

CHAPTER 19: PUBLIC HEALTH

The public health system contributing to the protection and promotion of the health and safety of Fort Worth residents consists of a network of numerous agencies as diverse as the population they serve. These agencies include city and county government and non-profit agencies, hospitals and educational institutions, and others.

EXISTING CONDITIONS AND TRENDS

Ten Essential Public Health Services

In 1999 Texas became the first state to codify into law ten essential public health services. The idea of identifying essential services was based upon the work of national, state, and local public health leaders to establish what has since become a universally accepted “guiding framework” for the responsibilities of state and local public health systems. This listing was developed to describe the public health activities that should be undertaken in all communities. The essential services referenced in the Texas Health and Safety Code, Chapter 121.002 are as follows:

1. Monitor the health status of individuals in the community to identify community health problems.
2. Diagnose and investigate community health problems and community health hazards.
3. Inform, educate, and empower the community with respect to health issues.
4. Mobilize community partnerships in identifying and solving community health problems.
5. Develop policies and plans that support individual and community efforts to improve health.
6. Enforce laws and rules that protect the public health and ensure safety in accordance with those laws and rules.
7. Link individuals who have a need for community and personal health services to appropriate community and private providers.
8. Ensure a competent workforce for the provision of essential public health services.
9. Research new insights and innovative solutions to community health problems.
10. Evaluate the effectiveness, accessibility, and quality of personal and population-based health services in a community.

The City of Fort Worth’s Public Health Department is engaged in all ten of these activities, with a focus on population-based, community-driven public health initiatives. Their mission is to promote and protect the health and safety of our diverse community.

Fort Worth Public Health Center



The Fort Worth Public Health Center will move from University Drive to a site within the Evans and Rosedale Village in 2009. (Source: Public Health Department, 2007.)

The Fort Worth Public Health Department (FWPHD) administers a comprehensive Community Needs Assessment (CNA) every five years. This unique assessment provides a statistically reliable profile of self-reported health problems and social issues at the neighborhood level. The most recent survey was completed in 2003 and another will be administered in 2008. Additionally, other diseases and conditions of public health importance are tracked and analyzed from mortality and morbidity data available internally or through partnerships with other federal, state and local agencies in order to construct a reliable profile of the city's overall health, and to identify community health issues and priorities.

Based on this data, the Public Health Department has established the following priorities for targeting public health and other community resources, and for developing intervention and/or preparedness strategies.

Obesity and Related Health Conditions

According to the Texas Behavioral Risk Factor Surveillance System, over thirty-seven percent of adults 18 years of age or older are overweight and almost twenty seven percent obese. Similarly, recent figures revealed by the Strategic Plan for the Prevention of Obesity in Texas indicated that thirty-five percent of school aged children are considered to be overweight or obese. Based on population projections from the Texas State Data Center, the number of obese adults in Texas is projected to increase from 3.5 million in 2000 to over 9 million in 2040, with the greatest increase occurring among Hispanics.

A recent local study, performed by the Tarrant County Public Health Department, revealed that 64 percent of Tarrant County residents are either obese (26 percent) or overweight (38 percent). In 2003, the University of North Texas Health Science Center conducted an obesity study among elementary school aged children in Fort Worth that indicated thirty percent of the children were either overweight or obese.

The prevalence of obesity is a serious public health concern because obesity is associated with the development of several chronic diseases. The economic consequences of obesity-related illnesses include a significant increase in healthcare costs and lost population productivity days at the local, state, and national level.

Development Patterns and Public Health

The pattern of land development shapes travel choices and impacts public health. In 2003, a study in the *American Journal of Health Promotion* concluded that there is a significant correlation between development patterns and public health. People who live in isolated, automobile-dependent neighborhoods are more likely to walk less and suffer from obesity, high blood pressure, diabetes, and other diseases. Conversely, people who live in more connected, compact communities are less likely to suffer these health problems. To support healthier communities, the Comprehensive Plan encourages the development of mixed-use growth centers and urban villages. These areas, described in detail in Chapter 4: Land Use, should help minimize the risk of health problems related to conventional suburban development.

