

Tarrant County Public Health 2003 Annual Report



Safeguarding Our Community's Health

Director's Message

"The sum of the whole is this: walk and be happy; walk and be healthy. The best way to lengthen our days is to walk steadily and with a purpose." – Charles Dickens



Tarrant County Public Health has taken many steps forward this year. We opened the doors to the new facility in April and many people from the community, the region, the state, and even the nation have walked in to participate in workshops, conferences, preparedness exercises, and town meetings. 1101 S. Main Street has become the community meeting center we hoped it would be.

Tarrant County Public Health has made great strides in emergency preparedness; disease control and prevention; promotion of healthy lifestyles and choices; collection, analysis and dissemination of health data; and environmental and consumer protection. Our Biosafety Level 3 laboratory is a state-of-the-art operation which not only prepares us for bioterrorism but also for day-to-day challenges such as West Nile virus (WNV) testing. Our entire staff completed training and many participated in tabletop exercises for our Public Health Ready certification. We received several grants for enhancing volunteer efforts and for the development of advanced practices.

We began working more closely with our local hospitals to improve syndromic surveillance capabilities to track emerging diseases and warn the public of potential outbreaks. Two of our programs, mandatory homeless shelter screening for tuberculosis and our West Nile virus collaborative have become best practices for the nation. Monkeypox, SARS, smallpox vaccinations, and an early influenza season kept the epidemiology and nursing staff busy. Travel Health saw an increase in the business community's demand for international travel information.

The community came together around chronic disease prevention as we developed a 16-partner consortium to address obesity, diabetes, asthma, physical activity, nutrition and smoking cessation. We continued to provide data and leadership to the Infant Mortality Summit and workgroup efforts.

The community health report and a special report for Arlington were completed and distributed to stakeholders and elected officials. The lab increased its ability to test for food-borne diseases. And our staff provided leadership at the state and local levels regarding air quality.

As we journey into the coming year, we hope that our community will be happy with our services and healthier as a result of our efforts. We will strive to "walk steadily and with a purpose."

The Best in Health,

A handwritten signature in black ink that reads "Lou K. Brewer". The signature is fluid and cursive, written over a white background.

Lou K. Brewer, RN, MPH
Director
Tarrant County Public Health

New facility, new neighbors

As we celebrate a year at our **new facility**, some things have changed, while others have stayed the same. The goal was to provide seamless service during the move from the old facility to the new. That goal was met. The building is a hub of activity. Its state-of-the-art education center has been host to meetings from groups as diverse as the Boy Scouts to a summit for the Tarrant County Commission on Aging.

The department's involvement with **Meals on Wheels** is an opportunity for the employees to give back to the community. Volunteers deliver nutritious meals a short distance from our location to shut-ins and other people who are unable to or do not have

"The new facility expands the County's ability to address existing and emerging health issues and to promote healthier communities throughout the region."

—G.K. Maenius,
Tarrant County Administrator

anyone to regularly prepare meals for them. Our visits allow us the opportunity to visually check on them and report anything we observe that might affect their health and well-being. The willingness and volunteer spirit of the staff make involvement in activities like this possible.

Working with the Fort Worth Independent School District's **Adopt-A-School Program**, public health adopted D. McRae Elementary School. The first initiative, a pen pal program, kicked off successfully.



*(l-r)
Hospital
District Board Chair
Harold Samuels joins County
Commissioner Glen Whitley, U.S. Congressman
Martin Frost, County Commissioners Dionne Bagsby,
J.D. Johnson, Marti Van Ravenswaay, Judge Tom Vandergriff
and Director Lou Brewer for the ribbon cutting ceremony.*



*Doug Fabio,
Manager of Health
Planning and Policy,
heads out to deliver meals.*

Emergency Preparedness

Each year we learn more and seek to do more. Our active role in emergency preparedness helps us deal better with public health threats – whether those threats are terrorism, such as anthrax-contaminated letters, or natural, such as food-borne diseases or influenza outbreaks that we deal with on a more routine basis. Daily our Health Response Team members are at work in the

“We have a tremendously strong network of professionals and community volunteers whom I am confident will make the Medical Reserve Corps efforts successful.”

