




Health Related Boards Screening Panels

Screening panels have been expanded to include all boards. This is a method for hearing cases in a consistent and timely manner. It is an informal process to mediate a settlement with a board approved panel. If unable to reach a settlement the case would be sent to the Office of General Counsel for prosecution before the full board.

Unusual Incident Reporting

Health Care Reporting Act of 2002 supported the development of the Unusual Incident Reporting program for all licensed health care facilities. This is a web based reporting program. In 2005, **79.9%** or **5,076** incidents were reported electronically. The rate of on-line reporting has increased **26%** from 2004.

### What Still Needs to be Accomplished

-  Implement New Licensing Systems in all divisions of the Bureau.
-  Complete implementation of the Hospital Resource Tracking Program across the state.
-  Continue to improve timely complaint investigation process in HRB Investigative Unit.

- ✚ Continue to improve the HRB Screening Panels.
- ✚ Complete second revision of Emergency Management Plan for Department.
- ✚ Develop a State Trauma Care Plan & implement the State Trauma Registry.
- ✚ Enforcement of Criminal Background Checks for all Boards to begin implementation June 2006.
- ✚ Develop a State Injury Prevention, Surveillance and Control Plan.



# CHILD FATALITY REVIEW

## INTRODUCTION

The Child Fatality Review and Prevention Act of 1995 established a statewide network of child fatality review teams. These multi-discipline, multi-agency local teams have been established in each Tennessee judicial district to review deaths of children seventeen years of age or younger. Fourteen Department of Health team leaders provide the administration and coordination of the teams.

## FACTS

The Child Fatality Review (CFR) program has review teams in the 30 Judicial Districts of Tennessee. The judicial districts cover all 95 counties of the State. These teams review all child deaths and make recommendations to the Child Fatality Prevention Team (state team) for reduction and prevention of child deaths statewide.

The Child Fatality Prevention Team is composed of elected officials, commissioners, and other policy makers in the State of Tennessee as described in T.C.A. 68-142-103. This team reviews the recommendations submitted by the local teams and reports to the Governor and the general assembly.

## GOALS

1. The overall Department of Health goal is eliminating racial disparities in mortality rates and adverse health outcomes in children in Tennessee.
2. To review all deaths of children seventeen years of age or younger in order to reduce the number of preventable child deaths.
3. To establish a systematic and uniform statewide method for the collection of data to be used in identifying trends in Tennessee child deaths.
4. To provide in-depth analysis and annual reports of child deaths in Tennessee.
5. To report to the governor and general assembly concerning the state team's activities and recommendations for changes to any law, rule and policy that would promote the safety and well being of children.
6. To develop policies to prevent suicide and preventable deaths among children in Tennessee.

## OBJECTIVES

- ✚ By June 30, 2007, increase the percentage of all cases reviewed and included in the annual report from 95% to 97%.
- ✚ By June 30, 2007, decrease the time line of data collection, analysis and production of the Child Fatality Review Annual Reports by 66% (from three years to one year).
- ✚ By December 31, 2008, implement electronic reporting for child fatality review data collection forms.

**OBJECTIVES** (continued)

- ✚ By December 31, 2008, integrate data from Fetal Infant Mortality Report (FIMR) into the annual recommendations for the State Child Fatality Review Program.
- ✚ By December 31, 2008, integrate data from the Tennessee Pregnancy Risk Assessment Monitoring Survey (PRAMS) to annual recommendations for State Child Fatality Review Program.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Based on recommendations from the CFR Teams (state and local) the law was revised in 2005 to include provisions for investigations and autopsies for sudden unexplained deaths of children from birth to age 17.

New HUGS program guidelines completed in July 2004 increased the training education to home visitors.

Receipt of grant from Substance Abuse and Mental Health Services Administration (SAMSHA), with Memoranda Of Understanding established between the Department of Mental Health and Developmental Disabilities, the Department of Education, the Department of Children's Services, Juvenile Courts and the Department of Health for suicide prevention in teens.

Annual Reports complied and disseminated to policy makers, local health departments, law enforcement offices, etc.

Women's Health and Women, Infants and Children (WIC) integrated SMART MOMS program into all local health departments in conjunction with the Life Style Initiatives.

SIDS Prevention campaign in Memphis, Tennessee Department of Health Life Start Initiative.

**What Still Needs to be Accomplished**

- ✚ Review the causes for the disparities in child deaths, and develop a campaign that will reduce and eliminate the disparities.
- ✚ Increase the percentage of all cases reviewed by the CFR team and include in the annual report.
- ✚ Reduce the number of deaths considered as accidental, motor vehicle or hand gun related among males.
- ✚ Reduce the suicide rate among teens across the state.
- ✚ Reduce the high rate of incidences of child fatality cases particularly in Shelby and Davidson counties.

## CHILD HEALTH AND DEVELOPMENT (CHAD) PROGRAM

### INTRODUCTION

CHAD is a home visiting program that has been in existence for over 20 years. Services provided are assessments, screenings, child development education, parenting education, parenting support and health support. Families receiving CHAD services must either meet a financial requirement or have had involvement with the Child Protective Services system. Families may receive services until the child turns 6 years of age. Prenatal services are provided only for pregnant girls who are less than 18 years of age. Families are referred to the program and generally receive monthly home visits. Visits can be made more frequently if determined to be in the best interest of the family.

### FACTS

In 2005 Kids Count Report, Tennessee ranked 43rd for overall child well-being, 45th for the percentage of low-birth-weight babies; and 48th for infant mortality rates.

### GOALS

1. Prevent child abuse and neglect.
2. Reduce infant and child mortality.
3. Promote family health.

### OBJECTIVES

- ✚ At least 90% of CHAD children will be up to date on their immunizations by age 2.
- ✚ At least 90% of CHAD children will be free from child abuse and/or neglect at the end of each fiscal year.
- ✚ At least 65% of CHAD mothers will wait at least 12 months after birth to become pregnant.

### Where Tennessee Is Today/Initiatives/Accomplishments

CHAD services are provided out of the local health departments in the 22 counties of the East and Northeast regions of Tennessee.

CHAD serves approximately 1,450 children and their families annually.

In fiscal year 2005, 93% of the CHAD children were up to date on immunizations.

In fiscal year 2005, 90% of the CHAD children were free from abuse and/or neglect.

### What Still Needs to be Accomplished

- ✚ Continue to work with Department of Children's Services streamlining eligibility, reporting and billing processes.

# CHILDHOOD LEAD POISONING PREVENTION PROGRAM

## INTRODUCTION

The Tennessee Childhood Lead Poisoning Prevention Program (CLPPP) began in 2001 as a health promotion effort to educate the Tennessee populace on the dangers of lead poisoning and an effort to track blood lead screening tests. Today, the Tennessee CLPPP has evolved into a multi-faceted, multi-partner, collaborative, and progressive program that provides all the necessary components to meet the Healthy People 2010 objective of eliminating childhood lead poisoning. Lead poisoning is considered to be the most serious environmental threat to children's health. Tennessee's population of children between the ages of 0-6 in 2005 was estimated to be 551,439. The total number of children under the age of 6 tested was 53,887. A total of 237 children's results were confirmed, resulting in 0.44% confirmed elevated blood lead levels (EBLLs) as percentage of children tested.

Lead poisoning remains a preventable environmental health problem in the United States. One of the specific national goals within Health and Human Service's *Healthy People 2010* initiative is the total elimination of BLLs  $\geq 10$   $\mu\text{g/dL}$  in children age 1-5 years old. Analysis of national data has shown that although childhood lead poisoning occurred in all populations, the risk is higher for persons having low income, living in older housing, and belonging to certain racial and ethnic groups. For all income levels, non-Hispanic black children have a greater risk of elevated blood lead levels (EBLL) than white children and the disparity is even greater for black children living in families below the poverty level. Children enrolled in Medicaid have three times the prevalence of elevated blood lead levels compared to non-Medicaid children. Blood lead levels are highest among young children (less than six years old) since their smaller body weight results in greater exposure per pound. Children living in poverty are at higher risk of lead poisoning than other children and more than a quarter of the very young children in Tennessee live in poverty.

There are several ways that young children may be exposed to lead and the most common is living in a housing unit built before 1950. According to the 1% Public Use Microdata Sample of the 2004 U.S. Census, there are approximately 354,515 pre-1950s housing units in Tennessee. These older homes are distributed across all regions of the state. Sixteen percent of these homes are in non-metropolitan areas, 11% are in the Knoxville area, 15% are in the Memphis metropolitan area, 13% are in the Nashville area, and the remaining 46% are in other metropolitan or combined metropolitan and non-metropolitan areas. The percentage of pre-1950s housing units in which children under age 6 live ranges from 9% to 13% across the metropolitan and non-metropolitan areas of Tennessee. Thirteen percent of the 46,000 older housing units in the Memphis metropolitan area include young children, as do 12% of the 40,000 pre-1950s housing units in the Nashville area. In non-metropolitan areas, 9.5% of 51,000 housing units include young children.

## FACTS

The Tennessee Childhood Lead Poisoning Prevention Program is responsible for the identification of children under 6 years of age who have elevated blood lead levels and to prevent childhood lead poisoning in Tennessee. This is accomplished by contracts with five entities including a major university, three metro health departments and the Department of Environment and Conservation. These contracted agencies provide screening and monitoring of blood lead levels as well as environmental investigations on property that is suspected of being the source of lead poisoning, health promotion and educational marketing.

## GOALS

1. To eliminate childhood lead poisoning as a major public health problem in Tennessee.
2. To implement a statewide child lead poisoning elimination plan in compliance with 2010 Healthy Initiatives.
3. To implement a statewide screening plan to target resources to children at highest risk of lead poisoning
4. Monitor and track all blood lead levels of children < 6 years old.
5. Assure proper follow-up of children with elevated blood lead levels (EBLLs).

## **GOALS** (continued)

6. Target resources to children and pregnant women at highest risk of lead poisoning.
7. Conduct primary prevention activities for pregnant women, parents and caregivers of children at high risk for lead poisoning.
8. Partner with community organizations and with other state/local agencies involved in environmental and child health activities.
9. Increase education/information to over 80% of children with unconfirmed EBLLs screened in health departments, or Women, Infant and Children (WIC) clinics and private provider clinics within 30 days of their initial screening.
10. Complete assessment of lead exposure risk of Tennessee Counties – including housing stock, populations, and industries; compile and publish data to support all primary and secondary prevention activities.

## **OBJECTIVES**

- ✚ By December 2006, implement and disseminate a Statewide Childhood Lead Poisoning Screening Plan to 95% of all private and public health care providers caring for children in the State of Tennessee.
- ✚ By June 30, 2007, increase screening of TennCare/Medicaid eligible children by 5%.
- ✚ By July 1, 2007, develop, and distribute Case Management Guidelines for children with Elevated Blood Lead Levels to all health care providers in the State of Tennessee.
- ✚ By December 30, 2007, implement the Geographic Information System (GIS) to analyze CLPPP data. This implementation process will ensure that targeted pre 1950 housing stocks will be identified and plotted to show the specific areas/zip codes with the highest number of housing stock built prior to 1950.
- ✚ By June 30, 2008, decrease by 10%, the EBLLs in children due to primary prevention activities targeting families of WIC participants.

## Where Tennessee Is Today/Initiatives/Accomplishments

Tennessee has formulated a 5-Year Elimination Plan and submitted it to the Centers for Disease Control and Prevention (CDC) for review.

Tennessee has a Surveillance System that collects data from all blood lead screenings and provides reports on a state wide as well as county and regional level indicating the areas where lead poisoning is occurring.

Tennessee CLPPP has reorganized the Advisory Committee to include partners with community organizations and other state and local agencies involved in child health activities.

The statewide Blood Lead Screening Guidelines have been accepted by the CDC and will be printed and disseminated to all child health care providers in the State of Tennessee.

The nurses in the Tennessee Department Of Health as well as the metro, regional and county health departments are providing follow-up care to children identified with elevated blood lead levels. Education and prevention activities are provided for women and families at greatest risk for lead poisoning.

## What Still Needs to be Accomplished

- ✚ Geographic Information System Mapping of the state to match the housing stock, populations and industries with the areas of highest risk of lead poisoning.
- ✚ Provide more educational material to the local health departments, private provider clinics, WIC clinics.
- ✚ Increase screening of Medicaid/TennCare eligible children

## CHILDREN'S SPECIAL SERVICES

### INTRODUCTION

Children's Special Services (CSS) is the federal Title V program, Children with Special Health Care Needs (CSHCN), offered by the Tennessee Department of Health, Division of Maternal and Child Health. CSS program covers Tennessee children from birth to 21 years of age who have a chronic physical illness, which may affect the independent functioning of a child. CSS has a care coordination component that assists the children and families with both medical and non-medical needs. Care coordination assists families to obtain a coordinated and comprehensive health program for the child. Medical services may include but not be limited to reimbursement for: assessments to evaluate the overall condition of the child, receiving services through TennCare, diagnostic assessment and tests, hearing aids, inpatient surgery, medical equipment, office visits, outpatient surgery, physical therapy, special formulas and foods, and many other medical needs. A family should apply through the local Health Departments or the Regional Health Offices. The family should provide information regarding the child's medical condition, information regarding family's financial situation, including income and medical bills, as well as any other health coverage.

### FACTS

CSS currently has 6,200 children enrolled. There are approximately 1,500 different diagnoses covered by the program.

In 2004, CSS Care Coordination was named as one of the top ten programs in the nation by the Maternal and Child Health Bureau and the Institute for Child Policy.





### GOALS

1. Continue working toward a complete comprehensive transition to adulthood services in all phases of a young adult's life; i.e. medical, transportation, housing, employment, religion, education, recreation. Currently there are no identified transitional resources within each community. CSS has started working on a transitional resource book that will help families identify those transitional resources within each community.
2. Children's Special Services implemented a new Family Service Plan that specifically addresses transitional needs of children 14 years and older who are preparing for adulthood. A transitional checklist was also developed to help assist care coordinators ensure all adult transitional needs are being addressed. These tools will continue to be incorporated into the recertification application process during the upcoming year. The number of children receiving a transitional plan will be monitored to determine the number of children needing transitional services.
3. Data reporting for CUBES will continue to be re-written in order that reliable data can be accessed at any time not only by Central Office staff but by field staff as well. CSS central office staff has worked and will continue to work closely with Patient Tracking Billing Management Information System (PTBMIS) staff to develop an automated system for standardized reporting for the CSS program.

## **GOALS** (continued)

4. CSS will continue to increase the percent of children with special health care needs who receive coordinated, ongoing, comprehensive care within a medical home. The CSS Family Service Plan (FSP) is initially developed on admission to the CSS program and is reviewed at six month or annual intervals and includes an assessment of well child visits and immunizations. The number of CSS Family Service Plans will be monitored and reported in the Patient Tracking, Billing Management Information System (PTBMIS) and will be tracked by CUBES.
5. CSS will continue to identify those children with special health care needs who might be eligible or have access to other health insurance coverage. CSS will work closely with MCOs and other insurance companies to ensure all service needs of the child are being met.
6. CSS will continue to identify those children with special health care needs whose community-based service systems are organized so they can use them easily as well as identifying those community-based service systems that are not organized and easily obtainable. The number of families reporting will be entered into PTBMIS and reported data will be entered into the CUBES reporting tool.

## **OBJECTIVES**

-  All Family Service Plans completed will be entered into PTBMIS and monitored on a monthly basis from the information obtained in the CUBES reports.
-  Those children who have or do not have easy access to community-based services will be entered into PTBMIS and monitored on a monthly basis from the information obtained in the CUBES reports.
-  The children 14 years or older who receive a transitional service plan will be entered into PTBMIS and monitored on a monthly basis from information obtained in the CUBES reports.
-  All program data including the number of children served, the number of home visits by care coordinators, the number of school visits on behalf of the child, and the number of



phone calls on behalf of the child by all staff, will continue to be entered into PTBMIS and monitored on a monthly basis from the information obtained in the CUBES reports.

### Where Tennessee Is Today/Initiatives/Accomplishments

A newly created CSS Family Service Plan has been established directly related to children 14 years and older who are in need for transition to adulthood. A transitional checklist was also developed to help assist care coordinators to ensure that all adult transitional needs are being addressed. Those transitional needs will include; housing, employment, education, adult medical care, religion, transportation, recreation, shopping for personal needs, as well as other needs for a child transitioning to adulthood. The program now has a newly developed policy manual that is now more user-friendly with updated program information related to today's programmatic activities.

Currently working toward changing the make-up of the CSS Advisory Board from being all physicians to consumers, parents and other professionals. Physicians served well in the day when direction for medical need was needed. Now, the program serves so much more within the community looking at the child as having many complex issues outside of just medical needs. The program now embraces non-medical needs for not only the child but for the entire family. Therefore, other professionals and consumers with a variety of different backgrounds and experiences will now serve very beneficial in setting the direction for the next 10 years.

### What Still Needs to be Accomplished

- ✚ The program will continue to develop strong working relationships with TennCare and other insurance companies to ensure the medical needs of the child are being met. Given the upcoming cuts in funding by the federal government, it will be vital for CSS to continue to look at other payment resources. CSS should continue to apply for grants associated with funding for services in order to maintain the fiscal integrity of the program.
- ✚ Continue to work with local communities to ensure all phases of adulthood have been made available to all children who are in need of adult transitioning. In establishing a transitional resource book, the program must realize the limits of those resources and the changes that will occur, which will create a need to continually look at updating the transitional resource book.

## COMMUNITY PREVENTION INITIATIVE

### INTRODUCTION

In 1996, when the Community Prevention Initiative (CPI) was implemented, the program targeted the reduction of the four major self-destructive behaviors of children and youth – substance use/abuse, pregnancy, violence, and school drop-out. The program addressed the precursors to the targeted self-destructive behaviors in children (ages 0-12) and their families. To achieve the prevention of these precursors identified as high risk behaviors, the Community Prevention Initiative (CPI) focused on reducing risk factors and enhancing protective factors through community-based prevention programs.

During the 2005-2006 contract year, the age range of participants has been changed from 0-12 to 8-16, and CPI began to focus more specifically on the reduction of alcohol and drug use/abuse and teen pregnancy/risky sexual behavior. Counties were selected to receive the revised contract based on the data on alcohol and drug use and abuse and teen pregnancy. Request for Grant Proposals (RFGP) were released statewide to selected counties on July 27, 2005. Fifty-one (51) programs in 29 counties will be funded.

### FACTS

The Community Prevention Initiative Program (CPI) targeted the risk factors that were precursors of self-destructive behaviors and targeted the protective factors that would empower children 0-12 and their parents to make appropriate decisions.

Beginning in January, 2006, counties were selected to receive funding based on the data for alcohol and drug use and abuse, and teen pregnancy. Risk and protective factors that affect both self-destructive behaviors were targeted.

### GOALS

1. To reduce alcohol and drug use and abuse and teen pregnancy in young people between the ages 8-16 in selected counties.
2. To inform, educate, and empower young people to change their behaviors that lead to alcohol and drug use and abuse and teen pregnancy.

### OBJECTIVES

- ✚ Annually, 100% of the CPI programs will provide services to the most at risk youth ages 8-16 and their families based on the specific admission criteria identified by each program provider.
- ✚ Annually, at least 85% of the programs will provide program services and activities that will document a positive change in behaviors that will lead to alcohol and drug use and abuse and teen pregnancy.
- ✚ Annually, 100% of the CPI program providers will participate twice a year in the evaluation of the program.
- ✚ Annually, 85% of the CPI programs will document change in behavior in the targeted population as a direct result of participation in the program through the achievement of performance measures designed to document the behavior changes.
- ✚ Annually, 85% of the CPI programs will achieve the targeted population as identified in the goal statement.

**OBJECTIVES** (continued)

- ✚ Annually, 100% of the CPI program providers will utilize effective, evidence-based programs to address the identified problem behaviors.

**Where Tennessee Is Today/Initiatives/Accomplishments**

**Community Prevention Initiative**

From 1996-2004, the program has served over 84,934 children, 20,424 families (all parents/caregivers/children in the family were targeted), and 5,837 parents (programs targeted specific parents of children enrolled in the programs). The target population for July 2005-December 2005 has not yet been compiled.

From 1999 through 2004, an average of 88.2% of the programs achieved one or more of their goals and objectives which documented changes in the behavior of the participants who received services. The range was 95% to 82% for the five years of operation.

From 1996-2000, the CPI program participated in a state-wide evaluation of prevention programs conducted by the Department of Anthropology at The University of Memphis. The evaluation was funded by the Bureau of Alcohol and Drug Abuse Services.

Two surveys were field-tested in 1996-1997: Children's Self Concept Attitudinal Inventory (SCAT), administered to the children, and the Family Environment Scale (FES), administered to the family members. During the time that the surveys were being used, the SCAT surveys reported statistically significant improvement in the following scales: student-teacher relationships, school environment, basic social values, advanced moral values, self-esteem, perception of family cohesiveness, and attitude toward school. The FES surveys reported statistically significant improvement in the following scales: cohesiveness, expressiveness, conflict, independence, achievement orientation, active recreational orientation, organization, and control. The Bureau terminated the funding for the surveys in 2000. Further description of these surveys can be obtained on the internet. The SCAT is available through the National Clearinghouse for Alcohol and Drug Information (NCADI).

**What Still Needs to be Accomplished**

- ✚ On-going: To continue to evaluate the effectiveness of the program through on-site monitoring completed by each regional Community Prevention Initiative (CPI) Coordinator; local evaluation reports based on the measurable goals and objectives due January 31 for a semi-annual report covering July-December and reports due July 31 for an annual report covering July-June; and a Program Performance Review and Evaluation completed by the CPI Coordinator based on the program requirements and the measurable goals and objectives.
- ✚ On-going: To continue to provide technical assistance to the Regional Prevention Coordinators and the program providers to ensure that the programs are achieving their goals and objectives and are the most effective programs possible.
- ✚ On-going: To ensure that all Community Prevention Initiative programs continue to use effective, evidenced-based programs.
- ✚ On-going: To address the long-term goals by reducing alcohol and drug use and abuse and teen pregnancy.

# COORDINATED SCHOOL HEALTH (CSH)

## INTRODUCTION

Tennessee is one of 23 Center for Disease Control and Prevention (CDC) Coordinated School Health funded partner grant recipients. The Department of Health's Coordinated School Health (CSH) office works cooperatively with the Tennessee State Department of Education, Tennessee State Board of Education, State Universities, Local Education Agencies, School Health advocacy groups, and other interested parties in advocating and advancing the CDC's Coordinated School Health eight (8) component model in Pre-K through grade 12. The State School Nurse Consultant provides guidance to school nurses and school administrative staff across the state on the medical needs of students to include asthma, diabetes, medication administration, and other chronic diseases. Project TEACH nurse consultants, located in eight (8) regional Health Departments, interact directly with schools in accessing and coordinating medical services and Medicaid reimbursement for special needs students.

## FACTS

Almost two-thirds of all deaths in the United States and a large percentage of all illnesses, suffering, and financial costs are due to heart disease, cancer, and stroke. Three health risk behaviors contribute enormously to these major causes of death: tobacco use, poor dietary patterns, and physical inactivity. These personal behaviors have several common traits: they are often established in youth and extend into adulthood; they are interrelated; and they contribute to poor health, poor education, and poor social outcomes. These major health risk factors are also all preventable. Additionally, other risky behaviors such as alcohol and substance abuse, unsafe sex, violence, and suicide have a disproportionately higher incidence rate in youth.

Schools have an important role in helping to stem this tide of risky behavior in youth. Nearly all young people are enrolled in schools, and schools are often the only place where they have access to reliable health information as well as constant interaction with well-prepared professionals who can provide consistent reinforcement of positive behaviors.

## GOALS

1. The goal of the CSH program is to enhance student's academic performance, health, and lifetime wellness by addressing coordinated school health initiatives that improve health education, physical education, health services, counseling and psychological services, nutrition services, a healthy school environment, health promotion for staff, and family/community involvement in school health activities.
2. The goal of Project TEACH is to improve the capability of local school systems to access third party payers for medical services delivered to special needs students while in school by:
  - a. Identifying students with special healthcare needs in the school system, and providing continuum of care
  - b. Assisting school systems in obtaining necessary medical equipment for special needs students
  - c. Assuring the proper agency or insurance pays for treatment and equipment
  - d. Coordinating other services

## OBJECTIVES

- ✚ Assist the Department of Education in hosting 11 Physical Activity and Nutrition Training to Schools (PANT) Institutes across Tennessee by March 2007.
- ✚ Develop a School Health website by June 2007.
- ✚ Compile a consolidated YRBS report showing trend data by December 2007.

OBJECTIVES (continued)

- ✚ Revise the *Guidelines for Use of Health Care Professionals and Health Care Procedures in a School Setting* to incorporate current state and federal laws by December 2006

**Where Tennessee Is Today/Initiatives/Accomplishments**

Conducted 2005 Youth Risk Behavior Survey (YRBS).

Funded and created a Coordinated School Health office in the Department of Health.

Developed and conducted Physical Activity and Nutrition Training to Schools (PANTS) for the professional development of school staff.

Setting up or updating Resource Libraries at Institutions of Higher Education which are training future wellness and health educators.