**Obesity and Related Health Problems
Tarrant County, 2004**

Individual Self-Reported Health Problems	All Males	All Females	Tarrant County Overall
	(%)	(%)	(%)
Overweight	46.7	28.6	37.8
Obese	27.0	25.6	26.2
Myocardial Infarction/ Coronary Heart Disease/Heart Disease	10.8	9.6	10.3
Diabetes	6.3	5.5	5.9
High Blood Pressure	23.2	23.0	23.1

The above table percentages were computed from 2,565 telephone dial-in interviews. Overweight people have a body mass index (BMI) of 25 to 29.9, while obese people have a BMI of 30 or above. (Source: *Tarrant County Behavioral Risk Factor Surveillance System, Tarrant County Public Health Department, 2004.*)

Public Health Emergency Preparedness

Community Needs Assessment data indicate that 41 percent of Fort Worth residents do not feel adequately prepared for emergencies. Protecting the health and safety of our diverse community from a variety of potential threats, including acts of terrorism, bioterrorism, pandemic flu, and others requires careful planning to ensure organizational and community readiness.

As part of a nationwide network of public health agencies and professionals, FWPHD and its staff have worked diligently to develop public health emergency preparedness and response plans utilizing an all-hazards approach. Because the public’s health could be at risk during any emergency scenario, integration of public health resources and expertise as part of the larger local emergency management infrastructure continues to be a priority.

Infant Mortality

Infant mortality rates are generally considered to be an important index of the overall health of a community. For the past several years, Fort Worth has consistently experienced a higher infant mortality rate (IMR) than other major Texas cities. Fort Worth’s IMR also exceeds state and national benchmarks.

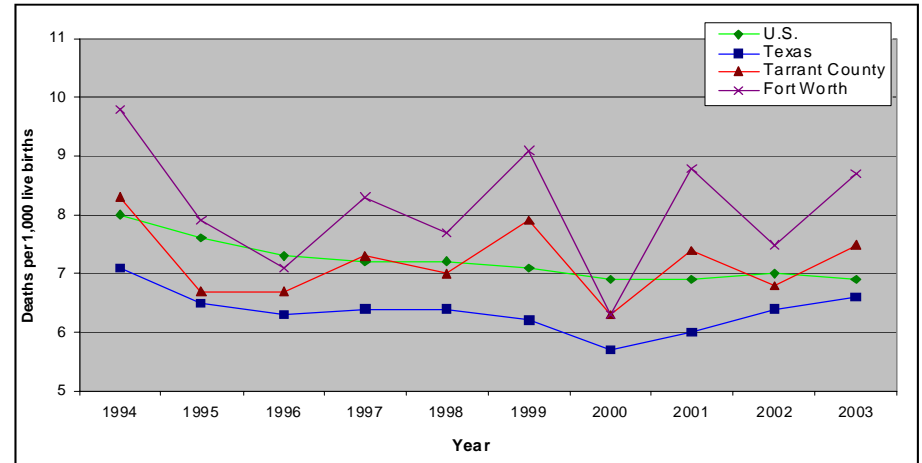
The infant mortality rate is defined as the number of deaths among children less than 12 months of age per 1,000 live births in a given year. In Fort Worth, the 2003 infant mortality rate was 8.7 deaths per 1,000 live births, an increase of 16 percent from the 2002 rate of 7.5 deaths per 1,000 live births. This upward trend was also experienced countywide, statewide and nationally. Fort Worth recorded 11,635 births and 101 infant deaths in 2003.

Infant mortality rates differ among racial/ethnic groups. Blacks have consistently had higher IMRs than both Whites and Hispanics for each of the years 1993 through 2003. As is the case in Texas and Tarrant County as a whole, Fort Worth’s IMR for Blacks each year were twice as high as those for Whites and Hispanics. Infant mortality rates are affected by factors such as prenatal care utilization, smoking rates among mothers, birthweight, and prematurity of infants. High infant mortality may indicate problems in a community, including poor maternal health, infant malnutrition, teenage pregnancy, and/or limited access to adequate health care facilities.