— Alex Hathaway, MD
Health Authority / Medical Director

county as a direct line of communication and as a resource to local governments. They provide training, presentations and may be called upon to offer assistance or to be the first public health responder to investigate and gather data on anything that might affect the public’s health. The department continues its smallpox vaccination programs for health care workers and first responders, following national protocols. Partnerships, planning and logistics are primed for any required mass inoculation through the Strategic National Stockpile, which has been designed to deliver needed medication to any area affected in the event of a terrorist act. To increase public health’s overall ability to respond to all threats and hazards, public health competed for and was awarded two grants that focus on emergency preparedness.

Medical Reserve Corps

The department received a \$50,000 grant to form a Medical Reserve Corps (MRC). The Corps will be made up of physicians, nurses, health professionals and other volunteers who will provide a coordinated response to health and medical situations in support of established, local public health and emergency medical response systems. North Texas will



Bobby Jones, Chief Epidemiologist, conducts a “what if” bioterrorism scenario.

have two reserve units – a West Unit based in Tarrant County and an East Unit based in Dallas County. The Tarrant County MRC West Unit also will support efforts in Denton County and Dallas County’s East Unit will support Collin County efforts.

Advanced Practice Center

A \$500,000 grant was awarded to the department when it was selected as one of only five sites in the nation to become an Advanced Practice Center (APC) for bioterrorism and emergency preparedness. The grant will be used to improve and evaluate our infrastructure for public health preparedness. The department will be responsible

“I believe strongly in our ability to reach new areas of the county through our Health Response Team members. Having them stationed in local communities provides those communities with a resource that can be tapped at any time.”

— Glenda Thompson, Associate Director
Community Health Promotion

for pilot, implementation and dissemination of innovative tools, technology, and training nationally, being particularly responsive to the needs of the public health region in which it serves. As an APC, public health will serve as a formal demonstration and training site for other local public health departments and for the Centers for Disease Control and Prevention (CDC).

Public Health Ready

Last year, TCPH was selected as one of only 12 pilot sites from more than 3,000 local public health agencies nationwide to participate in "Public Health Ready," a bioterrorism preparedness and emergency readiness program. The program builds on partnerships between local and state public health agencies, emergency response agencies, academic

"Our efforts are focused on preparedness. Our resources have increased and been retrofitted since Sept. 11, and we continue to learn from local, national and regional colleagues who in turn learn from us."

—Peggy Wittie, Surveillance and Response Manager

institutions, and federal agencies that support this work. As required by the program, the department has reviewed its emergency response plan, and made changes, enhancements and refinements where needed. All agency staff has received basic training on emergency readiness and the public health agency's role in emergency response. Simulated emergency events are planned in 2004 to further test and refine the department's response plan and resources.

Biosafety Lab

Our laboratory has expanded its infectious disease surveillance capabilities. The lab can now test stool specimens for the presence of enteric pathogens such as *E. coli* O157, *Campylobacter*, *Salmonella*, *Shigella*, *Yersinia*, and *Vibrio*. During 2004, the lab will add tests to identify bacterial pathogens and toxins in prepared food and retail food products. The addition of these tests will enhance the Epidemiology and Environmental Health Divisions' capacity to identify food-borne and water-borne disease outbreaks and rapidly respond to contain the spread of the disease.



Lab microbiologist Diana Cervantes conducts a West Nile virus test.

Construction on the Biosafety Level 3 environmental sample processing facility was completed in October. Laboratory workers have begun setting up equipment and operational testing. The Biosafety Level 3 facility will be fully operational and commence testing in early 2004. This facility will screen samples collected by police, fire, HAZMAT, and other public safety agencies for the presence of bioterrorism agents. This facility was designed to keep laboratory workers safe as they process environmental samples that could contain high consequence bacterial pathogens such as *Bacillus anthracis* which causes anthrax.

"Recent laboratory upgrades mean we can test more; we know more and we do more toward safeguarding the community's health."