Provided one-time gift to school systems across Tennessee to enhance CSH and physical activity initiatives.

Publishes updates and answers queries on School Health Guidelines for Healthcare in schools.

Works collaboratively with Public Health and Department of Education nutritionists on Body mass Index (BMI) and obesity issues in children.

CSH activities in West Tennessee through a grant to LeBonheur Community Outreach.

Achieved “weighed data” on YRBS. Enough school systems and enough students across Tennessee participated in the YRBS to have a statistically valid survey. This allows school systems to use the data in projecting similar trends locally.

Entered into an interagency agreement with the State Department of Education; implemented a quarterly interagency meeting to bring together personnel from the various agencies providing services to children in schools.

Conducted PANTS Health Institutes at 7 regional locations across the state, focusing on nutrition, obesity, the State Board of Education Physical Activity Policy, the School Vending law, other legislative updates and the Federal Wellness Policy.

Provided CATCH curriculum (incorporating Physical Activity in classroom settings) to 5 state universities.

Conducted Wellspring II conference and awarded \$10,000 to 10 non-pilot CSH schools (\$100,000 total) to enhance their CSH program. Provided the 10 Tennessee CSH pilot sights with a total of \$110,000 to expand their programs.

Provides clarification and answers questions by school nurses and other school/district staff on the provision of healthcare procedures in schools.

Conducted briefings on the impact of obesity in children, how to initiate BMI screenings, and ways to improve physical activity and nutrition in schools.

Monitors LeBonheur CSH grant and fosters integration of CSH activities into other LeBonheur Community Outreach projects; provides increased school based healthcare and health promotion to students and parents of disadvantaged ethnic, social and economic groups.

**What Still Needs to be Accomplished**

- ✚ Compile a consolidated Youth Risk Behavior Survey (YRBS) report to show trend data on Tennessee students (1999, 2003, and 2005). Additionally, to develop one-page fact sheets on areas of interest and other data reports to be distributed to interested school systems, parents, and advocacy groups.

- ✚ Working in coordination with the State Department of Education, rewrite of the state’s Wellness curriculum to reflect current trends.

- ✚ Working in coordination with the State Department of Education, rewrite of the state's Physical Education curriculum to reflect current trends.
- ✚ Increase the number of PANTS Health Institutes offered for professional development to school staff and offer them in more geographical regions throughout the state.
- ✚ Develop a School Health website to be placed on the Department of Health's webpage to allow better advertisement of school health initiatives, to make available a comprehensive information source for answering common school health questions, and to provide customers (teachers, district staff, parents, etc.) an additional mechanism to identify professional development needs and programmatic shortfalls.
- ✚ Incorporate current state and federal laws into the next revision of the School Health Guidelines for Healthcare in schools.
- ✚ Expand collaboration between the Department of Health, Department of Education, and other agencies and advocacy groups to address chronic health issues affecting Tennessee's children.

# DIABETES PREVENTION AND CONTROL PROGRAM

## INTRODUCTION

The *mission* of the Tennessee Diabetes Prevention and Control Program (DPCP) is to provide a mechanism by which public health diabetes programs, health care providers and professionals, and governmental and community agencies receive national and statewide diabetes surveillance data; diabetes prevention and management strategies and materials; and federal administrative policies and legislation guidance to improve and enhance public and private health programs and policies for effective diabetes prevention and control. Further, the Diabetes Control Program strives to reduce the burden of diabetes in Tennessee by the use of strategies that focus on community interventions, health communications, and health care systems.

## FACTS

In Tennessee, the prevalence of diabetes among the adult population was 8.4% in 2004, a 45% increase from 5.8% in 1990, resulting in the 3rd worst state ranking among all 50 states. Based on the diabetes prevalence rate of 8.4%, approximately 375,000 adult Tennesseans were diabetic in 2004.

In 2002, more than 60,000 Tennesseans received hospital services for diabetes and diabetes related diseases or conditions. These services resulted in \$1.2 billion dollars in hospitalization costs. Diabetes was also responsible for more than 1,700 deaths of Tennesseans in that same year.

Diabetes disproportionately affects African Americans. From 2002 through 2004, the diabetes death rate in Tennessee was 2.3 times higher for African Americans (63 deaths per 100,000 population per year) than for Whites (27 deaths per 100,000 population).

While the death rates for heart disease, cancer and stroke are the top three causes of death in Tennessee, the diabetes mortality rate has increased steadily over the past two decades.

## GOALS

1. Increase the awareness of the diabetes prevention and control opportunities among the public, the health care and business communities, and people living with diabetes.
2. Use statewide public health projects to reduce diabetes-related problems.
3. Enhance the current diabetes surveillance system to more accurately document the burden of diabetes in Tennessee and to evaluate program success.
4. Provide surveillance documentation related to the national indicators for diabetes through data collection, assimilation, and dissemination efforts to Tennesseans.
5. Reduce the health disparities for high-risk populations (i.e. racial/ethnic groups, seniors and underserved rural populations) with respect to diabetes.

## OBJECTIVES

- ✚ By 2010, reduce the statewide diabetes age-adjusted inpatient hospitalization rate from 149/100,000 in 2002 to 107/100,000.
- ✚ By 2010, reduce the black (328/100,000) - white (117/100,000) difference in diabetes age-adjusted inpatient hospitalization rate from 211/100,000 in 2002 to 105/100,000.
- ✚ By 2010, increase quarterly Hemoglobin A1C screenings for persons with diabetes to 75%



## Where Tennessee Is Today/Initiatives/Accomplishments







Tennessee Diabetes Advisory Council and its partners, a diverse group of stakeholders, have completed the Performance Improvement Plan which will be utilized to identify areas for improvement and assist in the building of coalitions.

The Tennessee Diabetes Advisory Council and its partners have also completed a Diabetes Strategic Plan which will be utilized to establish the system's direction, planning of objectives, and direct and indirect responsibilities of the diabetes prevention program.

The Diabetes Advisory Council developed a medical record for physicians to ensure quality and standardized care for patients with diabetes.

The Diabetes Prevention and Control Program provides support to the Community Health Centers across the state currently participating in the Diabetes Chronic Disease Care model also known as Collaboratives. Collaboratives is a national effort to improve health outcomes for all medically underserved people with chronic diseases. The Health Disparities Collaboratives helps health centers improve functional and clinical outcomes and eliminate health disparities and calls for organizations to change the way they deliver care. In Tennessee there are fourteen community health centers participating in the Collaboratives.

## What Still Needs to be Accomplished

-  Increased awareness among individuals and health care providers about the importance of diabetes standards of care.
-  Implementation and use of evidence-based care models and guidelines.
-  Additional funding to implement new initiatives and continued efforts to reduce the burden of diabetes.
-  Build network among diabetes stakeholders statewide to increase coordination and collaboration.
-  Complete and disseminate a diabetes burden document to State/local health departments, health professionals, legislators, and the executive branch.
-  Develop surveillance system to monitor diabetes status in communities to track the status of diabetes care.



## EARLY CHILDHOOD COMPREHENSIVE SYSTEMS (ECCS)

### INTRODUCTION

Early Childhood Comprehensive Systems (ECCS) establishes partnerships and collaborations which support families and communities in their development of children that are healthy and ready to learn at school entry. This goal is achieved by addressing the following service components 1) access to health insurance and medical homes; 2) mental health and social-emotional development; 3) early care and education/child care; 4) parenting education; and 5) family support. Public and private agencies coordinate their efforts to assure availability of a broad range of non-duplicated services regarding these initiatives.

### FACTS

ECCS programs bring partners to the table to develop a comprehensive system of care for children birth to five years of age.

### GOALS

1. To recruit a diverse committee of stakeholders to assist in developing and implementing a statewide system of care for children up to five years of age.
2. To develop a state plan that addresses the 5 service components and:
  - a. focuses on the results the ECCS Planning process targets to achieve;
  - b. identifies partners and their contributions;
  - c. incorporates the involvement of families and local communities;
  - d. is based on a needs assessment/ environmental scan (can use existing assessments for some or all areas); and
  - e. contains an evaluation plan and a core set of indicators of early childhood well-being.
3. To coordinate the implementation of the comprehensively developed plan.

### OBJECTIVES:

- ✚ Recruit all the major public and private agencies that focus on early childhood issues to be a part of the ECCS Advisory Committee by December 2006.
- ✚ Summit Tennessee's formal ECCS Implementation Plan to the National Maternal and Child Health Bureau by June 30, 2006.
- ✚ The ECCS Program Director will participate on the advisory committee of at least 5 -10 federal, state or local agencies that focus on early childhood issues by June 2007.

### Where Tennessee Is Today/Initiatives/Accomplishments

Tennessee received a planning grant in July 2003.




By end of November 2004, had recruited and trained committee members including Governor's staff, sister state department staff, community based organizations, faith-based organizations, and advocacy groups and parents.

By end of November 2005, started drafting the formal state plan.

Accomplishments:

- 1) Recruited, oriented and trained an 87 member committee and divided into 4 small groups that focused on the service components.
- 2) Small groups met monthly and entire committee met quarterly during the last 16 months to work out specific action steps for each service component.

### What Still Needs to be Accomplished

-  Complete the State Implementation Plan by June 2006.
-  Submit the plan for funding consideration by end of June 2006.
-  Begin implementation efforts by August 2006.

## EARLY & PERIODIC SCREENING, DIAGNOSIS & TREATMENT (EPSD&T)

### INTRODUCTION

EPSD&T, recently renamed TENNderCare, is a program administered by the Bureau of TennCare to provide well-child screenings to children and youth from birth to 21 years of age. Screenings are provided on a periodicity schedule developed by the American Academy of Pediatrics. Screenings are provided in all 95 local health departments. The Managed Care Organizations (MCOs) are required to contract with local health departments to provide this service.

Through a contract with the Bureau of TennCare, the Department of Health began a TENNderCare Community Outreach program in July 2004. The Community Outreach program is a grass roots campaign to educate and inform TennCare-enrolled children and their families, TennCare providers and community members about the benefits of screenings by face-to-face contacts through home visits and meetings held at schools, churches, physician offices, health fairs and other public arenas.

In May 2005, the Department of Health established an outreach call center to inform the parents of TennCare-enrolled children about available services, why preventive care is important, and where to obtain services. Operators also assist parents in making appointments for screenings with primary care providers or local health departments and help schedule transportation, if required.

### FACTS

In 1998, the State of Tennessee entered into a consent decree in federal court. The decree required that the State achieve a screening rate of eighty percent of all TennCare-eligible children by fiscal year 2002.

In an effort to reach the eighty percent screening rate, TennCare required Managed Care Organizations to contract with local health departments to provide screenings.

In July, 2001, the local health departments once again started to provide screenings.

Currently, the Department of Health, through local health department clinics, provides screenings to ten percent of the approximately 600,000 TennCare-eligible children.

### GOAL

To assist the Bureau of TennCare to reach the screenings target of eighty percent as established by the Consent Decree. This goal is met through outreach activities and by providing screens in the local health departments.

### OBJECTIVES

#### Community Outreach:

- ✚ The Community Outreach program will contact the families of newly enrolled or recertified children who do not show a telephone in TennCare file, but they have valid addresses beginning May 1, 2006.
- ✚ Throughout 2006, the Community Outreach staff will continue to conduct outreach activities outlined in the regional TENNderCare Outreach proposals submitted to and approved by Central Office.
- ✚ All of the Metro regions have been monitored to ensure that services are provided as outlined in their contracts. Monitoring will also be done in the rural regions to ensure the goals and objectives outlined in their TENNderCare Outreach Proposals are being accomplished.

## OBJECTIVES (continued)

### Outreach Call Center:

- ✚ The Call Center will begin to mail contact cards to the families of all newly enrolled or recertified children who the call center operators were unable to reach by telephone. This will begin approximately September 1, 2006.
- ✚ The Call Center will begin to mail appointment reminder cards to the families of all newly enrolled or recertified children who the call center operators were unable to assist in making appointments. This will begin approximately September 1, 2006.
- ✚ The Bureau of TennCare adds or recertifies approximately 3,500 children per week. The expansion of the call center will allow attempts to be made to contact all of these children. This expansion required the addition of 15 operators. Eight of these new operators are in place and trained. Four have been hired and will begin their training on August 7, 2006. Interviews for the remaining operators are ongoing.

## Where Tennessee Is Today/Initiatives/Accomplishments

### Screenings

### Community Outreach

### Outreach Call Center

64,682 screenings were done in the 95 local health departments during calendar year 2005.

In all thirteen regions, the Community Outreach staff completed community assessments and implemented plans on how to reach TennCare children, families and providers in their community to aggressively and effectively inform them about the benefits of screenings. Community Outreach staff have developed relationships with traditional and non-traditional partners to educate professionals and distribute information to the public about the importance of screenings.

During calendar year 2005, the TENNderCare call center made 74,672 calls to the parents of TennCare-eligible children. Operators informed the parents of 20,882 TennCare-enrolled children about the importance of screenings. As a result of these conversations, the call center staff scheduled 4,581 screenings for TennCare-enrolled children.

## What Still Needs to be Accomplished

- ✚ Screenings: This service is now an integral part of local health clinics and will continue to be offered to eligible families who choose to receive services for children in the health departments.
- ✚ Community Outreach: Continue to reach TennCare eligible children and their families to educate and inform them about the benefits of screenings. Future actions include targeting teens to increase EPSDT rates and to educate women who are pregnant or thinking of becoming pregnant about the benefits of prenatal and infant care.
- ✚ Outreach Call Center: Call Center Operations: Continue to be reviewed and modified to provide greater efficiency and improved outcomes. Future actions include the completion of the expansion of the call center in an attempt to contact the families of all TennCare eligible children, teens, and prenatals.

# EMERGING INFECTIONS PROGRAM

## INTRODUCTION

The Tennessee Emerging Infections Program (EIP) is a collaborative project funded by a Center for Disease Control (CDC) Cooperative Agreement to conduct surveillance and applied public health research on emerging infectious diseases. It works closely with CDC staff and nine other state health department based EIPs. Tennessee was awarded its first EIP Cooperative Agreement in December 1998. Since that time it has become an integral part of the EIP network.

## FACTS

The Tennessee EIP conducts four major surveillance and applied public health research activities.

Active Bacterial Core Surveillance (ABCs) – ABCs performs active laboratory-based surveillance for *Neisseria meningitidis*, group A & B streptococci, *H. influenzae*, and *S. pneumoniae* in 11 urban and suburban counties. It performs vaccine effectiveness studies on new vaccines (Prenar and Menactra).

Tennessee Unexplained Encephalitis Study – this project has identified and evaluated >500 cases of encephalitis since its inception in 1999. A detailed research laboratory evaluation is conducted on each enrolled patient.

FoodNet – this project conducts active laboratory-based surveillance state-wide for foodborne pathogens: *Salmonella*, *Shigella*, *Campylobacter*, *Yersinia*, *Listeria*, *E coli* O157, *Cryptosporidium* and *Cyclospora*. It has conducted numerous case-control studies including the evaluation of risk factors for infant *Salmonella* and *Campylobacter*; population telephone surveys on the frequency of gastrointestinal illness and food preparation and eating habits; and an evaluation of bacterial contamination of retail meats.

Respiratory Diseases activity – this new program conducts active surveillance for adult and pediatric influenza hospitalizations. It is beginning a vaccine effectiveness study evaluation of influenza vaccine in children aged 6-23 months.

## GOALS

1. To be a national public health resource for the surveillance and study of emerging infections
2. Engage in activities that go beyond the usual health department functions
3. Address important issues
4. Undertake well-suited activities
5. Maintain flexibility
6. Provide training to students, residents and fellows interested in public health
7. Develop and evaluate public health practice activities
8. Emphasize prevention

## OBJECTIVES

- ✚ Conduct active laboratory-based surveillance in all hospitals in 11 counties each year for *Neisseria meningitidis*, group A & B streptococci, *H. influenzae*, and *S. pneumoniae* with at least quarterly audits.
- ✚ Conduct active laboratory-based surveillance in all Tennessee acute care hospitals for *Salmonella*, *Shigella*, *Campylobacter*, *Yersinia*, *Listeria*, *E coli* O157, *Cryptosporidium* and *Cyclospora* with at least quarterly audits.
- ✚ By 12/31/06, enroll at least 25 new patients in the Tennessee Unexplained Encephalitis Study.
- ✚ Enroll at least 20 patients in the inactivated influenza vaccine effectiveness study by 12/31/2006.

## Where Tennessee Is Today/Initiatives/Accomplishments

Completion of a vaccine effectiveness study of Prevnar, the new pneumococcal vaccine, showing that the vaccine is very effective against the strains contained in the vaccine.

Evaluation of screening vs. risk-based approach to prevention of early-onset neonatal group B streptococcal sepsis. The screening approach was more effective and national guidelines have been changed. A follow up study is now underway.

Successful evaluation of >500 patients with encephalitis demonstrating the etiology in ~50% of patients.

Completion of a multiyear burden of diarrhea study utilizing four years of population survey data.

Completion of the *Salmonella/Campylobacter* case-control study that showed that infants are at increased risk of infection if they ride in shopping carts in the grocery store.

Culturing of retail meats (ground turkey and beef, chicken breasts and pork chops) showing a >90% rate of contamination with fecal organisms such as enterococci.

Evaluation of two independent pediatric influenza hospitalization surveillance systems using the capture-recapture methodology.

Additional staff in the Department of Health available to respond to new and emerging infectious diseases.

## What Still Needs to be Accomplished

- ✚ Enrollment of cases and controls in vaccine effectiveness studies on the inactivated influenza vaccine in children aged 6-23 months and for the new meningococcal vaccine (Menactra) in 11-19 year olds.
- ✚ Evaluation of the relationship between Menactra and Guillain-Barre Syndrome.
- ✚ Description of the first 500 patients enrolled in the Unexplained Encephalitis Study.
- ✚ Improve the timeliness of molecular testing of foodborne pathogens.

# ENVIRONMENTAL EPIDEMIOLOGY

## INTRODUCTION

The Environmental Epidemiology Program (EEP) within Communicable and Environmental Disease Services (CEDs) is responsible for environmental public health activities that relate to chemical exposures and pollution. Under a Cooperative Agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR), EEP performs investigations at Superfund and other hazardous waste sites. EEP answers environmental public health questions in formal, science-based, and peer-reviewed documents. These documents often provide responses to technical questions raised by the Tennessee Department of Environment and Conservation (TDEC) or the United States Environmental Protection Agency (EPA). EEP is responsible for environmental public health investigations in all 95 Tennessee counties.

EEP provides technical assistance to Environmental Epidemiologists in the 13 regional health offices. These regional Environmental Epidemiologists, in turn, provide assistance to EEP for site-related issues in their regions. They also assist during EEP's public meetings. We are working together to implement the new Cancer Cluster Protocol and to design Environmental Public Health Tracking applications for environmentally-related chronic diseases. EEP provides quality environmental public health community engagement activities and education ranging from intense public meetings to friendly neighborhood thermometer exchanges. In addition, EEP remains prepared to provide chemical expertise in emergencies or terrorist activities involving known and unknown chemicals.

## FACTS

EEP has a director and four staff members, three of whom are funded under the Cooperative Agreement with ATSDR. One position is funded by CDC's Public Health Emergency Preparedness grant.

EEP has provided technical assistance to the TDEC Divisions of Superfund, Solid Waste Management, Air Pollution Control, and Water Pollution Control; Tennessee Wildlife Resources Agency; Departments of Agriculture and General Services; and to over 500 concerned citizens each year. EEP routinely works with regional health departments and other groups to inform and educate the public.

## GOALS

1. Prevent ongoing and future exposures of hazardous chemicals and resultant adverse health effects.
2. Assist other agencies, such as TDEC, with public health issues originating with chemical and pollution exposures.
3. Implement public health tracking of potentially environmentally-related chronic diseases and correlate it with environmental data by working with the regional Environmental Epidemiologists, the Office of Policy, Planning, and Assessment, and Tennessee Department of Environment and Conservation.
4. Implement, evaluate, and improve the Disease Cluster Protocols.

## OBJECTIVES

- ✚ Determine all completed routes of exposure to hazardous chemicals, the resultant public health hazard, and make recommendations to mitigate exposures in a certified Public Health Consultation or Assessment.
- ✚ Publish information about any possible correlations between chronic diseases and environmental pollution in a yearly, peer-reviewed report.



✚ Record statistical and other information on all disease cluster investigations on a yearly basis.

### Where Tennessee Is Today/Initiatives/Accomplishments

#### Public Funding

EEP successfully completed our first 5-year Cooperative Agreement with ATSDR in 3/06 and has successfully competed for a second 5-year Cooperative Agreement, with annual funding of \$238,000.

#### Publications

EEP has provided scientifically-based, peer-reviewed written assistance at more than 35 different locations with significant environmental public health issues.

#### Environmental Justice

EEP has worked with the Memphis-Shelby County Health Department on complex environmental justice issues in the North Hollywood and Cypress Creek areas of Memphis.

#### Health Tracking

EEP has worked to promote environmental public health tracking. Tennessee was the only state without CDC Health Tracking funding chosen to present at the Annual Environmental Public Health Tracking Conference sponsored by ASTHO.

#### Evaluations that Count

EEP is charged with evaluating the environmental public health impacts of new, proposed Superfund sites. These sites, considered the most potentially hazardous in the United States, require specialized investigation. For example, two three-part *Public Health Assessments, Smalley-Piper, Collierville, Shelby County and Loudon County Hazardous Air Pollutants* were recently released to address chromium metal contamination affecting a growing town's drinking water supply and air pollutants released from an industrial park.

#### Talented Staff

EEP has been re-invented, with the successful hiring of a staff with diverse expertise. Fields include toxicology, chemistry, environmental science, public health education, biology, geology, and environmental sociology. All staff work together as a team.

#### Accessibility

EEP provides telephone, email, written, and face-to-face assistance to more than 500 people a year with environmental public health concerns.

#### Statewide Expertise

EEP has been instrumental in creating a team of regional Environmental Epidemiologists who work with their health officers and other epidemiologists. These regional environmental epidemiologists work independently, with each other, and with EEP on a variety of environmental health issues such as the completion of a statewide Cancer Cluster Protocol in conjunction with the Cancer Registry and the successful exchanges of mercury thermometers in Knoxville, East, Northeast, Chattanooga, Southeast, Nashville, and the Mid-Cumberland Regions

### What Still Needs to be Accomplished

- ✚ Continue to receive ATSDR Cooperative Agreement funding and meet ATSDR requirements. Since the Cooperative Agreement is a capacity-building grant, we must plan to supplement EEP with state funding.
- ✚ If EEP is to be successful in developing an environmental public health tracking program, in conjunction with TDEC, the regional health offices, the Office of Policy, Planning, and Assessment, and other agencies, a consistent source of state funding is needed.

## EPIDEMIOLOGY AND LABORATORY CAPACITY

### INTRODUCTION:

The Epidemiology and Laboratory Capacity (ELC) Cooperative Agreement is a federal cooperative agreement that assists States in improving surveillance for, and response to, naturally occurring infectious diseases and drug-resistant infections. It achieves this by (1) strengthening epidemiologic capacity; (2) enhancing laboratory practice; (3) improving information systems; and (4) developing and implementing prevention and control strategies. ELC activities complement and are closely coordinated with the Emerging Infections Program (EIP) and the Public Health Emergency Preparedness cooperative agreements.

### FACTS

Tennessee has been a recipient of the ELC grant since 1997. The total amount of money awarded to Tennessee in 2006 from the ELC grant was \$604,389. This money included salary support for ten positions. Funding also assisted in the purchase of laboratory equipment/supplies and hardware/software purchases for the information system infrastructure.

### GOALS

Improve the health of Tennesseans by:

1. Identifying and monitoring the occurrence of known infectious disease of public health importance.
2. Detecting new and emerging infectious disease threats.
3. Identifying and responding to disease outbreaks.
4. Using public health data for priority setting, policy development, and for prevention and control.

### OBJECTIVES

- ✚ Train information technology staff and epidemiologists in OMS version 1.2 by February 28, 2007.
- ✚ Develop a module within the Outbreak Management System (OMS) version 1.2 for H5N1 (avian influenza) by June 30, 2007.
- ✚ Develop a trading partner agreement to receive and process electronic laboratory reports from a major clinical microbiology laboratory by December 31, 2007

## Where Tennessee Is Today/Initiatives/Accomplishments

### Invasive Methicillin-resistant *Staphylococcus aureus* (MRSA)

This condition was made reportable in July 2004. Tennessee is one of a very small number of states that tracks this condition that causes significant burden of disease. In fact, invasive MRSA is now the third most common reportable communicable disease in Tennessee (after chlamydia and gonorrhea). The Tennessee Department of Health (TDH) has emphasized appropriate diagnosis and treatment (e.g., Spider-bite? Think MRSA!), and prevention of infection and transmission of MRSA in healthcare settings.

### Drug-Resistant *Streptococcus pneumoniae* (DRSP)

Tennessee had the highest incidence of invasive DRSP in the nation. We have been pleased to see a reduction in the incidence of all invasive *S. pneumoniae*, and in particular, DRSP among children aged less than 5 years following the introduction of the conjugate pneumococcal vaccine (Prevnar) and our community campaign promoting appropriate antibiotic use. We have also documented a substantial decrease in racial disparities in invasive pneumococcal disease.