Creating and Promoting a Public Health Agenda

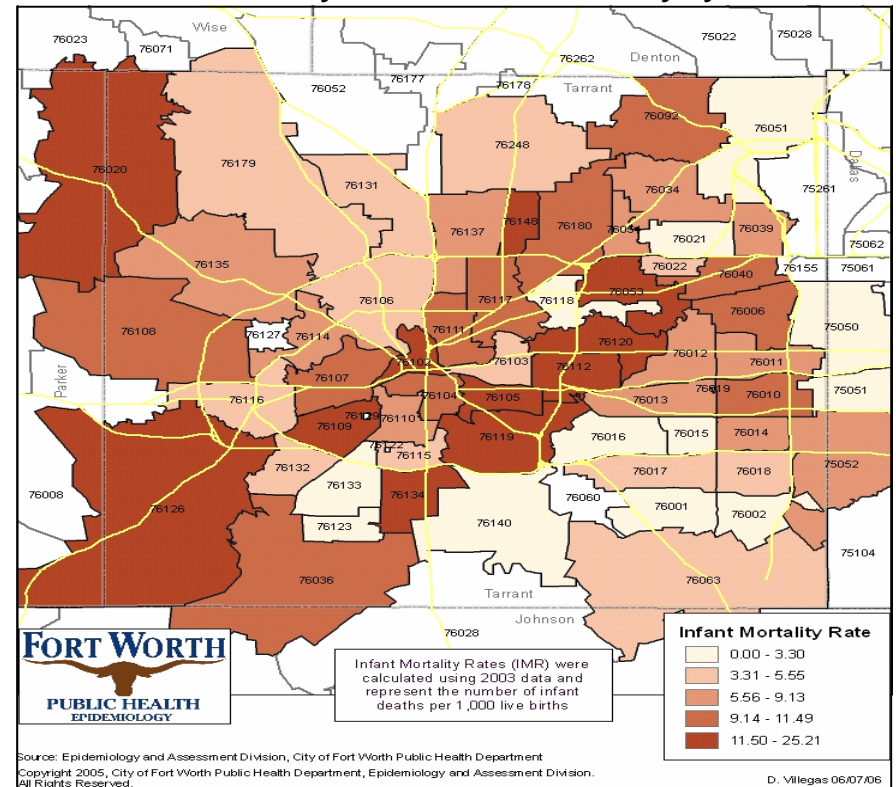
In order to identify public health issues, concerns and priorities, as well as to facilitate community awareness and drive the development of appropriate interventions, a comprehensive picture of the health of the city and its residents is required. Utilizing science-based methodologies, FWPHD’s Epidemiology Division is tasked with collecting, analyzing and disseminating health data to allow community leaders to promote a public health agenda. Armed with data, FWPHD, community partners and other stakeholders can identify resources and interventions

Infant Mortality Rates



Fort Worth has consistently experienced a higher infant mortality rate (IMR) than state and national rates. (Source: Public Health Department, 2007.)

2003 Infant Mortality Rates in Tarrant County by ZIP Code



that can be implemented to improve the health of the community. Maintaining and updating a “Health of the City” style report card is a FWPHD priority.

Compliance with Public Health Laws, Regulations, and Ordinances

Whether ensuring safe restaurants or minimizing the threat of pet and human exposure to rabies, FWPHD enforces public health laws, regulations and ordinances designed to prevent disease, injury and illness. Priorities for the upcoming planning period include: preventing the transmission of zoonotic disease, preventing injuries to humans from stray animal populations, preventing food, water and vector-borne illness, and preventing accidents and illnesses resulting from unsafe or unhealthy public venues, including public swimming pools. The following establishments or facilities are routinely inspected to ensure compliance: food establishments (including restaurants), day care centers, hotels and motels, and public and/or semi-public swimming pools. The Public Health Department’s current emphasis in this area is on improving low levels of compliance with animal licensing and vaccination requirements, and expanding quality assurance efforts associated with all regulatory functions.