—Guy Dixon, Manager
North Texas Regional Laboratory

Workload Measures	2003
Formal Public Health Emergency Response staff training hours	1,870
Smallpox vaccines administered to Tarrant County health care providers	220

Disease Control and Prevention

The 2003 flu season was aggressive. It marked the first time in recent years that the department expended its entire vaccine inventory for the general population. Vaccine was available only for high-risk infants and children. FluMist was acquired to help fill the void for the general population.

Pertussis

Whooping cough was attributed as a cause of several infant deaths in Texas last year, including a five week old in Tarrant County. Statewide in 2003, there were 317 pertussis cases, and four deaths. Tarrant County had 24 cases. The department administered 19,687 doses of DTaP (Diphtheria, Tetanus, Pertussis vaccine), reminded people that pertussis is a contagious disease and encouraged parents to ensure their child had complete vaccination against pertussis and other vaccine-preventable diseases.

Tuberculosis

During 2003, tuberculosis morbidity increased due to targeted high-risk screening in the homeless population. Forty-two percent of the county cases involved foreign-born people. We treated 118 cases and



Ann Salyer-Caldwell, Manager of Community Health Promotions, addresses dignitaries at the North Texas Shoot Out, an immunization event that provided flu shots to seniors. Seated behind Ann, left to right: William Zedler, Texas representative; US Congressman Michael Burgess; Arlington Mayor Dr. Robert Cluck, TCPH Director Lou Brewer and John Weist, administrator for Tarrant County Precinct 2.

192 tuberculosis suspects. Ten cases were co-infected with HIV and 14 suspects had comorbidity. We serviced six new drug-resistant patients. In addition, we provided medications for 1,228 clients that have latent tuberculosis infection. Intervention and close case management are two of our most important tools.

"Our work with a local night shelter reduced the transmission of tuberculosis in our community. I'm proud of the teamwork, commitment and the strong partnership that were the foundation of this accomplishment."

*—Gerry Burgess, Manager
Tuberculosis Elimination*

HIV/AIDS and STDs

In 2003, newly-identified cases of STDs increased in most disease categories. Public health's Adult Health Services (AHS) division provides treatment and follow-up for all cases of sexually transmitted diseases (STDs) in Tarrant County. The division increased



Staff members Donnitta Smith and Elaine Allen set up AIDS quilt display for 2003 World AIDS Day.

screening activities, testing individuals for syphilis and HIV at venues throughout the county. AHS also increased the number of educational presentations to teens and adults at health fairs, community block parties and outreach events. Work continues to develop methods to help people reduce their risk of contracting an STD through active surveillance and rapid follow-up of diagnostic reports.

“Sexually transmitted diseases have the potential to permeate a community. Education, awareness and personal responsibility make all the difference in the world. That’s how we make progress.”

—Mark Wilson, Manager
Adult Health Services

Tarrant County Selected Disease Morbidity Summary				
DISEASES	2000	2001	2002	2003
Acquired Immunodeficiency Syndrome (AIDS)	167	140	153	172
HIV Seropositive (anonymously reported until 1999) ¹	309	199	258	371
E. coli 0157:H7 Infection	13	16	6	33
Hepatitis ² : Type A	143	203	110	76
Type B	22	247	332	176
Type C	32	369	2,526	1,756
Meningitis:				
Aseptic	267	522	304	332
Meningococcal	5	20	14	29
Other Bacterial	12	26	10	11
Pertussis	15	21	83	31
Salmonellosis ³	165	185	341	24
Shigellosis	256	84	184	539
STD:				
Chlamydia	4,097	3,970	3,740	4,495
Gonorrhea	2,730	2,210	1,889	2,076
Syphilis: Congenital (<1 yr.)	3	6	4	5
Primary	8	18	37	18
Secondary	14	20	63	58
Other	161	211	108	238
Tuberculosis	102	109	108	116
West Nile virus			5	22

Information provided is for selected reportable diseases

Serious health threats and suspected bioterrorism agents are also reportable and include anthrax, smallpox, plague, tularemia, botulism, brucellosis, Q fever and viral hemorrhagic fever.