### **Campaign to Promote Appropriate Antibiotic Use**

In 2004-2005, the Tennessee Appropriate Antibiotic Use Coalition (TAAUC) partnered with Lamar Outdoor Advertising and developed a media campaign that involved the posting of 150 TAAUC "Snort, Sniffle, Sneeze: No Antibiotics Please" billboards in Davidson and Knox counties. The TAAUC also collaborated with the Tennessee Radio Network and Blue Cross Blue Shield of Tennessee, to support forty 30-second public service announcements to air throughout the state of Tennessee.

### **Outbreak Management System (OMS)**

Tennessee is the first state to implement the OMS and has provided feedback to software developers; many of our requests are being incorporated into new software releases. OMS was used successfully to manage data from a large, complex outbreak of tuberculosis in Memphis with over 200 contacts. OMS will also be used to manage cases and contacts of avian influenza during phases 3, 4 and 5 of a pandemic.

### **Foodborne Outbreak Detection and Laboratory Diagnosis**

Tennessee has piloted the use of courier- or mail-delivered stool collection kits to augment traditional methods of stool collection during foodborne disease outbreak investigations in an effort to more frequently determine the cause of an outbreak. These stool collection kits have been well accepted and numerous other states are now using similar kits. Pulsed-field gel electrophoresis (PFGE) is a genetic fingerprinting technique that has revolutionized the nature of foodborne disease outbreak recognition and investigation. A new molecular microbiologist funded by the ELC cooperative agreement, has expanded the number of pathogens that can be fingerprinted.

### **National Electronic Disease Surveillance System (NEDSS)**

Tennessee was one of two pilot sites for the implementation of Center for Disease Control's new NEDSS Base System (NBS) and we have provided extensive feedback to the developers on how this system can be improved. We are now receiving electronic laboratory reports from LabCorp (a large commercial laboratory) and Mayo clinic; this greatly reduces the time from laboratory report to notification of public health staff, allowing us to intervene faster.

### **West Nile Virus (WNV)**

Tennessee has implemented a multi-faceted approach to surveillance of WNV. Surveillance includes the testing of dead and live birds, ill horses, and mosquito pools to determine whether there is WNV activity. These provide early indicators of WNV activity and permit the targeting of infection prevention messages to affected communities, as well as targeted mosquito-abatement activities. Under the leadership of Dr. Moncayo, medical entomologist, we have recently established dedicated laboratory space at the State Laboratory which will be used to identify risk factors for transmission of vector-borne diseases and to better understand the epidemiology of vector-borne diseases in Tennessee through molecular epidemiology, landscape epidemiology, mosquito ecology and seroepidemiology studies.

## **What Still Needs to be Accomplished**

- ✚ Increase the number of laboratories that send electronic laboratory reports to the NEDSS Base System (NBS).
- ✚ Improve the ability to extract data from the NBS.
- ✚ Further train epidemiology staff in the use of the Outbreak Management System.
- ✚ Develop outbreak questionnaire packages for the most common infectious diseases that require investigations and/or interventions.
- ✚ Develop and implement evidence-based interventions to control the spread of community-associated MRSA.

## FAMILIES FIRST HOME VISITING PROGRAM

### INTRODUCTION

The Families First home visiting program provides a one time assessment and referral service to families who are terminated from the Department of Human Services (DHS) Families First Program without successfully completing the program. These Department of Health (DOH) assessment services are mandated in legislation. DOH receives a referral from DHS upon the family's termination from the Families First program. DOH home visitors assess the welfare of the family, especially in regard to the parent's ability to adequately provide for the children without the use of the welfare funds. The visits are provided by DOH health professionals. The program also provides referrals for any services for which the family may be eligible and need.



### FACTS

DOH received and worked 20,719 Families First referrals in fiscal year 2005.

### GOALS

1. Provide assessment services to families who terminate the DHS Families First program without fully completing the program.
2. Provide referral services to families who are determined to need additional services.

### OBJECTIVES

-  An attempt will be made to contact 100% of families referred to DOH through the Families First Home Visiting Program.
-  DHS will receive a report from DOH on 100% of worked Families First Home Visiting referrals.

## Where Tennessee Is Today/Initiatives/Accomplishments


Families First home visiting services are provided out of the local health departments in all 95 Tennessee counties.

DOH home visitors made a total of 45,257 contact attempts to reach the referred families.

DOH home visitors provided 7,235 service referrals to visited families.

288 families were referred to DHS for an emergency auxiliary payment.

## What Still Needs to be Accomplished

-  DOH continues to work with DHS regarding the timeliness and appropriateness of referrals.

# GENERAL ENVIRONMENTAL HEALTH

## INTRODUCTION

The Division of General Environmental Health (GEH) regulates, by permitting and inspecting, food service establishments, public swimming pools, hotels and motels, bed and breakfast establishments, organized campgrounds, tattoo parlors, and body piercing studios. GEH also, by letter of agreement, conducts inspections of childcare facilities, public school buildings, and state correctional institutions. GEH distributes rabies tags to veterinarians and conducts animal bite/exposure investigations whenever exposure to rabies is suspected.

## FACTS

As of August 15, 2006, GEH has permits in 22,148 food service establishments, 4,875 public swimming pools, 1,616 hotels/motels, 743 organized camps, 236 tattoo parlors, and 162 body piercing salons.

## GOALS

1. Prevent illness and injuries in all facilities regulated by the Division.
  - a. Conduct, at a minimum, the inspections required by statute
  - b. Conduct follow-up inspections to determine whether corrective action has been taken.
  - c. Conduct training of personnel employed in the regulated facilities
  - d. Conduct training of environmental health specialists.
  - e. Take enforcement action whenever serious and repeated violations occur.
2. Prevent the occurrence of rabies in the human population
  - a. Distribute rabies tags to veterinarians.
  - b. Plan and co-ordinate annual rabies vaccination clinics in every county across the state.
  - c. Conduct animal bite investigations.
  - d. Conduct training/educational programs to make the public aware of the necessity of properly vaccinating dogs and cats to prevent the spread of rabies and to educate the public about how rabies is spread from wildlife to domesticated animals and to humans.

## OBJECTIVES

- ✚ Conduct environmental and safety inspections in the frequency required by statute:
  - a. The following programs shall be inspected a minimum of once each six month period from July 1-December 31 and January 1 – June 30.

**OBJECTIVES** (continued)

1. Food Service Establishments
  2. Hotels
  3. Bed and Breakfasts
  4. School Plants
  5. Organized Camps
- b. Conduct at least annually child care plant facility inspections in coordination with Department of Human Services Day Care Licensing Program.
- c. Conduct quarterly inspections on Tattoo Establishments.
- d. Conduct at least annually, inspections on Body Piercing Establishments.
- e. While in operation, conduct monthly inspections on Public Pools.
- ✚ Conduct follow-up inspections in all program areas (e.g. food service establishment, hotel) on all inspection types (e.g. complete, follow-up, complaint) which either have a critical violation and/or a score of less than 70.
  - ✚ Increase dog and cat rabies vaccinations a minimum of ten percent (10%) per annum.
  - ✚ All county health departments shall plan and co-ordinate annual rabies vaccination clinics.
  - ✚ Conduct rabies disease and vaccination public awareness training in 25% of the counties.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Facility Inspections

Rabies Prevention

The Division conducts >99% of the required inspections during each inspection cycle. By policy, the Division re-inspects food service establishments that score <70 within 30-45 days. This allows the Division to take enforcement action sooner against the poorest performing establishments.

During the 2004 legislative session, the Rabies law was rewritten to put the current practices and procedures into the statute.

**What Still Needs to be Accomplished**

- ✚ The Division would like to study the benefits of implementing a risk-based inspection system for food service establishments.
- ✚ The Division would like to explore the possibility of re-establishing the rules for inspection of public school buildings.

# HEALTH ACCESS PROGRAM

## INTRODUCTION

The Health Access Program is a state program designed to improve access to care in underserved areas. Each regional and metropolitan health office has an allotment of funding to improve access. The Regional Health Council provides guidance to the regional office and the Commissioner on the most appropriate use of the resources for their region. The resources provided to the regions may be allocated by the following methods:

### Health Access Practice Incentive Grants

Grant funding is available to primary care or dental practitioners interested in providing services, full time, in a designated Health Resource Shortage Area (HRSA). Application for grant funding is required prior to the provision of services. Recipients are required to serve a minimum of three and not to exceed five years of practice.

### Health Access Community Initiative Grants

This program provides funds to develop, expand, or enhance the availability of primary, obstetrical, or dental care services. Other projects that may be considered, on an as needed basis, are determined by the Commissioner of Health to include: emergency medicine, mental health care and preventive treatment for low income, pregnant substance abusers. The purpose of this program is to support projects that demonstrate innovative models of health care services delivery in areas that lack basic health services. Proposals for Health Access Community Initiative grants are developed in collaboration with regional health councils. The project focus is directed toward provision of health services to underserved populations, especially for those who are not currently receiving them, or to enhance access to and utilization of existing available services.

### State Conrad J-1 Visa Waiver

The Tennessee Department of Health will support and facilitate the placement of a primary care practitioner in a health facility located in a rural federally designated Health Professional Shortage Area (HPSA) or Medically Underserved Area (MUA) for the provision of health services directed towards primary care, obstetrical, pediatric, or TennCare designated by the State. Healthcare practitioners who are placed must agree to provide medical care to underserved Tennesseans. The Department of Health is positioned to cooperate with and assist any federal agency in its sponsoring and review of requests to waive the foreign residency requirements on behalf of primary care physicians holding J-1 Visas who will practice in an acceptable location.

### Health Council Role and Involvement

The Regional Health Council prioritizes community health needs as identified within each respective region and county. All projects submitted by rural and/or metropolitan regions must have Regional Health Council recommendations to be considered for funding by the Commissioner. The regional and metropolitan health offices that currently have an allotment of funding to improve access to health care are as follows:

#### REGIONS

- Northeast
- East
- Southeast
- Upper Cumberland
- Mid-Cumberland
- South Central
- West

#### METROS

- Nashville/Davidson
- Chattanooga/Hamilton
- Knoxville/Knox
- Memphis/Shelby
- Jackson/Madison

Projects must address the needs of the communities to be served. The Regional Health Council prioritizes community health needs as identified within each respective region and county. The appropriate local health council, together with the regional staff, develops a Community Initiative Project Summary. The summary is submitted to Health Access for program and Commissioner review and approval.



### FACTS

As of December 31, 2004, the Health Access Incentive Grant Program has placed 205 providers in health resource shortage areas in Tennessee.

The number of providers and their specialties, to date are:

- 89 family physicians (21 who are obstetrics (OB)-capable)
- 25 internal medicine specialists (2 are internal medicine/pediatrics)
- 26 obstetricians
- 14 pediatricians
- 2 psychiatrists
- 1 preventative medicine physician
- 33 family nurse practitioners
- 1 pediatric nurse practitioner
- 5 certified nurse midwives
- 10 physician assistants

### GOALS

1. Facilitate dissemination of grant funding for community projects that promote, enhance or expand health care or dental services for areas in need.
2. Support recruitment and retention efforts targeting primary care and dental practitioners, for placement in critical to recruit areas, utilizing the J-1 visa waiver program and Practice Incentive Grants.
3. Support communities in grassroots endeavors to identify and prioritize health needs unique to their demographics and geographical location.

### OBJECTIVES

- ✚ Annually, 100% of the Community Initiative Grant program contractors will meet 100% of Program expectations based on Health Access Community Initiative Guidelines.
- ✚ Audit outcomes assure that Community Initiative Program grantees are in 100% compliance with the program scope of services.
- ✚ Annually, 100% of the Practice Incentive Grant recipients will participate in a monitoring and evaluation program which demonstrates 100% compliance with the contract scope of services.
- ✚ Annually, 100% of J1-Visa Physicians will participate in a semi-annual monitoring and evaluation report, demonstrating 100% compliance with State and Federal guidelines.

### Where Tennessee Is Today/Initiatives/Accomplishments

Recruitment Incentives

Community Initiatives

Programs to recruit and retain primary care and dental practitioners in underserved areas include the J-1 visa waiver program, Practice Incentive Grants and the annual Medical Recruitment Fair.

The majority of projects support programs based in a hospital or clinic setting providing the focal point of out-reach efforts targeting the community and surrounding area. Initiatives include primary care, dental services, obstetrical care, disease management and patient education programs.



Expansion of Primary, Obstetrics, and Dental Health Services in Underserved Areas

Projects that Focus on Hispanic or other Special Populations in Underserved Areas

Disease Screening, Treatment, and Management

Expansion programs support acquisition of resources such as additional staff, supplies and other items needed to increase the volume of patients treated, in addition to enhancing accessibility to services. Target populations include children, uninsured, low-income, indigent and homeless adults. Over 13,000 patients were seen in Primary Care Clinics across Tennessee from January 2005 – July 2006, of which, 844 were Hispanics. Over 124 babies were delivered; and of 1,829 dental patient visits, 1,182 were homeless patients.

Programs support bilingual interpretation to improve access to services and provide prenatal, post-partum, and newborn care for the Hispanic population. During the 2005 – 2006 Fiscal Year, a total of 3,163 prenatal services were provided in one region, with over 94 deliveries.

Structured programs, such as, Search Your Heart, Rhythm of the Heart, Get Fit, Diabetes Education and Diabetes Initiative programs provide wellness, health promotion, awareness, risk reduction and intervention strategies for diabetes and cardiovascular disease. During the 2005 – 2006 Fiscal Year, 249 potential chronic complications such as diabetes and cardiovascular disease were prevented through age appropriate screenings.

### What Still Needs to be Accomplished

- ✚ Process continuation approvals to extend project funding for an additional year to support initial projects successfully completing their contract cycle.
- ✚ Provide ongoing support of recruitment and retention efforts in underserved areas by administration of the J-1 Visa Waiver Program, Medical Recruitment Fair, and Practice Incentive Grants.
- ✚ Continue to provide ongoing funding support for grassroots community-based health initiatives that expand or enhance health and dental care services, by administration of Community Initiative Grants.

# HEALTHY START PROGRAM

## INTRODUCTION

Healthy Start is an intensive home visiting program legislatively mandated through the Early Childhood Development Act of 1994. Families must be assessed to be at an elevated risk for child abuse or neglect in order to be eligible for the program. The program is distinctive in that it seeks out high risk families and enrolls them prior to an abuse or neglect occurrence rather than a program referral being a result of such an occurrence. Services provided are assessments, screenings, child development education, parenting education, parenting support and health support. The programs follow the national Healthy Families America program model. Families are able to reach a program staff person 24 hours a day 7 days a week. Services are provided prenatally through the child's fifth year. Services are voluntary and taper off over time as the family's need diminishes. The program targets first time parents in areas with elevated child abuse and neglect rates. This program is not the same as the federal Healthy Start home visiting program.

## FACTS

In the 2005 Kids Count Report, Tennessee ranked 43rd for overall child well-being, 45th for the percentage of low-birth-weight babies, and 48th for infant mortality rates.

## GOALS

1. Prevent child abuse and neglect.
2. Reduce infant and child mortality.
3. Promote family health.

## OBJECTIVES

- ✚ At least 95% of Healthy Start children will be free from child abuse and/or neglect at the end of each fiscal year.
- ✚ At least 95% of Healthy Start children will have their immunizations up to date by age 2.
- ✚ At least 65% of Healthy Start mothers will wait at least 12 months following birth to have a subsequent pregnancy.

## Where Tennessee Is Today/Initiatives/Accomplishments

Eight program sites provide Healthy Start services to 27 Tennessee counties. The programs are operated out of a variety of community agencies such as hospitals, mental health centers, universities and child development centers.

Healthy Start serves approximately 1,800 children and their families annually.

98.5% of the Healthy Start children are free from abuse and/or neglect. 99.8% of the children remain in the home. 96.3% of the children are up to date on immunizations.

The program has 2 National Healthy Families America trainers who train staff both in Tennessee and across the United States.

## What Still Needs to be Accomplished

- ✚ Program expansion is needed in service counties where the demand exceeds the capacity. Shelby County is in particular need of expansion.

# HEART DISEASE AND STROKE PREVENTION PROGRAM

## INTRODUCTION

The Tennessee Heart Disease and Stroke Prevention Program (HDSP) is a federal capacity-building or planning grant, sponsored by the Tennessee Department of Health, developed to reduce the burden of heart disease and stroke among Tennessee residents. The program is designed to be implemented in various settings that include Tennessee communities, hospitals, schools, and worksites.

Through collaborative efforts with other state departments, local health departments, area hospitals, the American Heart Association/American Stroke Association, and local business partners, the program aims to assess the burden of heart disease and stroke in Tennessee, as well as to develop an infrastructure for reducing the burden of heart disease and stroke among Tennesseans.

## FACTS

Together, heart disease and stroke account for 1 out of 3 deaths in Tennessee each year.

Nine out of ten adult Tennesseans reported at least one modifiable risk factor for heart disease.

Nearly 70,000 (40,000 elderly) Tennesseans were hospitalized for diseases of the heart in 2002.

About 2/3 of people with diseases of the heart had hypertension, 1/4 to 1/3 had diabetes mellitus and 30-40% had high cholesterol. One-third of people with diseases of the heart had two co-morbid conditions, and about 10% had all three conditions.

Inpatient costs associated with diseases of the heart (primary diagnosis) among the general population increased from 1.2 billion in 1997 to 2.1 billion in 2002, a 73% of increase.

Stroke inpatient costs among the general population (HDDS data) increased 73% from \$228 million in 1997 to \$395 million in 2002.

## GOAL

To prevent and reduce disability and death from heart disease and stroke in Tennessee and to develop infrastructure and means to reduce the burden of heart disease and stroke among its residents.

## OBJECTIVES

- ✚ Convene at least 2 Heart Disease and Stroke Prevention Advisory Council meetings every year.
- ✚ Produce a scientific document describing the burden of heart disease and stroke in Tennessee by end of year 2006 and then make updates every 3 years.
- ✚ Market heart disease and stroke burden document to at least 50 agencies and all county health departments by end of 2007.
- ✚ Develop a state plan for addressing heart disease and stroke among Tennessee residents by end of year 2006 and then make updates every 3-5 years.
- ✚ Develop an inventory of heart disease and stroke services in Tennessee by end of 2006 and market it to at least 50 agencies by end of June 2007.
- ✚ Assess policy and environmental issues related to heart disease and stroke and develop a report by July 2007.
- ✚ Conduct at least 4 technical assistance and training workshops on heart disease and stroke related topics every year.

## OBJECTIVES (continued)

- ✚ Develop and implement at least one population-based and culturally competent heart disease and stroke related program every year.
- ✚ Develop heart disease and stroke prevention web site by end of June 2007 and update website every 3-6 months.

## Where Tennessee Is Today/Initiatives/Accomplishments

- **Population Based Initiatives:** In an effort to reach those individuals who are disproportionately affected by cardiovascular disease, the Tennessee Heart Disease and Stroke Prevention Program (HSSP), in partnership with the American Heart Association and the Regional Minority Health Councils, are implementing the "Search Your Heart" program across the state. "Search Your Heart" is a free heart-health and stroke prevention initiative that helps faith-based organizations promote health advocacy, provide health screenings, encourage healthy eating and physical activity, increase awareness of heart disease and stroke signs and symptom recognition.
- **HDSP Advisory Council:** The HDSP Program is also responsible for developing both and internal and external partnerships. The Program successfully formed and convened the Heart Disease and Stroke Advisory Council which includes partners from public and private health care professionals, business, education and minority community representatives, as well as faith, finance and research representatives. The purpose of this Advisory Council is to assist the Program in developing, implementing and evaluating HDSP programs and to serve as community partners.
- **Heart Disease and Stroke Prevention State Plan:** The HDSP Program is currently working with the Advisory Council to develop a comprehensive heart disease and stroke prevention state plan.
- **Heart Disease and Stroke Burden Document:** The HDSP Program is working with Tennessee State University to gather and analyze heart disease and stroke data in Tennessee. This report will support HDSP activities in Tennessee and will also help partner with other agencies to use heart disease and stroke specific data for their program planning and research activities.

- **State Stroke Taskforce:** The American Heart Association/American Stroke Association and the Tennessee Department of Health, Heart Disease and Stroke Prevention Program convened a body of health professionals, quality improvement representatives, Tennessee Office of Emergency Medical Services representatives, hospital system administrators, etc., from across the state of Tennessee to assess where the gaps, greatest needs, successes and best practices are in primordial and primary prevention, notification and response of emergency medical services for stroke, acute treatment for stroke, sub-acute stroke care and secondary prevention for stroke, rehabilitation of stroke patients, and continuous quality improvement initiatives.
- **Certified Stroke Center Partnerships:** HDSP is partnering with the Tennessee Hospital Association and American Heart Association to establish at least one certified stroke hospital in each of the three grand divisions.
- **Evidence-Based Guidelines Implementation:** The Tennessee HDSP Program continues to address the burden of heart disease and stroke by successfully creating new partnerships and promoting evidence-based initiatives to increase the quality of care and promote excellence in heart disease and stroke care. The Program is currently partnering with the Tennessee Hospital Association and American Hospital Association to sponsor Get with the Guidelines modules for at least 50 health care settings in Tennessee.
- **Technical Assistance and Trainings:** The HDSP Program provides trainings and technical support to the field health staff for promoting and conducting heart disease and stroke related activities. Training assistance and training resources are also available to other community agencies.

- **Heart Disease and Stroke Inventory:** The HDSP Program is currently working with Middle Tennessee State University to complete a “Healthy Living Inventory” and later this year will also conduct a Health Systems Module to be added to this inventory document.
- **Stroke Collaborative:** During the 2004 Legislative session, Senate Joint Resolution 103 submitted by Senator Diane Black (R-Sumner) and Representative Kathryn Bowers (D-Shelby) unanimously passed the Tennessee House of Representatives with all members agreeing to be added as co-sponsors. The purpose of this stroke systems legislation is to establish a systems approach to caring for stroke patients, including assessing center designations, EMS protocols and field triage, inter-facility stroke transfer, and stroke data collection. The HDSP Program is diligently working to achieve results and provide resources to the community health care settings in pursuing systems approach and enhancing quality of care.

- **Heart Disease & Stroke Prevention Marketing:** The HDSP Program also conducts state-wide community education campaigns on heart disease and stroke prevention and is currently in the process of finalizing approximately \$50,000 in funding support to the Tennessee Hospital Association to conduct a HDSP community education campaign. The HDSP Program also provides heart disease and stroke related educational material to field staff and other community partners for their local educational needs and events.

### What Still Needs to be Accomplished

- ✚ Better surveillance system to monitor heart disease and stroke status in communities in order to improve standards of care and elimination of disparities. Development and implementation of a statewide stroke registry and stroke telemedicine opportunities for rural stroke care centers.
- ✚ Use of evidence-based systems of care by heart disease and stroke care providers.
- ✚ Completion of state heart disease and stroke prevention plan, burden document and inventory document and its marketing to agencies involved with HDSP and care.
- ✚ More partnerships and collaboration among heart disease and stroke care provider agencies.
- ✚ More research on identifying the causes of geographic and racial disparities in diseases of the heart, stroke, and hypertension. We need to know more about why some counties do so poorly, and other do relatively well.

## HELP US GROW SUCCESSFULLY (HUGS)

### INTRODUCTION

The purpose of HUGS services is to provide home-based prevention and intervention services. HUGS services are provided to children, birth through the age of five (5) years that may have health risks and/or risks of developmental delays or have identified delays. Prenatal/postpartum women are provided services to prevent or reduce complications, subsequent unplanned pregnancies, and developmental delays in the unborn child. Such services assist this population in gaining access to health care, psychosocial, educational, and other necessary services to promote good health practices, improve general well being, prevent developmental delays, and reduce maternal and/or infant morbidity and mortality. HUGS services are based on a care coordination model.

Care coordination is the process of assessing, planning, organizing, coordinating, counseling, educating and monitoring the services and resources needed to respond to clients' unique needs. Assessments are necessary to identify client needs. The primary role of the Home Visitor is to facilitate the timely completion of all required assessments and updates. Assessments for children, birth through the age of five years, should be completed and updated according to the American Academy of Pediatrics guidelines and recommendations, Child and Adolescent Health Manual and the Communicable Disease Control Guidelines.

Assessments for prenatal/postpartum women should be in accordance with the standards established by the American College of Obstetricians and Gynecologists. Once a referral is received, the initial visit should be made within 15 working days of receipt of the referral or sooner if the situation warrants. If unable to make the visit within the required timeframe, attempts to visit should be documented. A health assessment which is psychosocial, nutritional and developmental (children only) must be completed and/or verified within 60 working days of enrollment. After all assessments are completed and/or verified, an analysis of the comprehensive data will identify problems/issues for which planned interventions are needed. The Home Visitor and client or, if a child, the parent or responsible person, use this information to plan interventions for eliminating or minimizing the problems/issues.