GOALS

- Reduce obesity, overweight rates, and incidence of related health conditions.
- Expand and refine public health emergency preparedness plans for businesses and residents.
- Reduce infant mortality rate within targeted areas.
- Create, maintain, and promote a community public health agenda.
- Improve compliance with public health laws, regulations, and ordinances.

STRATEGIES

While directly participating in all ten of *Public Health’s Ten Essential Services*, the City of Fort Worth Public Health Department has identified five key impact strategies that represent a neighborhood-oriented approach to population-based public health:

- Collect, analyze, and disseminate public health data and information to identify public health priorities and drive interventions.
- Mobilize partners and other community stakeholders to engage internal and external resources to address identified public health priorities.
- Enforce consumer health, animal control, and other public health laws and ordinances aimed at preventing disease, injury, and illness.
- Facilitate an all-hazards approach to ensure community and organizational readiness for emergencies, including bioterrorism.
- Maintain an organizational focus on effectiveness, efficiency, innovation, and customer service.

Specific to the priority public health issues noted above, the following intervention strategies are being implemented:



The Fort Worth Public Health Department sponsors numerous initiatives aimed at promoting physical activity including *FitFuture Fort Worth* and *Walk for the Health of it*. (Source: Public Health Department, 2007.)

Strategies to Reduce Obesity and Related Health Conditions

FitFuture is a community mobilization effort to encourage physical fitness and better nutrition in the Tarrant County community. The effort is co-sponsored by the Fort Worth Public Health Department, the Tarrant County Public Health Department, and the United Way of Tarrant County. The vision of FitFuture is to unite individuals, schools, health care professionals, local governments, community organizations, faith communities, and employers to improve health and reduce prevalence of obesity in five key areas:

- Local school districts help students and staff establish and maintain healthy eating and physical exercise via the School Health Advisory Committee.
- Local companies provide comprehensive workplace wellness programs.
- Local government becomes involved as a leader in policy changes.
- Health professionals will have a significant positive influence on their patients.
- Community organizations support, educate, and mobilize the community (and become members of the FitFuture network).

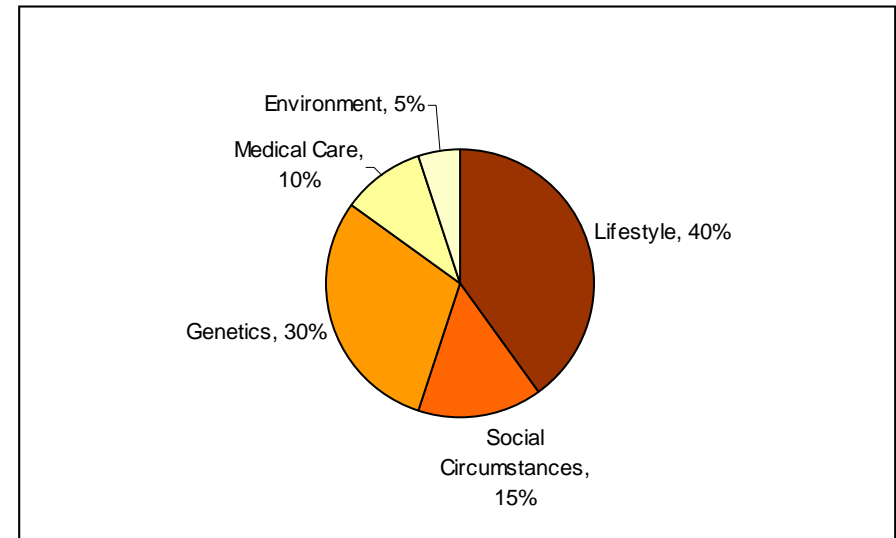
The department's Health Promotion and Education section also offers many programs aimed at improving nutrition and fighting obesity in Fort Worth. Such programs include "Let's Get Active," aimed at preschool children; "Be Wise, Exercise" and "Heart Power," aimed at keeping fitness fun for grade school children; "Walk for the Health of It," an incentive program that rewards local walkers of all ages for reaching walking milestones; and "Food for Thought," a program that teaches people of all ages how to overcome nutritional challenges. The Outreach Division offers dozens of educational programs including "Salud Para Su Corazon," a grassroots effort to bring Hispanic adults and children information they need to improve heart health and reduce risk of obesity, and "On the Trail to Healthy Eating" a new collaborative program with Minyard's Food Stores and the Texas A&M Extension Service aimed at helping shoppers make healthy choices when buying food.