¹ HIV became reportable by name in 1999.

² Reporting of hepatitis B and C was changed in 2001 to require the notification of chronic cases as well as acute cases.

³ Salmonellosis figures tend to fluctuate as a result of reporting and laboratory testing.

Workload Measures	2003
BCCCP [*] - clients screened	718
BCCCP - case managed clients	368
Child Health - visits	206
Family Planning - visits	4,030
Family Violence Prevention - people taught	17,125
Flu shots provided	13,478
Immunizations provided	83,880
WIC ^{**} - visits	542,624
WIC - monthly average caseload	45,219
Communicable disease reports investigated	3,546
New HIV cases reported	1,049
STD clinic visits	7,653
STD disease intervention field investigations	3,208
STD/HIV field screening of high-risk individuals	5,497
Individuals from target populations receiving HIV education &/or testing & counseling	9,798
HIV pre- and post-test counseling sessions	5,410
Clients provided HIV/STD prevention education	9,312
Clinical lab tests performed	59,047
HIV-1 lab tests performed	13,932
Clients tested for HIV	5,410
HIV/STD cases investigated, partners notified	2,844
High-risk clients tested for Hepatitis C	413
Preventive Medicine Clinic (PMC) caseload	568
PMC clinic visits	3,889
Travel Health Services clinic visits	5,153
TB clinic visits	16,115
TB contacts screened as part of disease intervention investigation	2,508
TB cases in Tarrant County	120
Percent of foreign-born cases (%)	42
Suspected cases treated preventively	192
HIV co-infections (cases only)	10
Drug-resistant cases	6
Directly Observed Therapy doses administered in the field	23,758
DOPT ^{***} doses administered	11,515
Contacts investigated	2,099
Total on therapy	312
Total positive reactors	1,228

^{*}Breast & Cervical Cancer Control Program

^{**}Women, Infants, Children Program

^{***}Directly Observed Preventive Therapy

Promote Healthy Lifestyles and Choices

The department continually promotes health education and awareness of health issues. This is a sampling of some of our community activities.

Obesity

Nearly two-thirds of Americans are considered overweight or obese. Tarrant County, along with the United Way of Metropolitan Tarrant County and other partners, initiated efforts to formulate a community action plan to address the epidemic. Plans are underway for a "Fit Future" Symposium and possible funding in 2004.

Infant Mortality

The Infant Mortality Taskforce continues to develop its action plan goal of reducing disparities in minority communities. The taskforce hosted its Second Annual Summit and introduced a "Resource Board" as one of its accomplishments for 2003. The group will focus its efforts in Fort Worth's 76104 and 76105 ZIP codes.

"Our process will continue to work with the entire community while focusing on areas and groups where we see the greatest need or disparity."

—Darren Asher, Manager
Chronic Disease & Injury Prevention

Champions in Health

The program is an annual symposium conducted jointly by Tarrant County Public Health and the Health Industry Council. It recognizes and showcases local businesses that have established successful employee wellness programs.

WIC Library Plan

Public health's WIC program offers the Tarrant County WIC Library Plan as one of six Nutrition Education Options. The plan is a community-based nutrition reading program that involves the WIC participants in



2003 poster contest winners were recognized at Commissioners Court.

reading a WIC-approved book about nutrition, food or eating to their children at one of the 19 participating libraries. Families learn about nutrition, and the plan encourages reading to young children.

Teen Videofest is an annual competition that challenges county youth ages 13 – 19 to produce videos on aspects of teen health. These videos provide a perspective on health issues affecting teens. The National Association of County and City Health Officials (NACCHO) presented TCPH with a 2003 "Model Practice Award," citing Teen Videofest as a model practice.

In 2003, TCPH sponsored its first **Public Health Week Poster Contest**. The contest, open to county students in grades 1-8, required students to create a poster around the theme "Exercise your right to good health!" The contest helps promote good health concepts to children.

"By reaching our youth, we reach our community."