An individualized Service Plan must be initiated and implemented within 60 working days of enrollment to prioritize problems/issues and select the most pressing to address first. Once the service plan is developed, the home visitor determines the frequency of the visits. The service plan must be reviewed/revised at least every 6 months and updated when circumstances change. Another very important component of care coordination is to empower clients to be an effective manager of their own service needs. Essential elements that enhance the clients' ability to acquire these important skills are education and counseling.

### FACTS

Home visitation programs use various methods and approaches to educate parents and improve the health and development of children. Research has shown that home visiting offers an effective way to assist, support and provide access to community resources for families. It is vital that these prevention and/or intervention services are offered in the home setting because this provides an opportunity to gain a greater understanding of clients' needs, constraints, and supports available in the home. In addition, it facilitates a climate of comfort for clients and an optimum environment to assess clients' ongoing needs and implement services.

### GOALS

1. To promote healthy pregnancy to ensure positive birth outcomes.
2. To assist families in accessing health care and other social and educational services.
3. To enhance family strengths.
4. To provide individualized education regarding pregnancy, growth, development and parenting education

### OBJECTIVES

- All staff will be trained on how to administer the developmental tools by December 2007.
- All staff will be trained and updated annually on current issues that promote positive family outcomes.



**OBJECTIVES** (continued)

- All staff will use a standardized curriculum to accomplish program goals by December 2007.
- The program will develop outcome measures for the program by December 2006.
- A form of home visiting services will be available in all counties by December 2006.

**Where Tennessee Is Today/Initiatives/Accomplishments**

The Help Us Grow Successfully (HUGS) Program has 13 Coordinators and approximately 185 home visitors across the state of Tennessee serving six metropolitan and seven regional areas. The HUGS program provides full services in 76 counties. Additional services are provided on an as needed basis to six (6) counties in the Southeast Region to cover 82 counties with HUGS services. Six (6) counties in the Mid-Cumberland Region have services available on an as needed basis for a total of 88 counties with HUGS services available. Five (5) counties in the West Tennessee Region do not have HUGS services and two (2) counties in the Southeast Region-Franklin and Grundy do not have HUGS services. While the remaining 7 counties do not have direct HUGS programs, 5 of the 7 counties have other home visitation programs, such as Healthy Start, that assist in providing home visitation services and referrals.

The Home Visitor is a specialty trained health care provider, employed by the local health department, providing services in the home setting.

**Role and Function includes, but is not limited to:**

- Ensuring that all required assessments are completed timely and are updated according to the respective periodicity schedule, including basic well child (Early Periodic Screening Diagnosis & Treatment) examinations, immunizations, etc.
- Developing and implementing an individualized Service Plan based on assessment findings and in collaboration with the client or, if a child, with the parent or guardian, and to the extent possible, the primary care provider.
- Making home visits as indicated in the individualized Service Plan.

Assisting clients to access and utilize appropriate health care and other social and educational services through coordination and collaboration.

- Making referrals as indicated and providing appropriate follow-up.
- Following-up on all missed medical and social service appointments. Contacting clients to discover the reason the appointment was missed, assist in rescheduling the appointment, and providing support services as necessary to help clients keep future appointments.
- Providing client education as indicated in the individualized Service Plan.
- Coaching and modeling of appropriate parenting techniques optimizing the growth and development of infants and young children through infant stimulation and healthy child development activities.
- Assisting prenatal/postpartum women to select and follow a family planning method to prevent subsequent unplanned pregnancies.
- Coordinating and monitoring services provided to the clients. Timely provision and continuity of services are essential to effective coordination.
- Collaborating with health department and community-based providers through ongoing communication.
- Promoting and providing counseling to improve health status with emphasis on self-management and responsibility for health care needs.
- Serving as an advocate to promote clients' optimal functioning and independence.
- Maintaining complete, accurate, and up-to-date care coordination records.

The number of home visits made in the past three years has increased dramatically. The number of home visits are as follows:

- Fiscal Year 2002-2003 (22, 815) home visits
- Fiscal Year 2003-2004 (32, 467) home visits
- Fiscal Year 2004-2005 (38, 895) home visits

In July 2004 the Tennessee Home Visiting Guidelines were replaced with the revised HUGS Guidelines. A basic Home Visitors Orientation Guide was used to train all new and existing staff. Also during that time HUGS forms were made uniform in order to standardize record keeping. Billing codes were also changed to reflect documented services provided to families. In 2005, marketing efforts were made to advertise the program and its services by the development and publication of a HUGS brochure.

Collaborations at the local level include hospitals, Department of Children's Services, pediatricians, health clinics, obstetricians, Department of Human Services, Women, Infants and Children (WIC), Head Start and other social service agencies. Health fairs, baby showers and other local events are used to market the program to various community organizations.

### **What Still Needs to be Accomplished**

- ✚ Expansion of HUGS services to the remaining 13 counties in the state
- ✚ Standardization of a curriculum for all programs
- ✚ Distribution of educational materials to families and staff
- ✚ Ongoing trainings and in-services for all HUGS staff
- ✚ Development of outcome measures to evaluate the effectiveness of the program



## HIV AND STD PREVENTION SERVICES

### INTRODUCTION

Human Immunodeficiency Virus (HIV) infection and AIDS continue to be a major public health challenge and a threat to the lives and quality of life for many of the people of Tennessee. Sexually transmitted diseases (STDs) are also a significant challenge and may have long term health consequences if left untreated. STDs increase the risk of transmission of the HIV virus. HIV and STD Prevention Services' staff use epidemiological data to determine priority populations that are at greater risk for acquiring disease and to fund prevention activities, case finding and diagnosis and treatment of STDs. Specific populations are at an increased risk for HIV/AIDS and for STDs. African Americans are disproportionately affected by STDs. Groups at higher risk for HIV/AIDS include African American females, men who have sex with men, and drug users.

The HIV and STD Prevention Services Program is responsible for developing, administering, and implementing both the HIV Prevention Grant and the STD grant from the Centers for Disease Control (CDC). The HIV Prevention Grant funds HIV prevention services for target populations determined in collaboration with community partners and AIDS advocates through the Tennessee Community Planning Group (TCPG), and the Regional Community Planning Groups (RCPGs) across the state. The target populations identified for HIV prevention are: HIV-positive persons, drug users, high risk heterosexuals, men having sex with men, and youth.

The program monitors the incidence of HIV and sexually transmitted diseases, provides assistance and service assurance, responds to outbreaks statewide and provides oversight of the HIV counseling and testing activities across the state. This program receives \$2.7 million from the CDC for STD services and activities and \$4 million from the CDC for HIV prevention activities.

### FACTS

The number of HIV/AIDS cases diagnosed in 2004 was 1,050.

Seventy-one percent of the new HIV/AIDS cases in 2004 in women were in African American women.

Of new AIDS diagnoses from 2000-2004, 86% progressed from HIV+ to AIDS within one calendar year.

### GOALS

1. For all sexually active individuals, to have access to HIV testing and understand the importance of knowing their status and that of their partner(s).
2. To further decrease the incidence of perinatal transmission of HIV.
3. To have HIV testing become a part of routine medical care.
4. To narrow the gap between the rates for syphilis between white and African American persons.
5. To increase number of high risk youth tested for chlamydia.
6. To perform partner notification and case finding on every newly diagnosed HIV and syphilis case.

### OBJECTIVES

- By 2010, increase HIV testing in publicly funded sites by 10% in order to detect new HIV infections and reduce further transmission in adolescents and adults. (baseline 2005 – 56,000 tests)

## OBJECTIVES (continued)

- ✚ BY 2010, decrease perinatal infection by 15% by implementing rapid testing procedures for women who present for delivery without knowing their HIV status (baseline 2005 – 6 perinatally infected infants)
- ✚ By 2010, screen for Gonorrhea and Chlamydia in 80% of all youth detention facilities in Tennessee. (baseline 2006 - screening occurs in two of the eight facilities)
- ✚ By 2010, reduce Primary and Secondary Syphilis transmission by 30% in all populations. (baseline 2005 – 94 cases)

## Where Tennessee Is Today/Initiatives/Accomplishments

Over the last 12 years, case rates of early syphilis have decreased from 2,572 cases in 1993 to 423 in 2005.

Chlamydia screening is available in select juvenile detention centers across the state.

Syphilis and/or HIV screening is available during the booking process at county jails in Nashville, Memphis and Knoxville.

A network of volunteer HIV prevention trainers have been established statewide.

Prison HIV Testing Initiative began in January 2006. HIV tests are being offered to inmates as they are released from prison.

Confidential HIV counseling and testing and STD exam, diagnosis and treatment are available in every county health department.

Confidential HIV testing is available in 18 community organizations across the state.

Rapid HIV testing is currently available in community organizations in Knoxville, Memphis, Nashville, and Chattanooga. Rapid HIV testing is available at the Nashville Metropolitan Health Department.

Health departments and community organizations are using the urine based gonorrhea and chlamydia test to conduct outreach testing.

## What Still Needs to be Accomplished

- ✚ Strengthen partner notification and medical referral for newly identified HIV positive patients.
- ✚ Use geographic information system (GIS) mapping software to target geographic location of HIV prevalence greater than 1%, and to enhance private provider education regarding the need for routine HIV testing.
- ✚ Implement Rapid HIV testing in emergency departments and birthing centers in order to screen mothers who present for delivery with no prior HIV test.
- ✚ Enhance chlamydia screening for African American females and males.

# HIV SURVEILLANCE AND DATA MANAGEMENT

## INTRODUCTION

Syphilis, chlamydia, gonorrhea, and HIV/AIDS are all sexually transmitted communicable diseases that must be reported under Tennessee Code Annotated (TCA) 68-10-109. The purpose of this law is the prevention and/or control of sexually transmitted diseases (STD). TCA 68-10-113 protects the confidentiality of individuals reported. Physicians report whenever they examine or treat any person known or suspected of being affected by one of these diseases. Directors of diagnostic labs are also required to report any positive test results for these diseases.

The HIV Surveillance and Data Management Program has the responsibility for maintaining an active surveillance system by capturing and managing all HIV and STD case reports. The core surveillance functions include educating physicians on reporting requirements, soliciting case reports, performing medical record abstractions to assure completeness of data, reviewing death certificates to identify unreported cases and updating the status of previously reported persons, and conducting follow-up of positive laboratory reports. These activities are carried in the field by regional surveillance staff. The program staff is also responsible for data analysis, disseminating reports, and responding to requests for specific data.

The surveillance data (with strict adherence to confidentiality standards) is widely utilized throughout the state to identify outbreaks, to calculate and analyze disease incidence trends, to access the adequacy of services available, and to prevent the further spread of disease.

## FACTS

The program receives over 32,000 reports of positive STD cases each year.

Over 1,000 new cases of HIV/AIDS are reported each year.

As of December 31, 2004, there were 12,561 persons living with HIV/AIDS in Tennessee.

## GOALS

1. To assure a STD and HIV surveillance system that is confidential, timely, complete, and valid.
2. To maintain an active HIV/AIDS surveillance effort through professional health care liaisons, case identification, disease reporting, and case investigation and follow-up.
3. To assure disease reporting systems are effective and efficient through innovative use of technology and periodic program evaluation.
4. To respond accurately and timely to the numerous requests for HIV and STD data.

## OBJECTIVES

- ✚ By 2010, annual laboratory visits will be conducted on 90% of all in-state laboratories that report HIV/STD data. (Baseline for 2005 is 85%)
- ✚ By 2010, both of the STD and HIV reporting system will be web-based. (Baseline 2006 - none of the systems are web based)

### Where Tennessee Is Today/Initiatives/Accomplishments

The program has implemented a Center for Disease Control (CDC) developed computer program statewide to capture STD cases and to manage the case investigation.

The program participates in the CDC STARHS HIV Incidence Project which sends all newly diagnosed HIV positive blood for additional testing and captures additional demographic information that will be used by CDC to calculate population-based estimates of HIV incidence. Incidence data will be used to identify emerging epidemics, to target prevention resources to those areas most heavily affected, and to evaluate programs designed to prevent the transmission of HIV.

Each year the program publishes the HIV/AIDS Epi-Profile that makes a wide variety of aggregate HIV/AIDS data and analysis of trends available to both public and private agencies that provide HIV services which allows targeting of services and resources. The information is also published on the Department's web site.

### What Still Needs to be Accomplished

- ✚ All of the reporting from private diagnostic labs is currently done with paper. The next phase is to migrate to systems which can accept electronic lab reporting.
- ✚ There are new CDC systems under development for both HIV and STD reporting. These systems, which will be web-based, will require conversion of all of Tennessee's data and intensive training for all of the staff.

# IMMUNIZATION PROGRAM

## INTRODUCTION

The Tennessee Immunization Program (TIP) is responsible for the prevention and control of vaccine-preventable disease in Tennessee. Its primary objective is to improve the on-time immunization of all children; an objective measured through TIP's annual survey of on-time immunization of 24 month-old children and through the assessment of immunization certificates in school and child care facilities to assure compliance with state immunization regulations.

TIP administers the Vaccines for Children (VFC) Program, a federal entitlement program designed to provide all recommended childhood vaccines to poor and uninsured children. Vaccines valued at over \$40 million, are administered in 130 Health Department clinics and about 500 private provider offices that voluntarily enroll in the program each year. TIP improves the quality of these services through VFC/AFIX, a quality assurance program developed by the Centers for Disease Control, which involves regular site visits by public health immunization staff to VFC providers to evaluate program compliance and educate to improve immunization services.

TIP prevents perinatal transmission of hepatitis B by identifying hepatitis B-infected expectant mothers and assuring their infants are treated appropriately to prevent the infant from contracting the lifelong and often fatal infection. Racial and ethnic minorities are over-represented among infants at risk.

TIP has programmatic oversight of the state immunization registry, established in 1994, which currently stores all immunization information on children born during or after 1994 and immunized at health departments, certain physician offices and those enrolled in the Blue Cross TennCare Managed Care Organization, BlueCare. TIP is expanding the registry to increase the number of children whose immunizations are recorded in the registry.

TIP promotes the importance of adult immunizations, especially influenza and pneumococcal vaccines, to address the nationwide racial disparities that exist in utilization of these vaccines among adults at risk.

TIP's Immunization Program Medical Director coordinates state planning for the response to pandemic influenza in coordination with federal and local public health officials with a goal of minimizing the morbidity and mortality of a future influenza pandemic in Tennessee while also minimizing social and economic disruption.

## FACTS

In 2005, the Program distributed 1,160,010 doses of federally-funded vaccines (worth \$28,182,737) for children <19 years to health departments and private clinics in the VFC program statewide.

Since Fall 2004, four new vaccines (influenza, meningococcus, hepatitis A, and adolescent pertussis) have been added to the national recommended schedule for all children and adolescents. All are now available to poor and uninsured children in Tennessee through VFC.

## GOALS

1. On-time immunization of 90% of children with all routinely recommended vaccines
2. Identify, counsel and assure correct case management of all pregnant women (and their infants) in Tennessee with hepatitis B infection to prevent infection of their infants.
3. Eliminate the black-white disparity in on-time immunizations.

## OBJECTIVES

Progress toward the ultimate goal of 90% on-time immunization of children by meeting the strategic plan objective to increase the on-time immunization levels of 24 month-old children from 81.2% measured in the 2005 state survey to 82% in the 2006 survey.

## OBJECTIVES (continued)

- ✚ Reduce the risk of perinatal hepatitis B transmission by providing educational outreach by January 2007 on the new federal recommendations for hepatitis B vaccination of newborns to the 46 Tennessee hospitals delivering at least 500 infants annually (89% of all births).
- ✚ Increase the percentage of the 46 large birthing hospitals enrolled in the federal VFC program for January 2007 from 15% to 37% to improve access to federally-funded hepatitis B vaccine to administer to all eligible newborns (uninsured, TennCare) prior to discharge

## Where Tennessee Is Today/Initiatives/Accomplishments

The results of the survey of on-time immunization of 24 month-old children against 10 diseases rose from 78% (2003) to 80.5% (2004).

The Medical Director is overseeing the revision of the state pandemic influenza program.

The VFC/AFIX program completed 218 quality assurance visits to health care providers in 2005.

During the 2004-2005 influenza vaccine shortage, the program assured that every nursing home resident had access to the vaccine and tracked utilization to assure that vaccine was used by high priority patients. The program served as the sole source for influenza vaccine to health care providers.

## What Still Needs to be Accomplished

- ✚ Disparity in on-time immunization of black and white children needs to be understood and eliminated to help achieve the state goal of 90% on-time immunization of all children.
- ✚ Current hepatitis B projections for Tennessee are that the number of pregnant women with hepatitis B exceeds the number found by approximately 33%. New strategies are needed to facilitate identification of women with hepatitis B to assure prevention of disease in their infants.

# INJURY PREVENTION AND CONTROL PROGRAM

## INTRODUCTION

The function of the Injury Prevention and Control Program of the Tennessee Department of Health is to develop and implement initiatives and services promoting injury prevention and safety. These endeavors include data collection and dissemination, providing accessibility to related resources and materials, technical assistance to county health departments and local coalitions, collaboration with public and private entities, and coordinating development and evaluation of specific targeted programs. These efforts are applied in order to promote safety for a high quality of life for Tennessee residents.

## FACTS

### Intentional Injury –Suicide

According to the Centers for Disease Control and Prevention, suicide continues to rank as one of the leading causes of injury related death for adults in the nation and is the third leading cause of death for young people aged 15-24 years. Additionally, the CDC reports that in 2003, Tennessee ranked 19<sup>th</sup> nationally in suicide deaths per 100,000. The Tennessee Suicide Prevention Network reports that the suicide rate for the elderly (85+) is higher than for any other age group. In addition, older men are four times as likely to take their own lives as older women and suicide deaths are more likely in rural areas than in urban areas of Tennessee. Recent data from the 2003 Youth Risk Behavior Survey indicates that 9% of high school students in Tennessee report attempting suicide during the past year.

### Poison Control

In 2005, there were approximately 46,000 poisonings in Tennessee and 90% occur in the home. Approximately 76% of the calls received by the Tennessee Poison Control Center were for unintentional, accidental circumstances involving children under the age of six. Over 33,838 cases were successfully managed on site in a non-health care facility by simple first aid interventions with the guidance of Poison Control Center staff. In 2005, only about 8,000 clients were referred to health care facility for management.

### Unintentional Injuries

Injury is a serious public health problem in Tennessee and in the nation because of its impact on health including premature death, disability and the burden on the health care system. Injury is the leading cause of all deaths for persons from age 1 to 44 years, as well as the most common cause of hospitalizations for persons under age 40. Injuries disproportionately affect children, minority populations, and older adults.

## GOALS

1. Develop an integrated Core Injury Prevention and Control Program
2. Develop effective policy changes at all three (3) levels: state government, local government and community level.
3. Increase Injury Prevention Resources.

## OBJECTIVES

- ✚ By July 2006, will coordinate injury surveillance data from the following sources: hospital administrative data, new trauma injury data, crash data, Emergency Medical Services' run data, death records, and all other available data sources.
- ✚ By July 2007, will identify interventions of different types of strategies including educational, environmental, or enactment and enforcement of laws and ordinances.
- ✚ By August 2006, identify members who demonstrate strong leadership and understanding of injury prevention issues and are willing to collaborate with the Department to develop an Injury Prevention Program.
- ✚ By July 2009, will identify and evaluate any possible funding resources.
- ✚ By July 2010, demonstrate a 10% increase in each year of the number of policy changes directly related to injury prevention.

Leading causes of deaths from injury in Tennessee include motor vehicle crashes, homicide, suicide, falls, fires and burns, poisoning, and suffocation.

Recent data from the Youth Risk Behavior Survey indicated that 14% of high school students reported rarely or never wearing a safety belt and 27% rode with a drinking driver during the past month.

Motor vehicle accidents are the leading cause of injury related death in Tennessee. According to the Centers for Disease Control, motor vehicle related injuries kill more children and young adults than any other single cause of death in the United States. The Task Force on Community Preventive Services cites child safety seats, and seat belts as two of the most important preventive measures to further reduce motor vehicle occupant injuries and deaths. According to the Tennessee Department of Transportation, in 2000, 43% of children under the age of 4 years who were seriously injured in motor vehicle crashes were not restrained in a child passenger safety system.

### Where Tennessee Is Today/Initiatives/Accomplishments

Established an Injury Prevention Advisory Council infrastructure for coordination of injury prevention. The Council has begun to develop a draft of the state plan and has started to coordinate the activities for the annual symposium to be held in July 2006.

The Upper Cumberland Region Health Educators Partnered with local law enforcement and Upper Cumberland Developmental District to conduct monthly car seat checks. Partner with Cumberland Good Samaritans to have car seat program available for indigent families/ individuals who were issued a citation for non-compliance of child restraint law. Partner with Fairfield Glade Security, local Kiwanis Club and local police to conduct seat belt checks. Partnered with the Tennessee Highway Patrol to conduct safe driving class at Fairpark Senior Center. Class on child passenger safety taught at Cumberland County High School Child Development class. Have conducted 8 car seat checkpoints at Head Start, Health Department and Wal-Mart. Checked approximately 52 car seats for correct installation/use. Twenty Child Restraints were issued to indigent families through program. Conducted seat belt checks at Cumberland County High School and Fairfield Glade Mall - about 285 high school students/parents checked for being buckled up:

A class on safe driving was conducted with approximately 55 seniors attending, and 30 students attended a class on Child Passenger Safety.

The Child Passenger Safety program is currently addressing the statewide need for child restraint systems and education on child passenger safety. By the end of the fiscal year, the program would have purchased 1,500 child restraint systems and distributed 1,000 of the systems to Tennessee families.

The West Region Health Educator held workshop meeting for Somerville Police Department. Topics included new child restraint law, proper way to install child safety seat, age/height/weight requirements for child safety seat, and proper fit of harnesses. Partnered with county mayor, and Fayette Cares to obtain \$500 worth of free child safety seats from Governor Highway Safety. In addition, Governor Highway Safety donated 42 booster seats to Fayette County Health Department, and spoke on child safety seats during 2 sessions of Women, Infants, and Children (WIC)-Prenatal classes at the health department.



75% were buckled up; checked 55 vehicles at Fairfield Glade Mall, 90% were buckled up.

### What Still Needs to be Accomplished

- ✚ Identify additional staff and associated resources.
- ✚ The mobilization of support and partnerships.
- ✚ The finalization of a state plan.
- ✚ The hosting of the annual symposium.
- ✚ Collection and analysis of injury data.
- ✚ Submission of an annual injury data report.
- ✚ The implementation of priorities established by the Advisory Council.
- ✚ Use of surveillance findings to inform and guide state injury prevention and control activities.

## LABORATORY SERVICES

### INTRODUCTION

Laboratory Services, consisting of the central laboratory in Nashville and the regional laboratories in Knoxville and Jackson, provides valuable support of public health issues such as newborn testing, disease prevention, and a clean environment. These laboratories provide services to program areas within the department, local health departments, hospitals, independent laboratories, other state departments, physicians, dentists, and clinics. These services include screening and confirmation tests for disease outbreak investigation, sexually transmitted diseases, tuberculosis (TB), HIV, mosquito-borne viruses, animal rabies, botulism toxin testing, biological and chemical contaminants, and suspect foods. This division also provides analytical support to environmental regulatory programs and the department's prevention and treatment programs. The Memphis-Shelby County Health Department Laboratory, through a state contract, provides many of these laboratory services for Shelby County residents.

It is the mission of Laboratory Services to provide vital, accurate, and precise scientific information to maintain, promote, and improve the physical health and quality of the environment for all Tennesseans; to promote the contributions of public health laboratorians in support of state and national health objectives; and to promote policies, programs, and practices that contribute to continuous improvement in the quality of laboratory practice in both the public and private sectors.

### FACTS

Each year performs over 1,000,000 Microbiological tests.

Each year performs over 100,000 analytical chemical tests.

Trains over 200 laboratorians each year.

Certified by State and CLIA for Microbiological testing.

Certified by Environmental Protection Agency for Drinking Water parameters.

Network of four laboratories that perform the Laboratory Response Network (LRN) bioterrorism procedures

### GOALS

1. Strengthen the existing partnership with health and environmental programs.
2. Maximize the effectiveness of organizational structure, processes and operations.
3. Promote the role of Laboratory Services in present and evolving health and environmental issues.
4. Enhance educational activities based on state and national public health and environmental laboratory issues and regulations.
5. Establish an effective laboratory information management system.

### OBJECTIVES

- ✚ Implementation of the Laboratory Information Management System by January 2007
- ✚ Complete the Bioterrorism Sample Collection Training DVD for First Responders by January 2007
- ✚ Complete the Chemical Terrorism Laboratory and test validation by August 2006
- ✚ To provide quality-assured laboratory services.

**OBJECTIVES (continued)**

- ✚ To assist other Tennessee laboratories in developing and strengthening.
- ✚ To serve the entire state as a reference laboratory for difficult, unusual or otherwise unavailable laboratory procedures.
- ✚ To serve as a resource of information on laboratory practice.
- ✚ To test human and related specimens and environmental samples.
- ✚ To assist in the development, evaluation, and standardization of medical and environmental laboratory testing procedures.
- ✚ To participate in special studies and research projects.
- ✚ To provide refresher training and information updates.