Strategies to Expand Public Health Emergency Preparedness

With an emphasis on assisting Fort Worth's business community and hard-to-reach populations, FWPHD will further develop citizen preparedness and business continuity planning guides for a variety of emergency scenarios. These special projects will supplement the continuous updating of public health "all-hazards" emergency plans and the coordination of community resources and confirmation of collaborations with other emergency response agencies. Various emerging pathogens and the threat of biological terrorism may affect the population of Fort Worth. By taking an "All Hazards" approach, FWPHD plays a vital role in ensuring community and organizational readiness to detect, respond, and recover from various health emergencies, including:

- **Pandemic Influenza:** FWPHD is actively involved in efforts to prepare and educate the public, municipalities, hospitals, first responders, schools, faith-based organizations, and many non-profits and non-governmental agencies and service providers regarding the potential impact of pandemic influenza.

Factors Influencing Health



Lifestyle and social circumstances account for 55% of early deaths. (Source: McGinnis, et al., *Health Affairs*, 21(2), p. 83, 2002.)

Preparing Residents and Businesses for Emergencies



Emergency preparedness staff provide food security education to local businesses. (Source: Public Health Department, 2007.)

- Deployment of the Strategic National Stockpile (SNS): A catastrophic natural or intentional biological event, such as a tornado or anthrax release, may result in local resources becoming overwhelmed. FWPHD collaborates with other emergency preparedness partners for the coordination of the federally managed SNS, including its receipt within the Fort Worth area, dissemination to all affected areas, and proper maintenance of the asset while in use.
- Business Continuity Planning: FWPHD is involved in strengthening the City's ability to continue providing basic services during a crisis. FWPHD is responsible for the development of departmental Business Continuity Plans, or outlined goals and actions the organization would take to continue operations when faced with a catastrophic emergency. Additionally, FWPHD is providing guidance to other City departments on the creation of their plans. Furthermore, FWPHD is developing materials to aid local businesses in their preparedness efforts regarding business continuity.
- Sheltering: FWPHD plays an integral role in the sheltering of individuals from other parts of the country or within the jurisdiction during an emergency. The Bioterrorism and Health Emergency Preparedness (BHEP) team works to develop medical resources that will be utilized to aid those in city sponsored shelters. Initial triage and medical needs are led by the BHEP team, through adaptation of response plans for other health emergencies.

Strategies to Reduce Infant Mortality

FWPHD will create a dedicated "Infant Mortality Outreach Team" as part of its Outreach Division. This team will be assigned to perform targeted outreach activities in the areas of the city with the highest incidence of infant mortality, focusing on pre-conception health. The importance of pre-conception health is well documented in research and has been identified as a primary factor contributing to Fort Worth's relatively high infant mortality rate. In addition to physical assessment, there will be an educational component focusing on factors that will improve overall health. Utilizing models created by the Centers for Disease Control and Prevention (CDC), key conception messages include: increasing public awareness of the importance of preconception health, improving access to preconception care for low income women, and encouraging women and couples to have a reproductive life plan. Additionally, the creation of a Fort Worth infant Mortality Task Force made up of grass roots community stakeholders and health and human services specialists is also planned. This task force will allow for coordination between numerous agencies committed to improving Fort Worth's infant mortality rate and ensure the most efficient utilization of community resources.

Strategies to Create and Promote a Community Health Agenda

Through the use of public health data, including FWPHD's community needs assessments and vital records data, the department's biostatisticians will identify critical public health indicators that will enable comparison of the health status of the citizens of Fort Worth with national, state, and local benchmarks. From this

Protecting Consumers



A registered sanitarian confirms appropriate food temperatures during a routine restaurant inspection. (Source: Public Health Department, 2007.)

analysis, a “State of the City” report card is being developed to provide a concise tool for community leaders and other stakeholders to **use** in the development of health improvement strategies.