—Vanessa Joseph
Senior Public Information Officer

Workload Measures	2003
Champions in Health nominees	9
Teen Videofest participants	210
Teen Videofest entries	86
Teens completing ATCP*	170
Poster contest entries	155

*Adolescent Tobacco Control Program

Collecting, Analyzing and Disseminating Health Data

On a daily basis, TCPH is focused on ways to safeguard the community's health. Throughout history, public health has been on the forefront tracking and studying the things that make us sick as well as the things that keep us well. In the late-1800s, at the height of the cholera epidemic in Soho, England, hundreds of people were dying within a short span of days. As a young doctor attending the sick and dying, John Snow believed that contaminated public drinking water was the cause for such a swift and violent epidemic. From his investigation and data, Snow successfully concluded that the Broad Street pump was the source of the cholera. The pump handle was removed and the number of cholera cases immediately diminished. Further investigation of the pump revealed it had been contaminated with infected sewage. The cumulative effect of Snow's meticulously gathered data was the beginning of the end for cholera in Britain—and the birth of the science of epidemiology.

"The Community Health Report is currently helping public health and other related agencies pinpoint health accomplishments and deficiencies."

—Carol Lee Hamilton, Associate Director
Prevention and Public Health Practice

Public health tracks the health of the community daily and maintains information on the overall health status of its residents. A comprehensive community health report was completed in 2003. The report, *Community Health Report 2000-2001*, and its condensed companion piece, compare the health of Tarrant County to that of the nation and the state of Texas. Using health indicators developed by the state, the report tracks seven domains:

1) community profile which includes demographics, socioeconomic data, quality of life

and health resources;

2) maternal and child health, covering infant mortality, child mortality, prenatal care, adolescent pregnancy, low birth weight and immunizations;

3) chronic disease encompasses cardiovascular disease mortality, cancer mortality, diabetes mortality, chronic obstructive pulmonary disease mortality, stroke mortality, obesity morbidity and diabetes morbidity;

4) infectious diseases covering STDs, body-fluid-borne pathogens and tuberculosis;

5) environmental health covering enteric disease, hepatitis A, lead poisoning and air and water quality;

6) social and mental health data was collected on suicide, substance abuse, child abuse and neglect, crime arrests, divorce and mental illness;

7) injury data covering intentional and unintentional injuries.

The report's information concluded that the overall health of Tarrant County residents is comparable to that of the state of Texas and the nation. In addition to the county-wide report, a report titled, *Arlington Community Health Profile*, provided a selective overview of that community's health status. A report for Northeast Tarrant County and Wise County will be prepared in 2004.

The Health Intelligence Center, part of the department's Epidemiology and Health Information division, coordinates such reports and other information.

Workload Measures	2003
Arlington Community Report	1
Community Health Report	1
AIDS Perspectives Newsletter	3
Eye On Epi Newsletter	3
Public Health Posters	2
Infant Mortality Report	1

Environmental and Consumer Protection

Prior to the county's first case of **West Nile virus** in early July, the department had already begun working with 24 cities in Tarrant County, DFW International Airport and unincorporated areas of the county to collect and transport samples of live mosquitoes to the department for testing. The newly-equipped laboratory is able to provide test results within two to three days. By mid-July, sufficient numbers of WNV-positive mosquito pools were found to allow for identification of potential WNV hot spots. Six hundred and thirty-six mosquito pools were tested in 2003. Of those, 139 tested positive for WNV.

"Mosquito sample collections paired with our laboratory's enhanced testing capabilities made a considerable difference in the way local governments were able to focus their resources to combat West Nile virus."

—David Jefferson, Manager
Environmental Health Promotion

Another concern TCPH has taken an active role in is the increase of asthma in Texas as a result of environmental factors. The Texas Health and Human Services Commission, at a directive from the 77th Legislature, established an Asthma and Allergy Research Advisory Committee to:

- 1) develop a strategic plan to research asthma and allergy and medical conditions associated with asthma and allergy in this state;
- 2) assess the resources and talent of institutions in this state as possible sites for research opportunities;
- 3) analyze the impact of asthma and allergy on the state economy and on the health of the residents of this state;
- 4) make recommendations to the legislature and governor concerning research programs in asthma and allergy and funding alternatives for the programs; and 5) advise the Health and Human Services Commission in conducting the children's asthma disease



Sanitarian
Mark DiNubila
demonstrates mosquito trap for media.

management pilot program under Chapter 95, Health and Safety Code, as added by this Act.