**Where Tennessee Is Today/Initiatives/Accomplishments**

State of the Art Microbiological Laboratory performing testing for infectious diseases, food outbreaks, reference microbiology, rabies, and molecular biology

Newborn Screening of all Tennessee newborns for over 40 metabolic defects

Environmental Laboratory performing testing for environmental permitting, routine environmental monitoring, and response to environmental contamination

Analysis of drinking water throughout Tennessee

**What Still Needs to be Accomplished**

- ✚ Full installation of a Laboratory Information Management System (LIMS) that is fully integrated with all county health departments and health program areas.
- ✚ Develop a complete contact information database for all clinical laboratories in Tennessee.
- ✚ Complete a Bioterrorism Sample Collection Training DVD for First Responders
- ✚ Complete implementation of a Chemical Terrorism Laboratory to test human specimens for chemical exposure

## MINORITY HEALTH

### INTRODUCTION

The Office of Minority Health (OMH) was established in 1994 by the Commissioner of the Tennessee Department of Health (DOH) and was codified by the State Legislature. OMH serves as a central point for the department on minority health issues and health disparities. The Office provides technical assistance and consultation, promoting the collaboration and coordination of other divisions within DOH and other State departments, community agencies and organizations to address concerns of minorities.

The mission of OMH is to promote improved health status of minority citizens of the state. OMH advocates the development of policies, programs and services that appropriately respond to the cultural and ethnic needs of minority Tennesseans.

In response to Healthy People 2010 (United States Department of Health and Human Services), the Tennessee Department of Health has adopted the "Better Health: It's About Time" initiative, which focuses on addressing morbidity and mortality of infants, prenatal care, adolescent pregnancy, diabetes, heart disease and stroke of all Tennesseans. The initiative also addresses critical health issues and health disparities in communities of color. The Office of Minority Health has enhanced its programs by instituting 10 Core Functions by which the office will operate. This will be accomplished by reorganizing the divisions and increasing its programmatic responsibilities. There are 4 programmatic divisions in the Office of Minority Health: Community Wellness, Minority Health and Community Development, Title VI, and Black Health Initiative/Administration. Staff has been hired to carry out programmatic responsibilities of the prescribed divisions.

### FACTS

In 2004, the diabetes age-adjusted mortality rate for African American Tennesseans was over two (2) times higher than for whites. In the same year, heart disease claimed the lives of blacks at an age-adjusted rate of 322.1 deaths per 100,000 versus 245.5 per 100,000 for white Tennesseans, a difference of 1.3 times.

In 2003, the African American infant mortality rate was 18.0. This was over two times the mortality rate of white infants, 7.0.

### GOALS AND OBJECTIVES

1. Monitor health status to identify and solve community health problems.
  - a. Diagnose the community health status.
  - b. Identify threats to health and assessment of health services needs.
  - c. Collect, analyze, and publish information on access, utilization, cost, and outcome data.
  - d. Review of vital statistics and health status of specific groups that are at higher risk than the total population.
  - e. Collaborate in the management of integrated information systems with private providers and health benefit plans.
2. Diagnose and investigate health problems and health hazards in the community.
  - a. Identification, epidemiologically, emerging health threats.
  - b. Utilizing public health laboratory capabilities to conduct rapid screening and high volume testing.
  - c. Conduct studies on active infectious diseases based on epidemiological studies.

**GOALS AND OBJECTIVES (continued)**

- d. Enhance technical capacity for epidemiological investigation of disease outbreaks and patterns of chronic disease and injury.
- 3. Inform, educate, and empower people about health issues.
  - a. Integrate social marketing and targeted media public communication into various special initiatives and current programs.
  - b. Collaboration with health care providers to reinforce health promotion messages and programs.
  - c. Conduct joint health education programs with schools, churches, and worksites.
- 4. Mobilize community partnerships to identify and solve health problems.
  - a. Participate in, and/or convening and facilitating community groups and associations involved in prevention, screening, rehabilitation, and support programs.
  - b. Coalition development to enhance human and material resources on community health needs.
- 5. Develop policies and plans that support individual and community health efforts
  - a. Leadership development at all levels of public health.
  - b. Health planning in all jurisdictions at the community and State level.
  - c. Develop tracking system of measurable health issues for quality improvement in prevention, intervention, and treatment programs.
  - d. Joint evaluation of prevention and treatment services in the medical health care systems to develop consistent policies in regard to health disparities.
  - e. Develop codes, regulations and legislation to guide best practice in public health.
- 6. Ensure State laws and regulations affecting communities of color protect the health and safety of that population.

## GOALS AND OBJECTIVES (continued)

- a. Assist in the regulation and enforcement of sanitary codes, especially in the food industry and clean air standards.
  - b. Assist in providing protection of drinking water supply.
  - c. Ensure timely follow-up of hazards, preventable injuries, and exposure-related diseases identified in occupational and community settings.
  - d. Monitor quality medical and behavioral health services.
  - e. Ensure timely review of new drug, biological and medical device applications.
7. Link individuals to needed personal health services and assure the provision of health care when otherwise not available.
- a. Assure access of care through a coordinated system of appropriate prevention, intervention, and treatment.
  - b. Develop and coordinate appropriate culturally and linguistically sensitive materials and ensure staff will provide referral to services and information for special population groups.
  - c. Assure that ongoing care management is provided and transportation services and targeted health information is available to high risk populations.
  - d. Assure technical assistance is available and provided for effective worksite health promotion/disease prevention programs
8. Assure a competent public and personal health care workforce.
- a. Provide staff education and training for personnel to meet the needs of public and personal health services.
  - b. Assure the efficiency and effectiveness of the licensure process of professionals, and certification of facilities, providing regular verification and inspection follow-up.
  - c. Advocate for life-long learning and continuous quality improvement of all licensure and certification programs.



<p>Annual Health Summit of Minority Communities</p>	<p>The Summit is an annual conference developed, sponsored and organized by the Office of Minority Health (OMH), the Tennessee Black Caucus of State Legislators (TBCSL), Tennessee Black Health Care Commission (BHCC), and the Tennessee Minority Health and Community Development Coalition, Inc. (TMHCDC). The Summit provides a forum for professionals - state and national - and other interested citizens to exchange ideas and dialogue with one another on matters that pertain to minority health. Issues concerning new technologies, prevention strategies, policy making, and managed care are among the many topics discussed.</p>
<p>HIV/AIDS Project</p>	<p>The project provides assistance in: (1) identifying community needs for the minority populations in Tennessee, (2) facilitating the coordination and collaboration of Community Based Minority Serving Organizations (CBMSO) with other State and local organizations receiving federal assistance and (3) providing technical assistance.</p>
<p>Hurricane Katrina</p>	<p>The Office of Minority Health was designated in September 2006 to receive federal disaster aid and support, and to address the effects of health disparities of populations effected by Hurricane Katrina. As a response to long-term relief efforts, OMH has developed a Katrina Relief Navigational Guide, in both English and Spanish which assists displaced persons in accessing the resources necessary to sustain themselves and their families. OMH has identified faith based and community organization partners with the capacity to assist in providing and/or referring individuals to medical, social and mental health services.</p>
<p>Tennessee Institute for Healthy Communities</p>	<p>The Institute for Healthy People was awarded a grant in September 2005 to develop cultural competency training, evaluation and support to governmental, non-governmental, and communities to eliminate health and socioeconomic disparities. The program will develop a statewide plan to eliminate health disparities, and evaluate and monitor government and non-government organizations to assess state efforts to implement and sustain culturally competent policies and programming activities.</p>
<p>Minority Health and Community Development Programs</p>	<p>The program goal is to develop and enhance community based intervention programs to eliminate health disparities in Tennessee. The implementation of the program encourages collaboration and partnerships among community based organizations.</p>



## Minority Health Month

The Tennessee Minority Health Community Development Coalition provides regional support, working to eliminate health disparities in Tennessee by improving health status in communities of color.

Minority Health Month is an initiative annually recognized by the United States Department of Human Services (DHHS) through the federal Office of Minority Health. April has been set aside to focus greater attention on health and socioeconomic issues that disproportionately affect African Americans and other citizens of color in the United States. Beyond raising awareness, this month is also an opportunity for individuals, institutions, and communities to pool their resources to eliminate health disparities through local health-related activities and events.

## What Still Needs to be Accomplished

- ✚ Ongoing - Perform timely and efficient investigations of discrimination complaints.
- ✚ Ongoing - Plan, schedule, and implement seminars, and health fairs.
- ✚ Ensure the collaboration of the Coalitions with an established Community intervention program to ensure engagement with the African American and Hispanic communities.
- ✚ Develop a media campaign to disseminate health related information to communities of color in Tennessee.
- ✚ Plan and organize activities to increase the awareness of health disparities in communities of color.
- ✚ Ongoing - Solicit funding by responding and writing grant application.
- ✚ Ongoing - Provide technical assistance and consultation on minority health issues and disparities, workshops, conferences, and seminars.
- ✚ Ongoing – Customized cultural competency training programs for various state and community agencies. A core training workshop is scheduled for the 2007 Annual Health Summit of Minority Communities.
- ✚ Enhance OMH's research forum that will review and disseminate new insights and innovative solutions to eliminate health disparities.
- ✚ Publication of Health Status Reports that identify health disparities in communities of color. The reports are reviewed and updated annually or bi-annually.
- ✚ Provide and/or make available supportive training activities on a bi-annual basis.
- ✚ Expansion of staff dedicated to protecting and promoting the health and well-being of communities of color.
- ✚ Enhance policy and procedures, fiscal management guidelines, programmatic activities, and administrative support.
- ✚ Enhance resources for intervention and prevention services in the Hispanic community.
- ✚ Ongoing - Review epidemiological health data to assist in planning efforts.
- ✚ Explore opportunities to partner with other agencies of state government and organizations to address minority health disparities.

**Major Projects:**

**Geographic Information Systems (GIS) Development.**

Researchers, public health professionals, policy makers, and others use GIS to better understand geographic relationships that affect health outcomes, public health risks, disease transmission, access to health care, and other public health concerns. GIS is being used with greater frequency to address neighborhood, local, State, National, and International public health issues. TOMH will assist in the development of GIS for DOH that will address health disparities statewide.

# NUTRITION SERVICES

## INTRODUCTION

The Nutrition Services Section administers the statewide planning, implementing, training and evaluation of multiple programs including the Special Supplemental Nutrition Program for Women, Infants, and Children, popularly known as WIC. The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) uses a combination of federal and other non-governmental funding to provide screening, nutrition education and supplemental nutritious foods to low-income pregnant, postpartum, and breastfeeding women, infants, and children to age 5. Through promotion and modification of food practices, this program seeks to minimize the risk of complications to women, infants, and children, maximize normal growth and development, and improve the health status of the targeted high-risk population. This program has central office employees that coordinate point-of-delivery (POD) services through local health department staff. Monthly services are provided to approximately 155,000 participants.

Federal regulations are followed in areas of determining eligibility, referral for health service, providing a uniform food delivery system including contracting with vendors, assuring expenditures are representative of clinic operations, providing nutrition education and conducting breastfeeding promotion and support. All aspects of the program operations are evaluated and monitored based on federal rules and regulations. Federal grants are provided to States for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children who are found to be at nutritional risk.

The United States Department of Agriculture (USDA) provides funding to state agencies to provide WIC services. The eligible population for the services is currently certified through the local health departments. This mechanism provides for an integrated health care delivery system in which the WIC eligible population can receive, at the same time as the WIC services, other health services they need. This mechanism also provides for a centralized system of accountability which will ensure program participants do not receive services from multiple sites in violation of federal standards.

The Department seeks to reduce nutrition related morbidity and premature mortality through promotion and modification of food practices to prevent or alleviate health problems which relate to nutrition. The target populations are pregnant, breastfeeding, postpartum women, infants and children to age 5.

The Commodity Supplemental Food Program is an optional service that provides nutrition education and supplemental food to pregnant, postpartum, and breastfeeding women, infants, and children to age 6, as well as, elderly (60+) men and women. Tennessee currently has an assigned caseload of approximately 15,000 of which ninety-two percent (92%) are elderly.

The Nutrition Services Section is also responsible for the administration of the Community Nutrition program. This program provides oversight and technical assistance to 14 Regional Nutrition Directors who provide nutrition education for the WIC program including clinical nutrition counseling and community nutrition education to other agencies. The Community Nutrition Program develops and coordinates the nutrition education component with consideration of local health department needs and available nutrition education resources. Community Nutrition staff are the experts in the most up to date scientifically based nutrition information and provide technical assistance to public health staff, health professionals, other state departments and community agencies.

## FACTS

The WIC program's statewide responsibility includes 162 WIC Clinics with approximately 368 rural regional staff and 151 metro contract staff. The number of WIC participants statewide is a monthly average of 155,000. The WIC program provides vouchers that participants use at over 1,100 authorized vendors monitored by WIC staff across the state. USDA federal funds are approximately \$138,000,000 to pay for WIC foods, nutrition counseling, nutrition education, and administrative costs.

## GOALS

1. By 2010, improve accessibility of nutrition information, nutrition education, nutrition counseling and related services in a variety of settings and for all eligible subpopulations.
2. By 2010, reduce the disparity for nutrition related diseases through focused nutrition education for disparate population groups.
3. By 2010, continue to provide improvement in monitoring and evaluating of program services.

## OBJECTIVES

- ✚ Continue to raise awareness about the importance of a healthy lifestyle through the community nutrition programs including the Body Mass Index initiative, School Vending Machine legislation, and other activities i.e. the Nutrition Services Cookbook.
- ✚ Continue to provide nutrition education and food vouchers to serve WIC participants statewide.
- ✚ Strengthen the link between nutrition and physical activity in all programs statewide.
- ✚ Continue to provide breastfeeding promotion and support activities to women participating in WIC.
- ✚ Provide leadership in fostering healthful lifestyles for specific populations.
- ✚ Continue to build and sustain data systems which include the Pediatric Nutrition Surveillance System, Patient Tracking Billing Management Information System, and other data systems to enhance services.
- ✚ Continue using scientific based research and standardized data for evaluation and improvement of program services.

## Where Tennessee Is Today/Initiatives/Accomplishments

Programmatic responsibility includes detailed federal reporting and accountability requirements. Complex federal rules and regulations must be strictly adhered to under the United States Department of Agriculture (USDA) program requirements. The WIC program has earned the reputation of being one of the most successful federally-funded programs in Tennessee.

Recently, the Tennessee WIC Program has expedited services to hundreds of women, infants, and children affected by the hurricane disaster. The WIC staff has collaborated with disaster relief organizations so that plans contain policies and protocols for the promotion, protection and support of breastfeeding mothers and infants.

In 2000, the Tennessee WIC program received federal funds to administer the WIC Farmers Market Nutrition Program and the Seniors Farmers Market Nutrition Program. These programs require eligibility determination, providing nutrition education, contracting with local farmers and evaluating and monitoring all aspects of each program's operations.

In September 2003, the Nutrition Section received a grant from USDA for breastfeeding promotion. A comprehensive plan using social marketing principles was developed to address these barriers and to raise public awareness and acceptance of breastfeeding. In 2004, the Nutrition Section received additional funding for this grant and has established a statewide breastfeeding peer counseling program for WIC participants.

The Nutrition Section has been instrumental in the implementation of the 2003 School Vending Machine and A la carte legislation establishing nutrition standards for individual foods vended or sold a la carte in grades pre-K through eight in public schools in Tennessee. The standards reflect restrictions on total fat, saturated fat, sugar, sodium, and serving sizes. This new law will over time positively affect the obesity rates in children and youth in Tennessee.

In 2004, the Body Mass Index (BMI) legislation passed authorizing local education agencies on a voluntary basis to implement a BMI screening program that identifies public school children who are at risk for obesity.

The Nutrition Section has developed the BMI training and education tools that will be used in public schools implementing the program. The Nutrition Section will also be the contact for schools collecting BMIs in order to assist them in the training materials and address any questions or concerns.

In 2004, the Nutrition Section developed a cookbook that features approximately 50 to 60 healthy, easy to prepare, and economical recipes. The Tennessee cookbook is unique because of the emphasis on healthful cooking, economical recipes, and inclusion of a nutritional analysis of each recipe. The cookbook will be available to all Tennesseans via the Department of Health's website and also in all WIC clinics. The cookbook will be featured in conjunction with health fairs and exhibits across the state.

### **What Still Needs to be Accomplished**

- ✚ Implement new WIC Vendor Cost Containment Rule establishing competitive price criteria and allowable reimbursement levels.
- ✚ Continue to support the growth of the WIC Breastfeeding Peer Counseling Program.
- ✚ Continue to support community nutrition efforts through the BMI legislation encouraging all schools to participate and to establish a statewide database system.

## OFFICE OF NURSING

### INTRODUCTION

The Office of Nursing is responsible for directing the Department of Health public health nursing services in developing and maintaining standards of public health nursing practice for professional nursing personnel. The monitoring of nursing practice is essential to ensure the delivery of quality patient care for citizens of Tennessee. These responsibilities are accomplished by the development and maintenance of the Public Health Nursing (PHN) Model Protocols which serve as physician standing orders, by providing and supporting statewide training opportunities, such as physical assessment classes, lab training, the United States Department of Labor Occupational Safety and Health Organization (OSHA) guidelines, nursing management, and by supporting the Quality Management process for evaluation of clinical services.

The Office of Nursing staff makes recommendations on, assists in the development of, and implements policies and guidelines related to nursing practice within the Department of Health. Staff in the Office of Nursing assists with assuring that these guidelines and policies are followed by working closely with Regional Nursing Directors, through public health nursing practice committees and Quality Management committees.

As the needs of public health patients change, so must the services in the local health departments adapt to meet these needs efficiently and competently. The goals for the Office of Nursing address issues which increase efficiency and competence.

### FACTS

Currently, a combined Patient Tracking Billing Management Information System (PTBMIS) computer data system and permanent paper record are utilized in 95 counties.

Currently, the PHN Model protocol paper manual is available for use in all 95 counties.

Currently, contact hours are available and provided through the Office of Nursing for any training provided.

Currently, there are 8 Rural and 6 Metro Nursing Directors who supervise approximately 192 Nursing Supervisors statewide.

Currently, Tennessee is at a crisis level of nurses with an expected shortage of more than 13,000 nurses for this year.

### GOALS

1. Increase effectiveness of patient care in local health departments assisting in the development of an electronic medical record, including the Next Generation of PTBMIS.
2. Place and maintain the PHN Model Protocols on the Intranet.
3. Increase workforce development opportunities at the nursing management level by providing leadership and management training for nursing management staff.
4. Increase public health nursing skills in emergency response.
5. Increase efforts towards retention and recruitment of public health nurses.

### OBJECTIVES

- ✚ By 2009, assistance in the Next Generation of PTBMIS will be provided with implementation in 15% of the local health departments.
- ✚ By 2008, 75% of all PHN nursing protocols will be accessible on the Intranet for local health department nursing staff.
- ✚ By 2009, 75% of all public health nurses at the management level will have received leadership and management training.

**OBJECTIVES** (continued)

- ✚ By 2008, 50% of all public health nurses will have received emergency response update/training in assessment, first aid and mental health counseling.
- ✚ By 2008, there will be a 50% decrease in vacant nursing positions within the public health department work force.

**Where Tennessee Is Today/Initiatives/Accomplishments**

A statewide committee has been formed to begin research and development of the Next Generation Patient Tracking Billing Management Information System (PTBMIS).

The PHN Model Protocol is current and is updated on a routine basis.

A process is in place to provide contract hours for nursing education. During 2005, there were 59 training courses with 1,309 participants with 316.6 contact hours awarded.

Currently, OSHA training includes fire safety and weather emergencies, disaster preparedness, blood born pathogens, and material safety data sheets (MSDS).

## OFFICE OF RURAL HEALTH and PRIMARY CARE

### INTRODUCTION

In July 1993, the Tennessee Office of Rural Health (TORH) was established through a grant by the Federal Office Of Rural Health Policy. Within the rural areas of the state of Tennessee, there was a need for a central focus and a coordinated effort to identify obstacles to the delivery of health care services that are unique to rural areas of Tennessee. Solutions were also required to bring about changes and reforms which would improve and enhance the health care of rural citizens.

The Tennessee Primary Care Office (PCO) serves to improve access to health care services for rural and urban underserved constituencies. The PCO continues to focus on the development of underserved areas through community intervention programs in an endeavor to address specific community needs, as identified by local health councils. Moreover, the PCO's efforts are directed towards recruitment and retention of primary, dental and mental health care providers in underserved communities and expansion of existing Community Health Centers (CHC).

### FACTS

The core programs of the Office of Rural Health are the Small Rural Hospital Improvement Program (SHIP) and the Medicare Rural Hospital Flexibility Program (FLEX). The core programs of the Primary Care Office (PCO) are the development and renewal of the federal designation of Medically Underserved Areas (MUA) for primary care and Health Professional Shortage Areas (HPSA) for primary care, oral health services and mental health services. Several federal programs use one or both of these designations as eligibility criteria. For example, MUA designation is necessary for a community health center grant. HPSA designation is necessary for National Health Services Corps placements. Current MUA or HPSA is necessary for rural health clinic certification. Medicare providers in a geographic HPSA are eligible for a 10% bonus on Medicare services.

### GOALS

1. Collect and disseminate programmatic and potential funding information.
2. Increase access to Primary Health Care Services for underserved areas and populations.
3. Support efforts to improve recruitment and retention of health professionals within rural and underserved areas, in an endeavor to increase the number of Primary Care providers serving disparate populations.
4. Coordinate resources and activities statewide.

### OBJECTIVES

- ✚ Annually, continue to work with National Health Service Corps (NHSC) Contractor to recruit sites to participate in NHSC programs through the distribution of site applications to all interested providers.
- ✚ By 2010, complete programmatic compliance audits on all participating sites; one third of sites will be audited each year.
- ✚ Assist communities and populations in the documentation of their need for primary care health services. Respond to 100% of requests for assistance.
- ✚ Annually, attend a minimum of one meeting with each partner organization. The Primary Care Office will continue to maintain working relationships with organizations that improve access and reduce disparities, including the Tennessee Department of Health's Office of Health Access, the State Office of Rural Health, the State Office of Minority Health, the Tennessee Primary Care Association, the Rural Health Association of Tennessee and other key statewide partner organizations.



## Where Tennessee Is Today/Initiatives/Accomplishments

### Medicare Rural Hospital Flexibility (FLEX) Program

The Medicare Rural Hospital Flexibility Program assists states in developing rural health plans, supporting the conversion of small rural hospitals to critical access status, developing rural health networks, strengthening and improving emergency medical services and improving and sustaining access to appropriate quality healthcare services in rural areas. The Flex Program seeks to sustain the rural healthcare infrastructure, with the Critical Access Hospital (CAH) as the hub of an organized system of care.

The Tennessee Department of Health's Medicare Rural Hospital Flexibility Program utilizes the state's Health Council infrastructure as the formal community process to identify the effective strategies to address identified needs. County and Regional Health Councils recommend proposals to the Commissioner of Health for approval. Grand funding is available to targeted rural communities to improve systems of care.

According to the guidelines established by the Federal Office of Rural Health Policy, funding is targeted to communities with a facility certified by the Centers for Medicare and Medicaid Services as a Critical Access Hospital (CAH), a facility eligible for designation as a Critical Access Hospital, and communities where there is no formal health care system, or an inadequate system of care. Communities located in rural areas, based on rural classification/reclassification criteria, are eligible to apply for funding from the Rural Systems Development Fund for projects designed to improve and integrate emergency medical services.

### Small Rural Hospital Improvement Grant Program (SHIP)

The Office of Rural Health Policy's Small Rural Hospital Improvement Grant Program (SHIP) provides funding to small rural hospitals to support endeavors in any or all of the following:

- Pay for costs related to the implementation of the Prospective Payment System (PPS).
- Comply with provisions of the Health Insurance Portability and Accountability Act (HIPPA).
- Reduce medical errors and support quality improvement.

#### Hospital Eligibility Requirements:

Small is defined as 49 available beds or less, as reported on the hospital's most recently filed Medicare Cost Report.

Shortage Designations

Rural is defined as located outside a Metropolitan Statistical Area (MSA); or located in a rural census tract of a MSA as determined under the Goldsmith Modification or the Rural Urban Commuting Areas.

The Primary Care Office (PCO) is proactive in support of the designation process. As mentioned earlier in the narrative, the Department conducts a survey of all primary care physicians and mid-level providers annually and dentists bi-annually and obtains data from the Department of Mental Health and Developmental Disabilities in order to complete mental health designations. These survey results are used to determine Full Time Equivalent (FTE) distribution, provider to population ratios, adjusted low-income FTE distribution and shortage areas. Upon completion of this survey, the PCO reviews all HPSA designations in the state. All updates are submitted to the Shortage Designation Branch. All low-income and population HPSAs are reviewed to determine if any can be upgraded to Geographic HPSAs and all undesignated areas are reviewed to determine if any could be eligible for new designations. The PCO responds to all requests for facility designations. All inquiries from providers, institutions or the public about current or possible new designations are made to the PCO. A subsequent review of new data could result in the successful application of a new or upgraded designation.