Strategies to Improve Compliance with Public Health Laws, Regulations, and Ordinances

One of the primary objectives identified as part of this initiative is to reduce stray animal populations and associated risks of disease and injury. In 2006, over 1,000 animal bites were reported in Fort Worth. Ninety percent of the biting animals were not adequately vaccinated for rabies and 95 percent of the biting animals were not licensed with the City. Both are required by City ordinance. Educational campaigns will be developed to educate residents on these ordinance requirements and to encourage compliance. A second primary objective is to protect consumers from unhealthy restaurant, day care, swimming pool, and hotel/motel environments. Principal strategies utilized to accomplish these objectives include: 1) the enforcement of laws, regulations and ordinances related to the establishments listed above, and 2) the provision of education and training for food and day care establishment owners, managers, and employees as well as swimming pool operators. Annual inspection schedules are created based upon a risk assessment tool that identifies facilities engaging in activities that pose the greatest potential health threats to the public. These facilities are inspected most frequently.

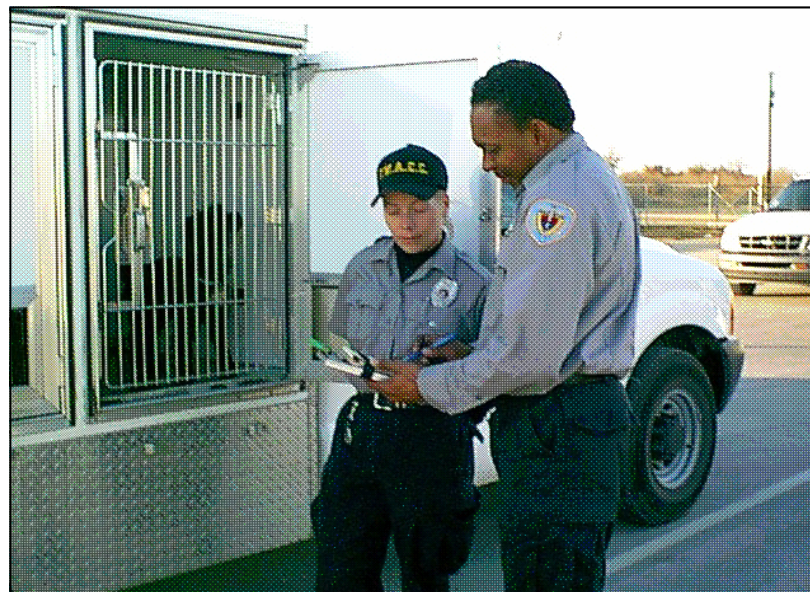
PROGRAMS AND PROJECTS

Fort Worth Public Health Department Programs

Animal Care and Control: The City of Fort Worth’s Animal Care and Control program is charged with the enforcement of City ordinances pertaining to animals and with protecting citizens from stray, homeless, aggressive, or nuisance animals. In addition to contributing to safer neighborhoods, a primary purpose of this activity is to address the public health issue of rabies control by safeguarding people and pets in Fort Worth from the threat of rabies and other zoonotic diseases. Demand for service has increased dramatically during the past five years. The two best indicators of this trend are “Service Requests Handled” and “Animal Impounds”. The number of service requests handled has increased by 42 percent and the number of animals impounded has increased by 14 percent during the past five years.

Community Solutions: The City of Fort Worth Public Health Department has been awarded a \$9.5 million cooperative agreement with the Substance Abuse and Mental Health Services Administration (SAMHSA). Funding allows for the creation of “Community Solutions”, which will work collaboratively to create an accessible, culturally competent, and seamless child-and-family-driven system of care for families impacted by severe emotional disturbance (SED) in Fort Worth. The City of Fort Worth Public Health Department will act as the lead agency, partnering with the Fort Worth Independent School District (FWISD) and the member agencies and individuals of the Mental Health Connection of Tarrant County.