A TCPH representative sits on this committee, which has developed and delivered a Texas Asthma Plan to every state legislator, informing them of the asthma issues facing the state and providing them with a strategic guide for addressing these issues.

"Much of what we do relies on partnerships. Our facilitation of county and region-wide approaches to addressing public health issues, like West Nile virus, has resulted in a more efficient, coordinated local public health system."

—Scott Hanlan, Associate Director
Operations, Environmental
Health and Disease Control

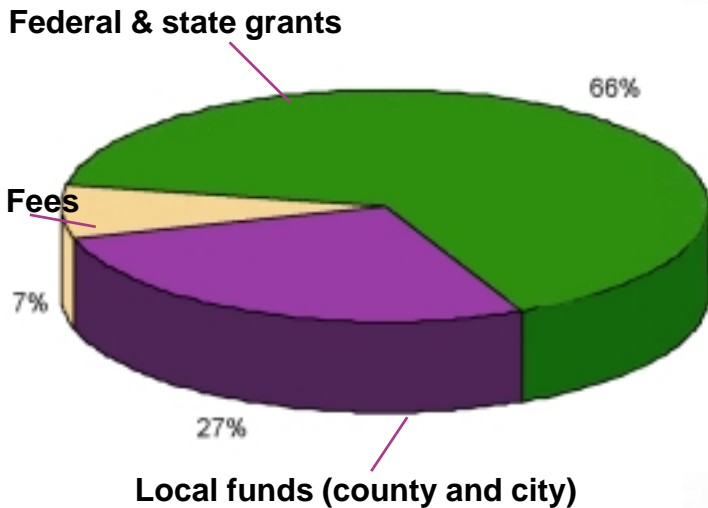
Workload Measures	2003
Food establishment inspections	4,058
Septic systems inspections	898
Swimming pool inspections	385
On-site sewage facilities permitted	902
Food handlers trained/certified	9,678
High blood lead level environmental inspections	27
Mosquito pools tested for West Nile virus	636
Milk & dairy lab tests performed	20,396
Water lab tests performed	22,470
Tests provided to 49-county* area in TX	115,845

*North Central Texas area

How we do business

Funding Sources

CATEGORIES	TOTAL FUNDING
Federal & state grants	\$ 17,952,034
Local (county and city)	\$ 7,509,863
Fees	\$ 2,010,532
TOTAL	\$ 27,472,429



\$
\$
WIC
monthly average
contribution to
local economy:
\$
\$
\$2,312,015

"Our ability to leverage state and federal funds increases what we can accomplish locally while reducing our reliance on local funds. Our fiscal accountability translates into a sense of responsibility to the community."

— Marsha Gillespie,
Fiscal Services Administrator

Public Health's 10 Essential Services

In 1999, Texas became the first state to codify into law 10 essential public health services to provide a working definition for local public health systems. This listing was originally created by a CDC steering committee, working with representatives of U.S. Public Health Service agencies and other major national public health organizations. Tarrant County Public Health adopted these 10 essential public health services as departmental goals and conducts many activities that address these services.

1. Monitor the health status of the community.
2. Investigate and diagnose health problems and hazards.
3. Inform and educate people regarding health issues.
4. Mobilize partnerships to solve community problems.
5. Support policies and plans to achieve health goals.
6. Enforce laws and regulations to protect health and safety.
7. Link people to needed personal health services.
8. Ensure a skilled, competent public health workforce.
9. Evaluate effectiveness, accessibility and quality of health services.
10. Research and apply innovative solutions.



Tarrant County Public Health
1101 S. Main Street
Fort Worth, Texas 76104
<http://health.tarrantcounty.com>
817-321-4700