National Health Services Corps (NHSC)

The Primary Care Office also facilitates the National Health Services Corps (NHSC) program for Tennessee. Over the past 25 years, the NHSC has supported primary care providers, dentists and mental health providers in rural and urban underserved parts of the state. This is accomplished by providing scholarships and student loan repayment to providers willing to fulfill a service obligation at an approved practice site located in a Health Professional Shortage Area (HPSA). The practice site must agree to see all patients regardless of their ability to pay for services, and provide a sliding fee schedule for the uninsured below 200% poverty. Since its inception in 1970, over 300 providers in Tennessee have participated in the program.

### What Still Needs to be Accomplished

- ✚ Continue to support ongoing health care practitioner recruitment and retention efforts through the National Health Services Corps.

- ✚ Continue ongoing coordination of processing applications for designating federal Health Professional Shortage Areas and Medically Underserved Areas.
- ✚ Continue ongoing support of technical assistance for communities in their efforts to locate and apply for grants that focus on increasing access to primary health services.

# ORAL HEALTH SERVICES

## INTRODUCTION

In 1936, the dental health program of the Tennessee Department of Health was established as one of the first dental public health programs in the United States.

The Oral Health Services Section (OHS) of the Tennessee Department of Health (TDH) continues to conduct programs to prevent oral diseases, educate the public regarding the value of optimal oral health, screen and refer patients for early detection and prompt treatment of disease, provide dental care for segments of the population unable to access care through the private sector, and conduct programs in research and evaluation as resources permit.

Service delivery programs currently consist of fixed dental clinics located in health departments, three mobile dental clinics offering dental services to children at school sites, as well as a school based dental prevention program. Currently there are fixed dental clinics located in 48 of the 89 rural counties as well as 5 of the 6 metro regions. The focus of care is comprehensive care to children and emergency care to adults.

Collaborative efforts are optimized through partnerships with schools as well as other health professionals. These collaborative efforts include an early childhood caries program partnering medical and dental professionals to address oral disease in very young at risk children. Partnerships with schools address access to care issues and health disparities by providing preventive and restorative care to at risk children in school settings.

## FACTS

Oral diseases are among the most prevalent health problems in Tennessee. Oral diseases affect a significant number of children and adolescents in every county in the state.

Population-based surveys reveal that certain segments of the population (low socioeconomic groups, minorities, and those living in fluoride-deficient communities) are at a high risk for oral diseases and are the least likely to access care in the private sector.

Dental caries is the most common chronic childhood disease of children ages 5-17 years of age.

80% of decay is found in 25% of children focused primarily in minorities.

## GOALS

1. To ensure the overall health of Tennesseans by ensuring optimum oral health.
2. To eliminate oral health disparities.
3. To increase access to dental services for at risk populations

## OBJECTIVES

- ✚ To continue to exceed annually the 2010 Healthy People (21-9) water fluoridation goal of 75% by encouraging all community water systems in this state to initiate or continue fluoridation and, when necessary, purchase fluoridation equipment for non-fluoridating community water supplies.
- ✚ To provide alternative fluoride programs to targeted children who are at high risk for dental caries and do not have access to fluoridated public water systems.
  - weekly and biannual fluoride mouth rinse
  - daily fluoride tablets
  - fluoride varnish applied by public health nurses in public health clinics

**OBJECTIVES** (continued)

- ✚ To address 2010 Healthy People Objectives 21-8, 21-10, and 21-12 by continuing to partner with schools to provide school-age children with other proven oral disease prevention and control programs which include school-based:
  - pit and fissure sealant application and follow-up
  - screening, prioritizing, and referring children needing dental care
  - daily tooth brushing programs
- ✚ To conduct oral health education programs through in-service training for teachers and direct oral health education in the classroom.
- ✚ To address 2010 Healthy People Objectives 21-2 and 21-2 by providing technical assistance and coordination of public dental care delivery programs that provide dental care to segments of the population that have difficulty accessing care.
- ✚ To monitor the prevalence and severity of oral diseases through periodic statewide oral health assessments.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Cavity Free in Tennessee-Early Childhood Caries Program (ECC)

In 2004, the Department of Health launched its "[Cavity Free In Tennessee – Early Childhood Caries Prevention Program](#)." Implementation of this program targets regular Early and Periodic, Screening, Diagnosis and Treatment (EPSDT) visits with children at risk for ECC. Nurses and nurse practitioners deliver preventive oral health services to children during these visits, as well as educate their parents or caregivers about keeping children's teeth healthy. These visits provide an opportunity for children to receive dental screenings, the application of fluoride varnish, and early dental referrals.

While children 0 – 5 years old are the target population for Cavity Free In Tennessee (CFIT), this program is available for children 0 through 20 years old in all seven rural regions of Tennessee. This program is a true medical-dental partnership.

School Based Dental Prevention Program

This program is a statewide school based preventive dental program targeting children in grades K-8 in schools with 50% or more free and reduced lunch. Portable dental equipment is used by public health dental professionals to provide dental services in the school setting to include screenings, referrals, and follow-up to dental providers to address unmet dental needs in this population. Dental examinations, health education and preventive sealants are also provided to this target school population as well as information regarding TennCare eligibility and the application process.








Mobile Dental Programs

Three mobile dental clinics have been purchased by the Bureau of Health Services of the Tennessee Department of Health. These are located in the Mid-Cumberland Region, Northeast Region, and West Tennessee Region. These mobile dental clinics provide comprehensive dental services to at risk children in school settings.

Clinical Dental Program

Public dental care delivery programs provide clinical dental services to segments of the population that would otherwise not receive care. Comprehensive dental services are offered to children and emergency care to adults. Dental facilities housed within local health departments are located in 48 of 89 rural counties and 5 of 6 metropolitan regions. If a dental clinic is open and staffed, clinical dental services are provided on a part-time or full-time basis depending on the location.

**What Still Needs to be Accomplished**

-  Ongoing: Continue to develop programs that address access to care issues.
-  Ongoing: Provide staff development and educational opportunities for medical partners and dental staff.
-  Ongoing: Continued implementation of the Oral Health Communication Plan.
-  Ongoing: Continue to serve as a resource for water utility customers, water plant operators, and Tennessee Department of Environment and Conservation in support of water fluoridation.
-  Ongoing: Serve as an oral health resource for public and private partners in Tennessee.
-  Planned: Apply to funding sources to allow Oral Health Services to provide tracking and surveillance of oral health needs in Tennessee.
-  Planned: Conduct a statewide survey to assess the current oral health status of children in Tennessee.

## PHARMACY SERVICES

### INTRODUCTION

The Pharmacy Program is responsible for providing oversight for the Department of Health regional pharmacies throughout the state and assures that pharmacy policies are followed. The Pharmacy Program is currently comprised of one pharmacist, who collaborates, communicates and coordinates activities provided by public health pharmacists, nurses, nurse practitioners, physicians and other healthcare providers within the public health infrastructure. The Pharmacy Program makes recommendations regarding medication repackaging and dispensing policies and procedures, and drug information.

The Pharmacy Program provides pharmacy expertise and professional direction and works collaboratively with the Department of Health regional pharmacies and provides support in obtaining medications and contracts for medications to the various programs. The Pharmacy Program works closely with the Health Services Medical Director and Director of Nursing in reviewing nursing protocols that serve as physician standing orders and providing various training to pharmacists, nurses and physicians within the Department of Health. Likewise, the Pharmacy Program works to obtain medications for indigent Tennesseans, who are patients within the Department of Health Primary Care Clinics. These medications will be either provided to the patient by the pharmacies or obtained through Patient Assistance Programs.

### FACTS

Tennessee Department of Health provides pharmacy services in 89 counties in the state.

Tennessee Department of Health pharmacy formulary currently provides over 280 medications in the health departments.

Tennessee Department of Health formulary addresses the needs of patients within the programs of: Immunizations, STD, HIV, TB, Dental, and Emergency Preparedness.

Tennessee Department of Health has 6 rural regional pharmacies and pharmacists.

Tennessee Department of Health provides medications to indigent Tennesseans in 47 county health departments that offer primary care services.

### GOALS

1. To support Safety Net/Primary Care in local health departments and ensure that uninsured Tennesseans have access to pharmaceuticals each year with optimal formularies by 2010.
2. To assist in the development and implementation of a bar-code system for medication tracking and dispensing by 2007 to reduce cost and errors, which will improve patient safety and quality of care.
3. To work with various programs to develop uniform formularies for the various programs and update them as new medications are brought into the marketplace to optimize patient care each year with optimal formularies achieved by 2010.
4. To assist in workforce development for Public Health Pharmacist and Pharmacy Technicians through continuing education requirements each year. This will allow for better quality of care and better health to patients receiving medications at our local health departments.
5. To ensure the state is able to purchase critical medications when needed during outbreaks and disasters.
6. To ensure that all state and federal pharmacy laws, rules and regulations are adhered routinely.

	<p><b>GOALS</b> (continued)</p> <ol style="list-style-type: none"> <li>7. To hire additional pharmacist and technician to optimize pharmaceutical support for East Tennessee Regional Office by 2010. This will improve patient care by assuring adequate staff to address clinical pharmacy issues within the region.</li> <li>8. Work with Tennessee Board of Pharmacy and Federal Food and Drug Administration to improve cohesiveness.</li> </ol> <p><b>OBJECTIVES</b></p> <ul style="list-style-type: none"> <li>✚ Consult with Director of Primary Care on pharmacy and formulary issues as requested and as new medications/treatment guidelines are implemented.</li> <li>✚ Work with pharmacist, nurses and information technology (IT) staff to develop a system that will enable public health staff to be more efficient with their time and improve patient safety and quality of care.</li> <li>✚ Improve the accountability of pharmaceuticals within the health department and improve the delivery and reordering of pharmaceuticals from the regional pharmacies.</li> <li>✚ Work with the programs to provide medications to patients more efficiently.</li> <li>✚ To assist with providing educational opportunities relevant to public health with regards to pharmacist and pharmacy techs.</li> <li>✚ Work with vendors to make sure ordering, invoices and payments are completed timely.</li> </ul>
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**Where Tennessee Is Today/Initiatives/Accomplishments**

<p>Policies, Protocols and Guidelines are current.</p> <p>Improved purchasing procedures for pharmacist and procurement staff in the regions.</p>	<p>Formulary for Primary Care is functional and in the Health Department's clinics and pharmacies</p> <p>Work with Immunization, STD, HIV, TB, Dental and other programs that require medications for the care of our patients.</p>
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### What Still Needs to be Accomplished

- ✚ Hire an additional pharmacist to assist the Director of Pharmacy in providing adequate service to all of the various programs within Department of Health; therefore, with the additional manpower overall health and cost of health is improved.
- ✚ Implement a pharmacy and hire a pharmacist for the East Tennessee Region.
- ✚ Continue to support the development and implementation of a bar-code system.

# PHYSICAL ACTIVITY AND HEALTH

## INTRODUCTION

Promote Physical Activity for persons of all ages, abilities, and who suffer disproportionately from disease as result of inactivity. Increasing Physical Activity through programs, policies, and environmental change. Encouraging the need for and benefits of regular physical activity which promotes:

- Prevention of disease
- Enhanced flexibility
- Strength of bones and muscles
- Control of Weight

The Physical Activity and Health Program within the Community Services Section facilitates the administration of health promotion programs in the 13 health regions and 95 counties of the state.

## FACTS

In 2003, it is estimated that \$1.8 billion was spent on adult obesity related medical expenditures in Tennessee.

In Tennessee, the increase in overweight and obesity have occurred in all ages, racial and ethnic groups, and both genders.

In 2004, 25% of Tennessee adults were obese.

## GOALS

1. Reduce the statewide self-reported overweight or obesity prevalence among Tennessee adults from 61.3% in 2002 to 40% in 2010 (Healthy People (HP) 2010 objective 19-1, a 35% reduction).
2. Reduce the black (80.1%) – white (52.3%) difference in adult overweight or obesity prevalence from 28% in 2002 to 14% in 2010 (a 50% reduction).
3. Reduce the self-reported overweight or obese prevalence among Tennessee high school students from 15.2% in 2003 to 5% in 2010 (HP2010 objective 19-3b, a 67% reduction).
4. Reduce the black (19.9%) – white (13.9%) difference in overweight or obese prevalence among high school students from 6% in 1999 to 3% in 2010 (a 50% reduction).
5. Serve as a clearing house for information on physical activity and wellness programs, materials, and best practices.

## OBJECTIVES

- ✚ Implement an awards program for the community and legislators by 2007.
- ✚ Develop an outreach strategy and a distribution strategy for the State Plan for Physical Fitness and Health with talking points by 2007.
- ✚ Governor's Council on Physical Fitness and Health members shall serve as a liaison for 5 agencies to encourage council activities by 2007.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Partnered with Blue Cross Blue Shield to implement Walking Works for Schools in 35 Schools with approximately 13,000 Students.

Partnered with Middle Tennessee State University to complete Tennessee Healthy Living Index.

**What Still Needs to be Accomplished**

- ✚ Partnered with Governor's Council on Physical Fitness and Health to complete the state plan on Physical Fitness and Health.
- ✚ Establish a budget and secure adequate funding for the Governor's Council on Physical Fitness and Health activities.

## PRIMARY CARE

### INTRODUCTION

The Tennessee Department of Health provides primary care for the uninsured which includes acute episodic and chronic disease care. There are 47 health departments which offer primary care services in Tennessee. These health departments also offer basic lab services and a limited pharmaceutical formulary. The Primary Care Target Service Group is age 19 to 65 years who are uninsured. (Not including age 65+ who are eligible for Medicare). Some regions serve as primary care providers (PCPs) for the TennCare population and they follow TennCare guidelines for care provided.

Oversight for primary care services is provided by one state primary care director/nurse practitioner who collaborates, communicates, and coordinates activities provided by public health nurse practitioners and physicians. The state primary care director also works closely with the state Pharmacy Director, Health Services Medical Director, and Director of Nursing to establish policies and procedures for quality health care in our health department clinics. This collaboration includes providing various training and information to health department medical and nursing staff in an effort to ensure that care provided is in alignment with the current standards of care for our patients.

### FACTS

Tennessee Department of Health provides primary care services in 47 counties in the state.

Tennessee Department of Health has added 21 nurse practitioners and 38 physicians during 2005-2006 to provide primary care for the increasing population of uninsured in the state.

The Tennessee Department of Health has seven regional primary care directors and one state primary care director.

The Tennessee Department of Health pharmacy formulary provides 70 medications designated for primary care services.

### GOALS

1. To increase the number of health departments providing primary care from 47 to 89 by 2010.
2. To increase the number of health department primary care providers to include at a minimum one nurse practitioner for each of the 89 clinic sites and one physician for every two sites by 2010.
3. To hire a regional nurse practitioner for every region in order to assure adequate staff to address clinical issues statewide by 2010.
4. To hire an additional public health nurse consultant to provide support for the state primary care director/regional primary care directors by 2010. This will improve patient care by assuring adequate staff to address clinical issues statewide.
5. To increase the number of medications for primary care services from 70 to 100 by 2010.

### OBJECTIVES

- ✚ Network with Tennessee Department of Health Regional Primary Care Directors/Coordinators, Regional Directors, Regional Nursing Directors, and Central Office staff.

#### Activities:

1. Participate on weekly conference calls with Regional Directors.

## OBJECTIVES (continued)

2. Coordinate quarterly and “as needed” meetings with the Regional Primary Care Directors/Coordinators – these will be teleconference, videoconference, and on-site conferences.
3. Provide primary care updates to Regional Nursing Directors – Feb.15, 2006 and September 28, 2006. Also other dates as needed.
4. Participate in Central Office meetings as needed regarding the primary care program – systems issues, contract issues, formulary issues, equipment/supplies issues, etc.

### Network with Regional Health Officers.

#### Activities:

1. Participate in the Medical Service Evaluation Committee (MSEC) meetings.
2. Provide primary care updates for MSEC – March 29, 2006. Also other dates as needed.
3. Develop policies/procedures for primary care with input from Regional Health Officers and Regional Primary Care Directors/Coordinators.

### Network with State Pharmacy Director

#### Activities:

1. Participate in Pharmacy/Therapeutics Committee.
2. Evaluate requests for changes in the State Primary Care Formulary.
3. Determine current standards of care for prescribing and communicate to Regional Primary Care Directors/Coordinators.

### Ensure current standards of care for primary care provided in our health departments.

#### Activities:

1. Work with nurse practitioners (NP), physicians, and nurses in the health departments to maintain current standards of care.
2. All NP and MD staff must keep current with medical and nursing literature.

**OBJECTIVES (continued)**

3. All NP and MD staff must maintain certification through CEU's and/or CME.

4. Maintain current Nurse Practitioner protocols.

✚ Develop and maintain State Primary Care Manual.

✚ Develop tools for quality assurance monitoring.

Activities:

1. Develop reports for evaluation of lab tests ordered, prescribing habits, productivity, most common diagnoses, and other aspects of primary care as deemed necessary.

2. Distribute reports on a regular basis for evaluation by each region and by Central Office staff.

3. Work with Quality Management to revise audit tools to assess primary care.

✚ Assist with primary care staff recruitment as needed.

Activities:

1. Work with Personnel to explore Career Builder contract and other recruitment tools.

✚ Support Central Office staff as they work toward implementing an electronic medical record.

✚ Collaborate with nurse practitioners, physicians, nurses, Health Services Administration staff, and IT staff to develop a data reporting system that will enable public health staff to be more efficient with their time and improve patient safety and quality of care.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Forty seven (47) health department sites are providing primary care for the uninsured.

The Primary Care Manual has been developed and distributed in draft format.

The Nurse Practitioner Protocol has been developed and is current in each primary care site.

Each region has a Regional Primary Care Director and/or Coordinator.

**What Still Needs to be Accomplished**

✚ The Primary Care Manual will undergo various revisions and additions over the first 6 months of use, and as needed thereafter.

- ✚ Recruitment and Retention.
- ✚ Electronic medical record.
- ✚ Development of tools for quality assurance monitoring.
- ✚ Development of reports for evaluation of lab tests ordered, prescribing habits, productivity, most common diagnoses, and other aspects of primary care as deemed necessary.

## PUBLIC HEALTH EMERGENCY PREPAREDNESS (PHEP)

### INTRODUCTION

In the aftermath of the September 11, 2001 terrorism attack and the October, 2001 weaponized anthrax releases, the Department of Health has received federal funding annually through the Centers for Disease Control and Prevention to establish a process for strategic leadership, direction, coordination, and assessment of activities to ensure state and local readiness, interagency collaboration, and preparedness for bioterrorism, other outbreaks of infectious disease, and other public health threats and emergencies.

### FACTS

Since 2001, the Tennessee Department of Health has received over \$68 million through a cooperative agreement with the Centers for Disease Control and Prevention (CDC). This funding has been utilized to improve preparedness at the local, regional and state levels, and the overall statewide infrastructure of the Department of Health.

In May, 2006, the Strategic National Stockpile operations achieved the CDC's designation of "Green" or the highest level of readiness.

### GOALS

1. Increase the use and development of interventions known to prevent human illness from chemical, biological, radiological agents, and naturally occurring health threats.
2. Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies.
3. Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food or environmental samples that cause threats to the public's health.
4. Improve the timeliness and accuracy of information regarding threats to the public's health as reported by clinicians and through electronic early event detection in real time to those who need to know.
5. Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.
6. Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.
7. Decrease the time needed to restore health services and environmental safety to pre-event levels.
8. Increase the long-term follow-up provided to those affected by threats to the public's health.
9. Decrease the time needed to implement recommendations from after-action reports following threats to the public's health.

### Where Tennessee Is Today/Initiatives/Accomplishments

To assist in reaching the goals listed above, 115 new positions have been established including physicians, epidemiologists, pharmacists,

In the Fall of 2002, the PHEP program developed a post-event smallpox plan to ensure the ability to vaccinate all of Tennessee's citizens within 10 days.



emergency response coordinators, nurse clinicians, nursing consultants, information technologists, microbiologists, and administrative staff.

In collaboration with local, regional and metropolitan health departments, staff has designated 117 points of dispensing (POD) sites with strategically located receiving, staging, and storing (RSS) sites for Strategic National Stockpile (SNS) assets. The Strategic National Stockpile, managed by the CDC, includes a broad spectrum of pharmaceuticals, antidotes, vaccines and other medical items that may be required in the event of an emergency.

Epidemiologic and disease surveillance has been greatly enhanced with hiring a total of 27 epidemiologists. In addition to monitoring disease reporting and responding to outbreaks, this staff augments the Department of Health's capacity to evaluate syndromes that might be indicative of exposure to bioterrorism agents.

To improve security, provide adequate space for new PHEP staff, and enhance testing capabilities at state laboratories, various renovations have been completed. Additionally, generators have been purchased to ensure the ability to continue critical operations in the event of an emergency.

The Tennessee Department of Health, the Governor's Office of Homeland Security and the Tennessee Emergency Management Agency combined funds and obtained a contract to execute 11 tabletop exercises, 10 district full-scale exercises, 11 district law enforcement-based exercises, 3 agro terrorism exercises, and one continuity of government exercise. The result, the Tennessee Homeland Security Exercise and Evaluation Program, exercises law enforcement, first responders, hospitals and public health simultaneously to enhance deterrence, preparedness, and response capabilities.

A statewide videoconferencing system has been installed at each of the 13 regional health departments and the central office and is used to facilitate multiple public health training sessions.

Additional training opportunities have been provided through a collaborative, on-line distance learning program with the University of Tennessee (UT)-Knoxville, UT-Memphis, and East Tennessee State University known as the Tennessee Public Health Workforce Development Consortium.

This plan will serve as the model for mass antibiotic distribution in the event of a large-scale outbreak.

Tennessee was one of the first states in the nation to complete statewide placement of CHEMPACKS, packages of nerve agent antidotes that can be immediately accessed in the event of chemical-based terrorism. Through a joint effort of the Tennessee Department of Health, the Governor's Office of Homeland Security, and the Tennessee Emergency Management Agency, CHEMPACKS have been deployed to multiple secure locations across the state.

Development of a Bio-safety level 3 (BSL-3) public health laboratory has improved our ability to identify potentially virulent organisms like tularemia, multi-drug resistant tuberculosis, and anthrax, etc. Additional enhancements to the Laboratory's diagnostic capabilities include the expansion of polymerase chain reaction (PCR) and pulsed-field gel electrophoresis (PFGE) methodologies to the four of the state's public health laboratories.

To ensure the ability to communicate in the event of an emergency, redundant communications systems have been purchased including computers, laptops, pagers, cell phones, fax machines, HAM radios, VHF radios, etc. In addition, the Tennessee Health Alert Network (T-HAN) has been implemented, which provides the ability to alert 3,000 public health staff and first responders, and 27,000 volunteers in the event of an emergency.

Effective communication of health information to the public, partner agencies, and the medical community is a major priority during a public health emergency. The Tennessee Department of Health's Crisis and Emergency Risk Communication (CERC) Plan has been developed to reach these groups in addition to special needs populations, such as non-English speakers, physically or mentally disabled, etc. The CERC also outlines lines of communication to media agencies to assist in the dissemination of important information.

### What Still Needs to be Accomplished

- ✚ Automation of data capture functions
- ✚ Planning/exercises with border states
- ✚ Basic Life Support Disaster training
- ✚ Fill Microbiologist positions at Lab
- ✚ NIMS training to all public health staff
- ✚ Continue joint exercise program

# QUALITY MANAGEMENT

## INTRODUCTION

The Quality Management (QM) Program reviews and evaluates clinical care and administrative areas in all Local and Regional Health Departments in the State. The Quality Management Guidelines consist of the standards that are used to evaluate the clinical care and administrative areas. Medical records and lab inspections are some of the many reviews conducted at each site. The review tools consist of Administrative, Availability of Services, Comprehensive Medical Record, Encounter Medical, Fiscal Risk Minimization, TennCare Advocacy, Title VI, and Women, Infants and Children (WIC) Voucher Control.

### FACTS

The QM Program operates in all thirteen regions. There is a coordinator for each region.

### GOAL

The goal of the Quality Management Program is to establish the foundation for evaluation of public health services and to pursue opportunities for improvement, providing comprehensive evaluations and assessment to all levels of the QM structure on an ongoing basis. Corrective actions are required on a timely basis as described in the Quality Management Guidelines.

### OBJECTIVES

- ✚ To identify and utilize strengths for continual improvement.
- ✚ To support the involvement and leadership of staff in the improvement process.
- ✚ To remove barriers to quality public health services.
- ✚ To streamline systems and processes.
- ✚ To analyze QM results to move toward consistency in clinical and administrative processes.

## Where Tennessee Is Today/Initiatives/Accomplishments

The QM program operates in all 95 health departments across the state.

QM Coordinators visit twice yearly to complete the required reviews.

## What Still Needs to be Accomplished

- ✚ Training new employees about the QM Program's ongoing process.
- ✚ Development of needed standards and interpretive guidelines for new features of the Primary Care QM Program following the recent development of the Safety Net/Primary Care clinics throughout the state.

# RAPE AND SEXUAL ASSAULT PREVENTION PROGRAM

## INTRODUCTION

The Tennessee Rape and Sexual Assault Prevention Program seeks to reduce the incidence of rape and attempted rape through education of the public, training of law enforcement, hospital and other related personnel, and direct services and support to survivors and their support systems.