Protecting Residents from Dangers Posed by Stray Animals



Animal Control Officers make sure that residents are protected from the threats posed by stray and homeless animals and the diseases that they may carry, including rabies. (Source: Public Health Department, 2007.)

Consumer Health: The Public Health Department's Consumer Health Division performs inspection, complaint investigation, and educational services to ensure healthy and safe environments for Fort Worth consumers. Protecting the public from food-borne and water-borne diseases and other health risks associated with food establishments, day care centers, hotels and motels, and swimming pools is the division's primary objective. Principal strategies used to accomplish this mission include: 1) the enforcement of laws, regulations, and ordinances related to the establishments listed above; and 2) the provision of education and training for food and day care establishment owners, managers, and employees, as well as swimming pool operators.

Additionally, the division sponsors a vector control program that is providing active surveillance for the presence of vector-borne diseases, including West Nile Virus, and promoting mosquito prevention strategies for residents.

Epidemiology: Epidemiology is the cornerstone science of public health and serves as a foundation for most of the department's community programs. This division is responsible for compiling, analyzing, and disseminating public health data from which public health priorities specific to Fort Worth can be identified, communicated, and addressed in partnership with other community stakeholders. Comprehensive community needs assessments are performed every five years to ensure current self-reported public health indicator information is available at the neighborhood level. Additionally, other diseases and conditions of public health importance are tracked from mortality and morbidity data in order to construct a reliable profile of the City's overall health. Hundreds of special-topic reports are created to satisfy requests from other City departments, local health and social service agencies, and other community partners. The Vital Statistics section maintains a database of all birth and death records for the City and satisfies, on a fee for service basis, public demand for official certificates.

Health Promotion and Education: Health Promotion & Education directly impacts the lives of approximately 40,000 Fort Worth residents annually through community presentations (made in both English and Spanish) that promote healthy behaviors and lifestyles. Sample topics include: fitness & nutrition, heart-healthy living, smoking cessation, disease prevention, and cancer prevention.

Outreach: The Outreach Division is structured to assign teams of public health outreach workers to geographic areas consistent with the City's 12 Neighborhood Police Districts (NPD's). There are six teams, each assigned two NPD's, comprised of a team leader, who is a public health nurse or other public health professional, and two community health workers. Their focus is to use epidemiologic data and extensive community involvement to identify priority health issues within each community and then facilitate the mobilization of resources to make positive changes. The structure of the Outreach teams is intended to complement the Community Policing model, helping to create "community wellness" throughout the City. The Outreach staff provide the residents of Fort Worth with quality of life assessments, advocacy through the broad health care and social service system, and

Public Health Outreach



Community health nurses assist with childhood health assessments as part of a healthy heart initiative. (Source: Public Health Department, 2007.)

assurance that needs are being addressed appropriately and in a culturally competent manner.

Public Health Emergency Preparedness: The Fort Worth Public Health Department's Bioterrorism and Health Emergency Preparedness (BHEP) Program, formed in 2002, is funded by the U.S. Centers for Disease Control and the Texas Department of State Health Services to strengthen the city's ability to prepare its more than 686,000 residents to respond to and recover from natural, accidental and intentional disaster and emergency events. The program's mission is to prepare the general public, businesses, food retailers, health care providers, animal care and control agencies, and other community and professional organizations for the threat of bioterrorism and other public health emergencies.

New or Expanding Facility Projects

- Spay and Neuter Clinic—In 2007, the City of Fort Worth will begin construction of an animal spay and neuter clinic as an expansion of its current Animal Care and Control Center located at 4900 Martin Street in southeast Fort Worth. This clinic will allow for a more efficient adoption process and ensure compliance with state laws requiring that all animals adopted from an animal shelter be spayed or neutered.
- New Public Health Facility—The City of Fort Worth is also planning the construction of a new public health facility that will be located east of Interstate-35 in the Evans and Rosedale Business and Cultural District. It is estimated that the new building will serve more than 57,000 visitors annually who will come to utilize a host of public health services provided from the department's Consumer Health, Epidemiology, Outreach, Health Promotion, and Community Solutions divisions.



(Source: Public Health Department, 2007.)