## FACTS

According to the 2005 Tennessee Bureau of Investigation, Crime in Tennessee report, rapes in Tennessee occurred at a rate of 37 per 100,000 population. There were 2,196 reports of forcible rape. Three hundred and twenty four adults and 69 juveniles were arrested for forcible rape and 254 adults and 2 juveniles were arrested for statutory rape. In addition, there were 394 arrests for forcible fondling, 11 arrests for incest, 53 arrests for forcible sodomy and 46 arrests for sexual assault with an object. Of the 2,196 forcible rapes reported, 1,482 occurred in the home. Two thousand one hundred and seventy nine victims were female and 17 were male. Forty percent of rape victims were under the age of 18; 23% were age 18-24; 17% were 25-34 years of age; and 11% were ages 35-44.

## GOALS

1. To increase the relationships and partnerships among professionals and the public to facilitate a community based response to victims and perpetrators of violence
2. To reduce the incidence of sexual assault and violence through education, training, direct services and support to survivors.
3. To eradicate the incidence of rape in Tennessee and improve the quality of rape prevention programs.

## OBJECTIVES

- ✚ By October 31, 2007, interpret and distribute information regarding the occurrence of sexual violence in Tennessee.
- ✚ By October 31, 2007, promote awareness of sexual violence prevention through presentations and media campaigns targeted to general population, faith based organizations, organizations that work with youth, middle and high schools, universities/colleges, organizations that work with men/boys and at risk communities.
- ✚ By October 31, 2007, mobilize partnerships to initiate a sexual violence prevention program to train school educators, peer groups, professional and community groups.
- ✚ By October 31, 2007, link at risk populations to traditional and nontraditional crisis intervention service providers in Tennessee.
- ✚ By October 31, 2011, increase by 10% the knowledge of sexual violence among professionals and volunteers, middle and high school students, family and staff, colleges and universities, and in the community at-large.
- ✚ By October 31, 2011, reduce the annual rate of rape and attempted rape to no more than 40 per 100,000.

## Where Tennessee Is Today/Initiatives/Accomplishments

Local health departments and sexual assault centers participated in RAINN Before & After which is a nationwide campaign to reach 2 million high school students with important information about sexual assault printed on wallet-sized cards containing prevention and recovery tips, along with information about the National Sexual Assault Hotline. A total of 64,150 cards were distributed to 102 schools across the state with the help of 14 agencies.

The West Region Health educator provided information on date rape/dating violence to 15 classes and approximately 375 Union City High School students in the Family and Consumer Science classes, provided rape education/dating violence training to 10 employees of Right Choices of West Tennessee on July 28th, provided the contact information to Obion County Central and Union City High Schools about the rape prevention specialist from Pathways.

The Northeast Region Health Educator partnered with staff of the area Crisis Center (formerly known as SARC) to provide information on sexual assault/violence prevention to forty participants at the local public housing community. The Health Educator also partnered with staff from the Crisis Center to provide information to students at Tusculum College during a Fall 2004 health event sponsored by Tusculum College Student Service Representatives and the campus Health Care Clinic. Approximately 85 students were given information on sexual assault/violence prevention as well as information on services of the Crisis Center. Currently partnering with SARC to provide the Rape and Violence portion of family life education in the county schools. Also, working with SARC to develop a violence prevention program for teen girls in state custody.

Adopted Florida Department of Health's Rape media campaign - *Rape. Talk About it. Prevent it.* The campaign focuses on providing young people with thought provoking messages regarding their role in the prevention of sexual violence. The campaign materials are designed for use during educational programs and public awareness activities. The key messages of the campaign are presented in various formats and designed for a variety of audiences.

In the Metropolitan Davidson County Region a total of 889 educational brochures on rape prevention were distributed to universities, churches, and mental health institutions. 2,654 educational brochures on rape prevention were distributed to schools, health clinics, and universities. Seven consultations were provided to inform community groups on teen sexual behavioral, rape cultures, teen cultures, how to design rape prevention programs, develop task forces, and to enforce laws and regulations related to this subject. Two formal education sessions were provided for a community group and a college. Four policy recommendations were made to develop rape reporting guidelines for colleges and universities and to develop information to be inserted into student handbooks. One formal rape prevention education program was developed and will be implemented during new student orientation sessions held at a diesel college in Nashville, Tennessee.

In grant year 2004-2005, the 10 Rape and Sexual Assault Centers across the state received approximately 14,739 crisis calls. A total of 155 educational programs were provided to approximately 4,098 participants on over 30 topics. The participants included professionals, students, parents and community members.

## What Still Needs to be Accomplished

- ✚ The implementation of the rape media campaign.
- ✚ Restructuring the Rape Prevention Education Program to focus on prevention education in lieu of victim centered services.

## RENAL DISEASE PROGRAM

### INTRODUCTION

The Tennessee Renal Disease Program was established by the state Legislature in 1971 to provide financial assistance to medically indigent persons with End Stage Kidney Disease. Limited coverage of dialysis treatment costs is also available for those unable to pay for these services.

### FACTS

The Tennessee Renal Disease Program serves 1,350 residents who require chronic dialysis or who have had a kidney transplant within 12 months of applying to the program.

Individuals are eligible for the program if the family's gross income is at or below 200% of the federal poverty level.

Medical eligibility is established by clinical criteria, including abnormal blood tests that show lack of kidney function.

### GOALS

1. Assure that health professionals and dialysis patients are aware of program benefits as well as keeping them abreast of the current policies and procedures.
2. Utilize all available funds allotted for eligible medical expenses of patients by adding to the membership list as slots become available.
3. Maintain good working relationships with the Tennessee Kidney Foundations, dialysis centers and patient groups.

### OBJECTIVES

- ✚ The Renal Disease staff will continue to make orientation/educational visits to selected social worker groups dealing with renal disease patients that need the benefits of the Renal Program. Visits have been made to Nashville, Memphis, Jackson, Chattanooga, and Knoxville in 2006 and Johnson City is due a visit soon.

Continue to support the Renal Intervention Project, which provides grant funding for dietary and medication compliance counseling in order to halt the progression of severe renal disease and avoid dialysis. Two sites, in Nashville and Chattanooga, are currently working with over 120 high risk patients to achieve this goal.

### Where Tennessee Is Today/Initiatives/Accomplishments

We cooperate with the Governor's Safety Net Initiatives to plan services for those who have been disenrolled from TennCare who are Renal Disease Program members. This initiative is administered by the Middle Tennessee Kidney Foundation.

In keeping with Program policy, we have recently increased the monthly supplement amount to \$120 for each person for the purchase of medication and dietary supplements not funded by TennCare, Medicare D, or other third party payors.

The program sponsors two project grants in the state to reduce the need for dialysis in at-risk populations by medication and dietary compliance review and patient educational support.



**What Still Needs to be Accomplished**

- ✚ Over 6,000 Tennessee residents still require dialysis for end stage renal disease. Transplants through kidney donor initiatives will reduce this number.
- ✚ Many of these patients are indigent and would be helped by enrolling in the Renal Program. Renal Program employees are conducting state-wide meetings for dialysis center social workers to keep them aware of the Program and its benefits.

## RYAN WHITE SERVICES

### INTRODUCTION

The Ryan White Program provides medical care, medications, insurance assistance and support services to low income HIV positive Tennessee residents. Eligibility is determined by medical care managers located throughout the state. Medical Care Managers also link newly diagnosed HIV positive persons into care.

Medical care is provided through a statewide network of designated AIDS Centers of Excellence and private providers. All AIDS Centers of Excellence agree to use the HIV/AIDS medical protocol developed by the United States Public Health Service.

The Program funds five Ryan White Consortia across the state. The consortia are made up of community members, advocates, and HIV infected/affected individuals. Each Consortium assesses its local needs and gaps in services and recommends services to be funded to meet those needs. These supportive services may include such things as case management, dental, mental health services, transportation, etc. One agency in each consortium area is designated as the lead agency. The lead agency issues Requests for Proposals (RFP) for services based on the Consortium's recommendations and awards contracts.

The Ryan White HIV/AIDS drug assistance program (HDAP) provides antiretroviral drugs and medications to treat opportunistic infections to Ryan White eligible patients. These medications are provided utilizing a contract with a mail order pharmacy.

The Ryan White insurance assistance plans (IAP) pay premiums, deductibles, and some co-payments for Ryan White eligible individuals with insurance if the cost is less than the average cost of HIV medications provided through HDAP.

### FACTS

As of February 1, 2006, there are 12 AIDS Centers of Excellence and one satellite site across the State.

All newly identified persons with HIV or AIDS are referred to a medical care manager who determines any program eligibility and links them to medical care.

### GOALS

1. To maintain the network of AIDS Centers of Excellence across the state that provides quality care to HIV positive patients.
2. To stop or slow the progression of HIV to AIDS in Ryan White eligible patients by providing antiretroviral medications.
3. To assist Ryan White eligible patients with private insurance in maintaining coverage by providing financial assistance with premiums, deductibles, and /or co-payments.
4. To provide support services that allow Ryan White eligible patients to access appropriate medical care and adhere to their treatment regime.
5. To assure that newly diagnosed HIV positive patients (with special emphasis on African Americans) are linked into medical care and supportive services.

### OBJECTIVES

- ✚ By 2010, the number of perinatal transmissions of HIV will decrease to 2 annually. (Baseline 2004 – 6)



**OBJECTIVES (continued)**

- ✚ By 2010, the unmet need will be no greater than 40% of all HIV/AIDS cases. (Unmet need is defined as no documented CD4, viral load, or antiretroviral medication in the previous year. Baseline 2004 – 53.6%)
- ✚ By 2010, 95% of medical records in the AIDS Centers of Excellence will meet AIDS Centers of Excellence standards of care. (Baseline 2005 – 80%)

**Where Tennessee Is Today/Initiatives/Accomplishments**

Currently over 2,500 individuals have access to antiretroviral medications through HDAP or IAP. The Ryan White program funds 22 community based organizations across the state to provide services for HIV/AIDS patients.

The number of living cases of HIV/AIDS in all genders and races has increased over the past 5 years from 9,868 in 2000 to 12,561 in 2004. Antiretroviral medications are effective at preventing or slowing the progression of the disease.

Specific funds are targeted to HIV positive African Americans who are not currently in medical care for the purpose of trying to link them with care.

**What Still Needs to be Accomplished**

- ✚ Of the new AIDS cases diagnosed from 2000-2004, 72% were diagnosed within 3 months of their first HIV test indicating that these patients are not being tested until they exhibit symptoms of the disease. The HIV/AIDS community and the Department must find ways to deal with the stigma of HIV/AIDS that is a barrier to testing, particularly in high risk populations.
- ✚ African Americans continue to be disproportionately affected by HIV/AIDS with the death rate from HIV disease being more than nine times greater for African Americans than for whites. The HIV/AIDS community and the Department must find way to ways to identify undiagnosed HIV positive African Americans and get them into care.
- ✚ Although perinatal transmission of HIV from pregnant women to their infants has decreased markedly, transmission is still occurring in women who present for delivery at emergency rooms and who are not known to be HIV positive, therefore, treatment of the mother and infant is not initiated. The Department is seeking to partner with hospitals that have numerous high-risk deliveries to encourage them to offer rapid HIV testing in Labor and Delivery.

## STATE HEMOPHILIA PROGRAM (SHP)

### INTRODUCTION

The State Hemophilia Program was established by the Tennessee Legislature in 1973 to provide "...for the care and treatment of persons suffering from hemophilia..." and other genetic bleeding disorders. Due to subsequent medical advances, the Program is now able to support prevention of bleeding episodes and their disabling effects.

### FACTS

The State Hemophilia Program:

- Contracts with five Comprehensive Hemophilia Centers to provide program participants certain preventive services from a wide range of health care disciplines.
- Covers annually an average of 325 clients who have met both financial (300% of the Federal Poverty Guideline) and medical criteria.

Program members receive:

- Cost-effective preventive screenings, counseling and referral services, as well as highly specialized preventive care and emergency treatment.
- Certain medications including clotting factor to assist in preventing the natural progression of this disease to crippling joint damage with subsequent institutional care or lifelong disability.

### GOALS

1. Educate the clients and their families of the importance of care to prevent permanent damage resulting from Hemophilia/bleeding disorders.
2. Increase awareness of health care professionals regarding the services available to clients.
3. Assist clients in application to TennCare, COBRA and other insurance options. COBRA premiums are paid in some instances to maintain medical insurance coverage.
4. Help clients to remain independent, improving their quality of life through comprehensive care.
5. Ensure that claims and vendor inquiries are handled in a timely manner.
6. Maintain collaborative relationships with both state and regional Hemophilia Foundations

### OBJECTIVE

- ✚ Ensure that all affected individuals are aware of the benefits of the Program through communication and collaboration with the state-wide Hemophilia Foundations.

### Where Tennessee Is Today/Initiatives/Accomplishments

A Safety Net program for TennCare disenrollees that are also Hemophilia Program members has been implemented through the local foundations. The State Hemophilia Program is providing our clients with information to be able to obtain Safety Net assistance.

All program members are encouraged to obtain preventive medical evaluations at the Comprehensive Hemophilia Centers every two years to remain up to date on methods to control their bleeding disorder.

### What Still Needs to be Accomplished

- ✚ Continue to work with TennCare disenrollees and others to utilize benefit programs available to them.
- ✚ Keep other Department sections aware of the Hemophilia program (i.e. Children's Special Services).

# SUDDEN INFANT DEATH SYNDROME PROGRAM (SIDS)

## INTRODUCTION

The Tennessee Legislature established the Sudden Unexplained Child Death Act (SUCD) in 2001 to help reduce the incidence of injury and death to infants by accurately identifying the cause and manner of death of infants less than one (1) year of age. From this Act, the SIDS program was formed. Effective July 1, 2005, the law was revised to include provisions for investigations and autopsies for sudden unexplained child death from birth to age seventeen (17).

## FACTS

State funding is provided for investigation and autopsies for sudden unexplained deaths of children from birth to age 17.

Through the SIDS Program, training is provided for all first responders on the investigation and handling of cases of sudden unexplained child death.

## GOALS

1. To make autopsies available for every suspected SIDS death as well as all sudden unexplained deaths of children from birth to seventeen years of age.
2. To establish a systematic method for the collection of data to be used in developing an annual report that indicates the manner, causes, and trends of child deaths in the State of Tennessee.
3. To educate professionals, parents, community agencies, clergy, law enforcement personnel, emergency responders and all other interested persons who are involved in SIDS deaths throughout Tennessee.
4. To provide support to parents and their families through published materials, home visits conducted by public health nurses, and referral for counseling and association with parent groups of those who have experienced a SIDS or SUCD.
5. To provide reimbursement to county governments for the cost of any autopsy deemed necessary to extent authorized.
6. To reduce and prevent child deaths in the State of Tennessee.

## OBJECTIVES

- ✚ By June 30, 2007 increase by 5% the number of law enforcement officers participating in the Death Scene Investigation training.
- ✚ By June 30, 2007, reduce the number of deaths of children categorized by SIDS deaths.
- ✚ By December 31, 2007, develop message for MCH/WIC public awareness campaign for safe sleep practices.

**OBJECTIVES** (continued)

- ✚ By June 30, 2008 improve communication and data sharing with county medical examiners and home visitors in the health departments to improve the referrals and grief support provided to families who have experienced SIDS.
- ✚ By December 31, 2008, provide autopsies to all children suspected of SIDS deaths.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Through the Death Scene Investigation (DSI) Training, training has been provided for 5,989 first responders, including 201 law enforcement officers, 2,919 professional fire fighters, 2,739 emergency medical technicians, and 130 other state affiliations.

According to the 2003 Annual Child Fatality Report, there was a 24% decrease from 2002 in children whose cause of death was reported as SIDS.

SIDS in-service training is held annually for Regional SIDS Coordinators and Home Visitation nurses and staff. This training is specifically designed to provide current grief training and resource material for those individuals in direct contact with families affected by SIDS.

Passage of a bill which mandates autopsies and death investigations be conducted according to nationally recognized standards for all sudden unexplained deaths for children under the age 17.

**What Still Needs to be Accomplished**

- ✚ A statewide “Back-to-Sleep” media and marketing campaign. Continue targeting local health department clients, Women, Infants and Children (WIC) clinics; immunization clinics, home visiting programs and private providers with safe sleep resources.
- ✚ While this training is mandatory by law for both pre-service and in-service, law enforcement personnel lag far behind the other required personnel in their training efforts. We must develop a mechanism to reach and provide training to more law enforcement personnel.
- ✚ Develop measurable outcomes and an annual report on the accomplishments and direction of the SIDS program.
- ✚ Promoting collaboration with county examiners in order to provide earlier grief support and referrals for SIDS families.

# TB ELIMINATION PROGRAM & LABORATORY

## INTRODUCTION

The mission of the Tennessee Tuberculosis Elimination Program (TTBEP) is to control, prevent and ultimately eliminate TB in Tennessee as part of the national goal of TB elimination. The TTBEP has made steady progress toward that goal until very recently. In 2005, there was an increase in active TB cases centered primarily in the two largest Metro regions of Memphis/Shelby and Nashville/Davidson, and also associated with sub-populations at particularly high risk for TB. TB case management is becoming increasingly more complex and labor-intensive as program staff address medical, social, and psychological factors that impact upon treatment and completion of anti-TB therapy. However, there are new tools that the TTBEP and the State Laboratory are exploring: the "QuantIFERON-TB Gold" whole blood diagnostic assay for Latent TB Infection (LTBI), and enhanced use of Nucleic Acid Amplification (NAA) tests. Implementation of a statewide Genotyping Program (DNA fingerprinting of TB strains) has demonstrated value in identifying TB cases with the same strain of TB organism, permitting more effective contact investigation and opportunities to interrupt TB transmission.

## FACTS

In 2004, there were 277 cases of active TB in Tennessee; case rate of 4.9 cases per 100,000 population (lowest on record in Tennessee).

In 2005, there were 299 active TB cases in Tennessee; case rate of 5.0 cases per 100,000 population (final data).

## GOALS

1. To promptly identify, diagnose, and complete appropriate treatment of all active TB cases in Tennessee;
2. To identify close contacts of active TB cases and reduce the risk of infected contacts from developing TB disease through treatment of Latent TB Infection (LTBI);
3. To identify populations and individuals at high risk for TB and reduce their risk for TB through targeted testing for LTBI and appropriate treatment;
4. To reduce and ultimately eliminate the racial disparity in TB disease in Tennessee;
5. To ensure a skilled public health workforce to fight the battle against TB in Tennessee.

## OBJECTIVES

- ✚ By 12/31/07, HIV status will be reported for at least 75% of all newly reported TB cases in Tennessee regardless of age.
- ✚ By 6/30/07, at least 90% of sputum culture positive cases will have a documented culture conversion to negative.
- ✚ By 12/31/07, at least 90% of TB patients for whom therapy is indicated for one year or less will complete treatment within 12 months of initiation of therapy.
- ✚ By 12/31/09, the TB case rate among US Born African-Americans in Tennessee will decrease to 9.0 cases per 100,000 population.

**OBJECTIVES** (continued)

- ✚ By 12/31/09, at least 85% of all infected contacts who are started on treatment for latent TB infection will complete therapy.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Targeted Testing Initiative of the TTBEF has been implemented statewide and has been recognized nationally as a model for screening persons at high risk for LTBI.

Conducted a statewide TB Clinical Management Course for all public health TB physicians in January, 2006.

Implemented a statewide Genotyping Program in collaboration with the State Laboratory to identify clusters of TB cases with the same genetic strain of TB.

Providing enhanced resources and training for public health regions with the highest TB case rates.

**What Still Needs to be Accomplished**

- ✚ Evaluate the possible implementation of new laboratory technologies for the diagnosis and appropriate treatment of TB (e.g., QuantiFERON-TB Gold, NAA, timely electronic lab reporting to Regions).
- ✚ Develop and operationalize a statewide TB patient data management system.
- ✚ Develop standardized training modules for all new public health staff in the TTBEF.
- ✚ Identify and collaborate with community partners to join the fight against TB, particularly in areas of racial disparity.

## TB EPIDEMIOLOGICAL STUDIES CONSORTIUM (TBESC)

### INTRODUCTION

The Tuberculosis Epidemiologic Studies Consortium (TBESC) is a CDC-funded research group designed to strengthen, focus, and coordinate tuberculosis (TB) research. The TBESC is designed to build the scientific research capacities of the State/Metropolitan TB control programs, universities, hospitals, laboratories, and both non and for-profit organizations which participate. Tennessee is one of 22 TBESC Member Sites in the United States and Canada. Sites are charged with designing, conducting, and evaluating programmatically relevant research concerning the identification, diagnosis, prevention, and control of active TB disease and latent TB infection. The TBESC is funded by a ten-year, Centers for Disease Control (CDC) contract. The Tennessee site is currently in year five of the contract. Specific multi-site and multi-year research projects are funded by individual "task order" contracts with consortium members.

### FACTS

Tennessee participates in 5 of the 17 TBESC studies funded to date by CDC.

Four full-time staff positions are funded by TBESC as well as the part-time Principal Investigator position.

### GOALS

The goal of participation in TBESC studies is to improve TB services in a concrete way:

1. By gathering information that helps us better understand high-risk communities, missed opportunities, barriers to treatment, and immunogenetic associations to TB infection and disease progression.
2. By providing staff members with expertise in a variety of areas that support TB elimination.
3. By developing new tools for the field that improve information collection and using data collected to improve diagnostic methods.

### OBJECTIVES

- ✚ By 12/31/06, enrollment in Task Order #2 will be completed in compliance with study protocol.
- ✚ By 12/31/06, enrollment in the post-pilot phase of Task Order #9 will be completed in compliance with study protocols.

## Where Tennessee Is Today/Initiatives/Accomplishments

Enrollment in Task Order #2 ("Prospective evaluation of immunogenetic and immunologic markers for susceptibility to TB infection and progression from *M. tuberculosis* infection to active TB") began in November 2004 and continues through December 2006.

Enrollment in the post-pilot phase of Task Order #9 ("Enhanced surveillance to identify missed opportunities for TB prevention in foreign-born populations in the United States and Canada") began in April 2005, and will continue through December 2006.

Phase 2 of Task Order #13 ("Retrospective chart review of risk factors for acceptance of, adherence to, and toxicity from treatment for LTBI") completed in January 2006.

Phase 3 of the study entitled, "Prospective cohort study of risk factors for acceptance of, adherence to, and toxicity from treatment for LTBI" began pilot enrollment in July 2006.

Submitted a proposal to participate in Task Order #18 which is an upcoming study entitled,

“Evaluation of new interferon-gamma release assay (IGRAs) in the Diagnosis of latent TB infection (LTBI) in Healthcare Workers.”

TBESC staff has worked with regional and metro TB staff to identify, approach, and enroll participants in appropriate research studies.

TBESC personnel have conveyed the importance of research to all involved parties by explaining that current research impacts future developments in TB treatment and elimination.

### What Still Needs to be Accomplished

- ✚ Training and pilot phase of Task Order #8 (“An analysis of molecular epidemiology of multi-drug resistant *M. tuberculosis* in the United States”) to be carried out in spring 2006.
- ✚ Focus group interviews for Task Order #11 (“Addressing TB among African Americans in the southeast: Identifying and overcoming barriers to treatment adherence for LTBI and TB disease”) are in the planning phase and will be carried out in fall 2006.
- ✚ Complete on-going studies and compete for funding of new studies as announced by CDC.



# TOBACCO USE PREVENTION AND CONTROL PROGRAM

## INTRODUCTION

Tobacco use is the most preventable cause of death and disease in the United States. Tobacco Control Programs are designed ultimately to help reduce disease, disability, and death related to tobacco. Comprehensive tobacco control programs use multiple strategies to address goals. Typically, strategies are grouped into three program components: community mobilization, policy and regulatory action and the strategic use of media.

## FACTS

Nearly 1.2 million adult Tennesseans smoke (27.8%), the fourth highest ranking in the nation. Second hand smoke is the third most preventable cause of death.

## GOALS

1. By 2010, reduce initiation of tobacco use among young people by 20%.
2. By 2010, reduce nonsmoker's exposure to secondhand smoke by 10%.
3. By 2010, increase quitting among adults and young people by 25%.
4. By 2010, eliminate disparities related to tobacco use in Tennessee.

## OBJECTIVES

- ✚ By 2008, increase the proportion of adult smokers who attempted to quit by 5%.
- ✚ By 2008, increase advocacy and support to eliminate disparities.
- ✚ By 2008, decrease the number young people reportedly sold cigarettes by 10%.
- ✚ By 2008, increase the number of children who say an adult discussed not smoking cigarettes with them by 10%.
- ✚ By 2007, increase the quit attempts by adults as evidenced by a 10% increase in proportion of adults who stopped smoking for one day or longer because they were trying to quit. (Baseline ATS 49.9%)
- ✚ By 2008, increase the proportion of adults who make quit attempts during pregnancy for 1 day or longer from 49.9% to 54.9%.

## Where Tennessee Is Today/Initiatives/Accomplishments

Tennessee continues to increase awareness to main stream smoking and second hand smoking. Some 1.1 million Tennesseans, almost 26 percent of the state's population over the age of 18, smoke compared to 22 percent of the nation. The 2004 National Youth Tobacco Survey (YTS) found that 21.7% of United States high school kids smoke and 9.9% of high school males use spit tobacco. Most smokers start smoking as adolescents.

All health departments are now smoke free.

1. Northeast Region, Carter County had (3) restaurants with smoke-free policies and with designated smoking areas only. Also in Carter County, 6 parents at Hampton Hunter Elementary School, 8 parents at Keensbury Elementary School and 11 members of a

Tobacco use is addictive. Nearly 70% of smokers want to quit. 9,400 Tennesseans died from their own smoke in 2004. There were 488,000 kids exposed to secondhand smoke at home. 128, 300 kids now under 18 and alive in Tennessee will ultimately die prematurely from smoking.

For the past two years, the Tennessee Tobacco Use Prevention and Control Program (TUPCP) worked with the Tennessee Chapter March of Dimes on the S.M.A.R.T. Mom's cessation during pregnancy project and in promoting other cessation initiatives.





TUPCP is collaborating with MOD ETS toolkit and Daddy's Smoke Hurt Too.

parent Head Start organization started a campaign called "Take Smoke Outside". Its goal was to have students take pamphlets home to their parents to stop second hand smoke at home and in their automobiles.

2. Chattanooga, Hamilton County had 6 hospital sites implement smoke-free policies with designated smoking areas for employees. They were Erlanger, Erlanger North, Memorial, Memorial North Park, East Ridge HCA, and Park Ridge HCA.
3. West Region, Hardeman County had a restaurant, Taco Bell become a completely smoke-free building.
4. Nashville, Davidson County had the Metro Board of Health establish a smoke-free policy limiting smoking only to designated smoking areas in health department facilities.
5. South Central Region, Perry County had a private company Fisher & Company go completely smoke-free. Their policy prohibits tobacco use on campus as well as in company vehicles. In Coffee County, the Manchester Recreation Department had a section of their Little League ball bleachers go smoke-free. Four restaurants in this county are now smoke-free. They do have designated smoking areas for employees. They are Papa Kay-Joes in Hickman, McDonalds in Giles County, Creasy Home Cooking in Wayne County, and Applebee's in Coffee County. Also, in Wayne County a grocery store went smoke-free. In Hickman County, one community center Wash House Memorial Community Center went smoke-free. Middle Tennessee State University's (in Rutherford County) buildings are now completely smoke free with posted signs saying "No Smoking" within 20 feet. In Bradley County, the Health Council Cancer Subcommittee along with the health educators worked to pass a resolution to repeal pre-emption at the state level. Teens against Tobacco Use (TATU) youth groups presented Tennessee Code Annotated 39-17-1604(6) to the Hancock County School Board to encourage the enforcement of places where smoking is prohibited policy.
6. In the Southeast Region, health educators worked with the Health Council Cancer Subcommittee to have the City Council sign a resolution for the repeal of preemption at the state level.

7. The Tennessee Tobacco QuitLine launched on August 4, 2006. The QuitLine (1-800-QUIT-NOW) provides free tobacco cessation counseling to any Tennessean ready to quit using tobacco.
8. 2006 legislative session passed a bill prohibiting smoking and tobacco use in any state owned and operated facility.
9. 2005 legislative session passed a bill allowing university systems governed by the Tennessee Board of Regents to implement smoke free dormitory/campus policy.
10. Tennessee Department of Health's Better Health Initiative incorporates tobacco cessation as one of its core strategies for statewide Lifestyle programming.

### **What Still Needs to be Accomplished**

-  Establish more smoke free public buildings and clean indoor air policies to promote tobacco free schools, worksites, and communities.
-  Establish more anti-smoking and tobacco free policies.
-  Promote the toll free proactive Tennessee Tobacco Quit line.
-  Initiatives to address tobacco related disparities in Tennessee.

## TRAUMATIC BRAIN INJURY PROGRAM

### INTRODUCTION

The Traumatic Brain Injury Program (TBI) was legislatively established in 1993 so that the special needs of survivors of traumatic brain injury and their families could be addressed. The program is funded through increased fines on four traffic violations. A nine-member Advisory Council appointed by the Governor provides guidance to program staff. The TBI Program is authorized to award grants to non-profit agencies and governmental entities to develop programs and services that meet the needs of TBI survivors.

### FACTS

Approximately 7,000 people per year in Tennessee are admitted to the hospital for traumatic brain injury.

### GOAL

Ensure that survivors of traumatic brain injury have access to comprehensive programs and services all along the continuum of care.

### OBJECTIVES

- ✚ Working in collaboration with the appropriate entities, increase the number of TBI survivors receiving home and community based services by 15% by 2008.
- ✚ The TBI Program will plan, organize and implement two injury prevention programs by 2008.

## Where Tennessee Is Today/Initiatives/Accomplishments

Since 1995, the TBI Program has awarded 58 competitive grants totaling approximately \$2.6 million for a variety of projects. For example, TBI seed money resulted in the building of three affordable and accessible apartment facilities in Nashville and Memphis which are home to TBI survivors.

Case management services have been established. Eight Service Coordinators provide assistance to survivors and families in accessing needed programs and services in all 95 counties.

Since 2000, the TBI Program has been awarded \$800,000 in federal TBI dollars to provide education and training to school personnel who work with students with TBI. The TBI Program collaborated with the Department of Education and Tennessee Disability Coalition to implement the project. More than 3,000 school personnel have participated in Brain Injury 101 training.

All TBI survivors admitted to the hospital receive a letter from the TBI program. This initial contact can be the first link in a chain of support for a survivor.

## What Still Needs to be Accomplished

- ✚ The Advisory Council and program staff are working to improve the availability of home and community based services as an alternative to institutional care as mandated by the enabling legislation. Partners in this effort include TennCare, American Association of Retired Persons (AARP), and the Area Agency on Aging and Disability.
- ✚ Program staff, in collaboration with the Governor's Injury Control Committee, is working on a state plan which will include prevention programs that decrease the incidence of traumatic brain injury.

## WOMEN'S HEALTH / GENETICS

### INTRODUCTION

Services for women and infants have long been a major component of the public health structure in the state. Programs within the Women's Health/Genetics Section include services for reproductive age women (family planning, prenatal care, perinatal regionalization, adolescent pregnancy prevention, and the office of women's health), genetics and newborn screening, and newborn hearing screening. State law mandates that all infants born in the state are screened for various metabolic disorders prior to discharge from the birthing facility; program staff provide follow-up on all abnormal and unsatisfactory metabolic screening results, and make referrals to the genetic and sickle cell centers for case management and treatment. Services are provided in local health department clinics and through contracts with hospitals and universities.

### FACTS

In Tennessee, publicly funded family planning clinics help women avoid 23,500 unintended pregnancies each year.

In Tennessee, 331,390 women are in need of publicly supported contraceptive services.

Newborn metabolic screening is mandated for all births in Tennessee. In 2004, there were 84,856 recorded births in the state.

Tennessee's infant mortality rate has fluctuated between 7.7 and 9.4 since 1993, and always has been higher than the rate for the United States. The year 2010 target for the nation is 4.5 infant deaths per 1,000 live births.

Infants born to black mothers in Tennessee die at a rate which is 2.7 times the rate for white mothers.

In 2004, the percent of Tennessee births in which the mother did not begin care in the first trimester was 29.4. HP 2010 goal is that 90% would enter care in the first trimester.

### GOALS

#### Family Planning Program:

1. Service Delivery/Clinical: Assure and maintain comprehensive and high quality family planning and preventive health services that will improve the overall health of Tennesseans of reproductive age through a network of public and private/contract clinics in all 95 counties. These services target the population in need, with priority emphasis on low income, high risk, minority, and adolescent clients.
2. Family Involvement: Comply with OPA (Office of Population Affairs, Department of Health and Human Services) directives concerning required counseling on family involvement and resisting coercive sex.
3. Community Education and Outreach: Promote individual and community health by providing reproductive health education and outreach to priority populations emphasizing family planning services.
4. Administrative: Provide administrative support to the network of public and private/contract agencies providing family planning in all 95 counties.
5. Financial Management: Conduct the Family Planning Program within the financial management policies and procedures as set forth by state and federal laws, regulations, guidelines, and procedures.

#### Tennessee Adolescent Pregnancy Prevention Program:

1. To promote community awareness and involvement in adolescent pregnancy and parenting issues.
2. To facilitate collaboration among various sectors of the community to enhance and increase prevention efforts.

## **GOALS (continued)**

3. To coordinate, improve and expand services available to pregnant and parenting adolescents.

### **Newborn Screening Follow-up:**

1. The goal of the newborn screening follow-up program is to assure that providers and/or families of infants with abnormal results are contacted as soon as possible and referred to the genetic or sickle cell center in the appropriate geographic area for follow-up.

### **Newborn Hearing Screening:**

1. Provide access to newborn hearing screening to 100% of the birth population by 2007.
2. Birthing hospitals to provide reporting of 100% of newborn hearing screening results to the Newborn Screening Program by 2007 to decrease lost to follow-up percentage for infants in need of further hearing testing.

### **Services for Pregnant Women:**

Goals for the Maternal and Child Health Block Grant funding include the following which apply to services for pregnant women:

1. To provide and assure mothers and children (especially those with low income or limited availability to services) have access to quality maternal and child health services.
2. To reduce infant mortality and the incidence of preventable diseases and handicapping conditions among children.
3. To promote the health of mothers and infants by providing prenatal, delivery, and postpartum care for low income, at-risk pregnant women.

## **OBJECTIVES**

### **Family Planning Program: Long Term Objectives:**

- ✚ By 2010, reduce pregnancies among adolescent females age 15 to 17 years to no more than 16.2/1,000. (Healthy People 2010, Objective 9-7; target is 43.0/1,000). Tennessee has reached the Healthy People 2010 target for this objective. A state specific target has been set. The state considers this objective to still be important.
- ✚ By 2010, increase to 55.9 percent the proportion of adolescents who have never had

## **OBJECTIVES (continued)**

- ✚ intercourse; to 18.4 percent the proportion, if sexually experienced, who are not currently sexually active; and to 64.4 percent, if currently sexually active, the proportion who used a condom the last time they had sexual intercourse. (Healthy People 2010, Objective 25-11)
- ✚ By 2010, reduce the proportion of births occurring within 24 months of a previous birth to 14.3 percent. (Healthy People 2010, Objective 9-2)
- ✚ By 2010, reduce to three percent the proportion of family planning clinic female adolescents and young adults, ages 15 to 24, with chlamydia trachoma infections. (Healthy People 2010, Objective 25-1a)

### **FY 2007 Family Planning Program Objectives:**

- ✚ By June 30, 2007, provide 115,000 clients with comprehensive high quality family planning services. Eighty percent of the caseload will include high risk and low-income clients (150 percent of poverty or below); 32.7 percent will be adolescent clients ages 19 and under; and 30 percent will be non-white clients.
- ✚ By June 30, 2007, screen 50,000 family planning clients statewide for chlamydia and gonorrhea in accordance with the protocols jointly developed by the Family Planning and STD Programs and the State Laboratory.
- ✚ By June 30, 2007, implement family planning outreach strategies in 100 percent of regions and agencies, with an emphasis on reaching the program's priority populations.
- ✚ By June 30, 2007, coordinate with the Community Services staff, Tennessee Adolescent Pregnancy Prevention Program Coordinators (TAPPP), local clinical staff, and regional/agency administrative staff in all 95 counties to provide reproductive health education reaching at least 50,000 adolescents, 10,000 adults, 3,000 parents, and 5,000 professionals.

### **Newborn Screening Program Objective:**

- ✚ By 2007, all infants with abnormal screening results will have received follow-up services and been referred to a genetic or sickle cell center for long term follow-up.

**OBJECTIVES (continued)**

**Newborn Hearing Screening Program Objectives:**

- ✚ HP 2010, Objective 28.11- Increase the portion of newborns that are screened for hearing loss by 1 month of age, have audiologic evaluation by 3 months of age and are enrolled in appropriate intervention services by 6 months of age.
- ✚ Program grant objective: By January 2007, increase from 54% to 80% the percentage of infants who receive a hearing screening and whose results are reported to the state.

**Tennessee Adolescent Pregnancy Prevention Program Objective:**

- ✚ By 2007, continue to fund a TAPPP coordinator in all 7 rural regions and in 4 metro counties.

**Services to Pregnant Women Objective:**

- ✚ By 2007, all local health department clinics will continue to provide basic prenatal care services.

**Where Tennessee Is Today/Initiatives/Accomplishments**

Family Planning Program

Tennessee Adolescent Pregnancy Prevention Program (TAPPP)

Family planning services are available in every county at 130 clinic sites (health departments, nonprofit agencies, and primary care sites). Services include counseling and education, physical exams, laboratory tests, and contraceptive supplies, and are available upon request to any reproductive age person. During CY 2005, services were provided to 114,969 persons.

The overall mission of the program is to identify and respond to the public health family planning needs and problems statewide and assure the availability of services. Long term goals include reducing adolescent pregnancies, increasing the use of contraception by sexually active adolescents, adequate spacing of pregnancies, and reducing chlamydia infections.

The state level TAPPP office was established in 1988. Each rural region has a Coordinator or a full-time-equivalency. County health educators, working with county and regional health councils, plan and implement teen pregnancy prevention activities in their communities. Each council participates in a wide range of activities, depending on local priorities and resources.



## Services for Pregnant Women

Sullivan, Knox, Davidson, and Madison have a full-time Coordinator, and each county has a TAPPP council. These councils were formed to address adolescent pregnancy and parenting issues at the local level, and consist of a cross section of individuals, agencies, and organizations.

Examples of TAPPP activities are: providing networking opportunities such as workshops and conferences for adult professionals and parents; community education and awareness activities for students, parents, and providers through classes in schools, and community agencies; displays set up at clinics, malls, libraries, and health fairs; media presentations; and loans of audio-visual and print materials.

Local health department clinics offer two levels of prenatal care:

- (1) All local health department clinics offer basic prenatal care, which includes pregnancy testing, eligibility determination for TennCare, Women, Infants, and Children (WIC), counseling, information, and referral for medical care. Local health departments provide direct on-line application for pregnant patients who are presumed eligible for TennCare (presumptive eligibility).
- (2) 10 counties provide comprehensive prenatal care with delivery by a private physician. Many of these clinics serve primarily Hispanic clients, most of whom do not have insurance or qualify for TennCare. According to PTBMIS (Patient Tracking, Billing, Management Information System) information, 2,820 pregnant women were provided comprehensive care during CY 2005. Of this total, 81% were self pay (not on TennCare) and 68% were Hispanic. The counties which currently are providing prenatal care include: Bedford, Dickson, Hamilton, Madison, Montgomery, Putnam, Rhea, Rutherford, Sumner, and Wilson.

Other activities for pregnant women include:

- Maternal and Child Health home visiting programs including HUGS, Healthy Start, and CHAD.
- Distribution of vitamins with folic acid and folic acid education. All reproductive age women need to take at least 400 mcg of folic acid daily for the prevention of neural tube defects (NTDs). Approximately 50% of all pregnancies are unintended. NTDs occur in 1.4-2 per 1,000 pregnancies and are the second most common major congenital anomaly worldwide.

Genetics and Newborn Screening Follow-up

Newborn Hearing Screening Program

- Because the neural tube is nearly formed by the time of the first missed period, folic acid must be ingested before conception and at least through the first 4 weeks of fetal development to be effective. Joint activities in Women's Health and Nutrition Sections include: exhibits, educational materials, presentations for the public and professionals, information on the web, media, and distribution of multivitamins.
- WIC/Nutrition – All local health department clinics provide WIC and nutrition services.
- SMART MOMS – Women, Infants and Children (WIC) clinics provide smoking cessation services for pregnant women.
- Perinatal Regionalization – The five Regional Perinatal Centers provide perinatal care for high risk pregnant women and newborns if no other appropriate facility is available to manage significant high risk conditions. Funding from the state is used to provide consultation and referral for facilities and for health care providers within the respective perinatal region. Funding also supports professional education for staff of hospitals and for other health care providers within the region. Maternal and neonatal transport is supported by the funding to the Centers. Contracts and funding are handled by the TennCare Bureau.

The state's Genetics and Newborn Screening (NBS) Program requires by law that all babies be screened for metabolic disorders prior to discharge from the birthing hospital. The Program has established a network of tertiary level providers for referral, case management and treatment of infants and children with genetic and metabolic diseases, including sickle cell. The NBS follow-up nurses are located at the State Laboratory to assure that all abnormal results are reported as quickly as possible. The program involves cooperation between hospitals, the State Laboratory, the NBS Program staff, the Genetic Centers, Sickle Cell Centers and primary care physicians. The state is currently testing for 40 diseases (which may reflect 66 different genetic disorders). There were 3,330 presumptive positives requiring follow-up for one or more of the disorders in 2005 and 156 of these were confirmed positives.

Newborn hearing screening is not mandated in Tennessee; however, 100% of the 82 birthing hospitals now provide hearing screening. The reporting of newborn hearing screening results on

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the newborn screening form is required (as of January 2004); however, only 72% of infants had a hearing screening reported in calendar year 2005, and 4.7% reported were referred for further hearing testing.

Thirty infants were diagnosed with bilateral hearing loss, 34 have pending results, and 34 had undetermined results. The percentage of infants receiving follow-up (63%) is greater than the national average of 48% due to the partnership with the Department of Education's Tennessee Early Intervention System. Child Find staff locate families in need of retesting. The program provided training to primary care providers, hospitals, early intervention programs, and audiologists. Three parent consultants, located in the three grand regions of the state, will provide parent support services and links to families with children of similar disabilities through the Family-to-Family program of Family Voices.

Legislation effective July 1, 2000 designated an Office of Women's Health located within the Department of Health. The act was established for the purpose of educating the public concerning women's health issues and advocating initiatives to enhance the quality of life for women in Tennessee. The office was to be designated from existing resources of the Department of Health. Functions include: (1) provide a contact point within the Department for health issues related to women; (2) foster interaction and information among programs within the Department which serve women; and (3) serve as the liaison for the Department with the federal Office on Women's Health in the United States Department of Health and Human Services.

**What Still Needs to be Accomplished**

- ✚ The family planning program will be working on increasing outreach strategies for the program.
- ✚ The section will be assisting in the Department's strategies and activities to reduce infant mortality and improve birth outcomes.
- ✚ The Newborn Screening Program, in conjunction with the State Laboratory, will continue to keep up-to-date on the rapidly changing field of metabolic screening for newborns and make recommendations for changes in the screening panel as appropriate.

## Endnotes

1. Bernard J. (Barney) Turnock MD, MPH, Jones and Bartlett Publishers, Inc.  
40 Tall Pine Drive, Sudbury, MA 01776
2. The Future of Public Health, Report from the Committee for the Study of the Future of Public Health
3. [Agency Strategic Plans, Volume 1, Five-Year Strategic Plans](#), page 83, Tennessee Department of Finance and Administration, 2005.
4. "Information Systems Three Year Plan; Fiscal Year 2005/2006 through 2007/2008," Information Systems, Tennessee Department of Public Health.
5. Introduction from *Tennessee's Better Health Initiative; It's About Time*; Tennessee Department of Health, November 2005.
6. United Health Foundation, [www.unitedhealthfoundation.org](http://www.unitedhealthfoundation.org).
7. National Office of Minority Health, U.S. Department of Health and Human Services, Public Health Service.
8. National Healthcare Disparities Report, Agency for Healthcare Research and Quality (AHRQ), US Department of Health and Human Services, 2003.



## **Appendices**

- A. Definition of Terms and Rates
- B. Internet addresses for additional information



## DEFINITIONS OF TERMS, RATES, AND RATIOS

**Age-Adjusted Death Rate** - Number of deaths per 100,000 age-adjusted population. (Population adjusted to the age distribution of the estimated United States 2000 standard population.)

**Body Mass Index (BMI)**

**BMI** =  $\frac{\text{Weight in pounds}}{(\text{Height in inches})^2} \times 703$

(Height in inches) x (Height in inches)

For adults, a BMI  $\geq 25$  is considered overweight.

For adults, a BMI  $\geq 30$  is considered obese.

**Cerebrovascular Disease (Stroke) Death** –

A death coded according to the Ninth Revision of the International Classification of Diseases (ICD-9) as 430-438, in 1994-1998 and Tenth Revision International Classification of Diseases (ICD-10) as I60-I69, in 1999-2003.

**Diabetes Mellitus Death** – A death coded according to the Ninth Revision of the International Classification of Diseases (ICD-9) as 250, in 1994-1998 and Tenth Revision International Classification of Diseases (ICD-10) as E10-E14, in 1999-2003.

**Fetal Death (reportable)** - A fetal death of 500 grams or more, or, in the absence of weight, of 22 completed weeks of gestation or more. (Note: Induced abortions are excluded from the fetal death count.)

**Heart Disease Death** – A death coded according to the Ninth Revision of the International Classification of Diseases (ICD-9) as 390-398, 402, 404-429, in 1994-1998 and Tenth Revision International Classification of Diseases (ICD-10) as I00-I09, I11, I13, I20-I51, in 1999-2003.

**Hispanic Origin** - Hispanic origin refers to persons whose ancestry, national group, lineage, heritage, or country of birth originated from a Spanish speaking country or culture.

**Infant Death** - A death of a live-born infant under one year of age.

**Infant Mortality Rate** - Number of infant deaths per 1,000 live births.

**Live Birth** - A birth in which the child shows evidence of life (includes heart action, breathing, or a coordinated movement of a voluntary muscle) after complete birth.

**Low Birthweight** - A live birth weighing less than 2,500 grams (5 pounds, 8 ounces).

**Low Birthweight Rate** - Number of live births weighing less than 2,500 grams per 100 live births.

**Pregnancies** - The sum of live births, reportable fetal deaths, and reported induced abortions.

**Pregnancy Rate** - Number of pregnancies per 1,000 female population aged 15-17.

**Prenatal Care** - The amount of prenatal care obtained by the mother is determined by information on the certificate of live birth concerning the month that prenatal care began and the number of prenatal visits. The percent of births with care initiated in the first trimester is a percentage of the total births. The percent of births with inadequate care which includes no prenatal care is a percentage of the total births.

**Race** - The terms "white" and "black" are used to denote the racial groups. Definitions used for classifying race are those specified by the Bureau of the Census.

**Resident Data** - Data compiled according to the usual place of residence of the person to whom the event occurred without regard to the geographic place where the event occurred. For births, infant deaths, and fetal deaths, the residence is of the mother. (Resident data for Tennessee include events which occurred to residents of the state irrespective of where the events took place.)





### Helpful Internet Links

1. Tennessee Department of Health (TDOH) website  
<http://www.state.tn.us/health/>
2. TDOH Faith Based Initiative  
<http://www2.state.tn.us/health/Faith/index.htm>
3. TDOH Disparity Elimination website  
<http://www2.state.tn.us/health/DE/index.htm>
4. TDOH Programs  
<http://www2.state.tn.us/health/programs.htm>
5. Tennessee Comprehensive Cancer Control Program  
<http://www2.state.tn.us/health/CCCP/index.htm>
6. Tennessee Cancer Registry  
<http://www2.state.tn.us/health/TCR/index.htm>
7. Birth Defects Registry Report  
[http://www2.state.tn.us/health/statistics/PdfFiles/BirthDefects\\_2000-2002.pdf](http://www2.state.tn.us/health/statistics/PdfFiles/BirthDefects_2000-2002.pdf)
8. TDOH Health Information Tennessee (HIT) website  
<http://hit.state.tn.us/>
9. TDOH Data  
[http://www2.state.tn.us/health/statistics/HealthData/hsr\\_healthdata.htm](http://www2.state.tn.us/health/statistics/HealthData/hsr_healthdata.htm)
10. TDOH “Better Health: It’s About Time”  
<http://www.tennessee.gov/health/itsabouttime/index.htm>
11. TDOH Kid’s website  
<http://www2.state.tn.us/health/kids/index.htm>
12. Infant Mortality  
<http://tennessee.gov/health/infantmortality/index.htm>
13. Finance and Administration Strategic Plan; Tennessee Department of Health and other agencies  
<http://www.state.tn.us/finance/bud/planning/SP2005Vol1.pdf>
14. TDOH Division of Health Related Boards  
<http://www2.state.tn.us/health/Boards/index.htm>
15. Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services, Healthy People 2010  
<http://www.healthypeople.gov/default.htm>
16. Governor’s website “Phil’s Priorities,” Health Care  
<http://www.tennesseeanytime.org/governor/TennCare.do>

17. Tennessee Department of Health news releases  
<http://www.state.tn.us/health/>
18. [Office of Disease Prevention and Health Promotion](http://odphp.osophs.dhhs.gov/)  
<http://odphp.osophs.dhhs.gov/>
19. Healthy People 2010 Initiative  
<http://www.healthypeople.gov/default.htm>
20. U.S. Government, Centers for Disease Control and Prevention  
<http://www.cdc.gov/>
21. [U.S. Department of Health and Human Services](http://www.hhs.gov/)  
<http://www.hhs.gov/>

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