



Tarrant County Public Health



2002 Annual Report

Safeguarding our community's health

Director's Note

"The future behaves differently than it used to. It comes at us faster now, and affects us more powerfully than before."

— Price Pritchett, Fast Growth



Tarrant County Public Health (TCPH) experienced a future fast upon us during 2002. No sooner had we seen the worst of the anthrax event than we were translating our newly identified gaps in resources and emergency preparedness training into a successful \$1.6 million bioterrorism grant. Before the FedEx™ truck was out of the parking lot carrying our grant proposal to the Texas Department of Health (TDH), we were planning for an anticipated West Nile virus (WNV) outbreak. We were ready for the amazingly rapid spread of the disease during the summer with trained and licensed staff, equipment and Geographic Information Systems (GIS) tracking capability. Before the mosquito season ended, the smallpox vaccination season started. Texas vaccinated the highest number of individuals in the nation. We worked with all 17 hospitals in Tarrant County regarding the core response team effort. Physician, nurse and first responder trainings were well attended.

As part of our emergency preparedness/bioterrorism response, TCPH established three geographically based health response teams throughout Tarrant County; activated a secure health alert network; upgraded plans for our new laboratory to a Biosafety Level 3 lab; developed a risk communication plan to convey timely and accurate information to the media and the public; and established a public health training network for the department and its partners. We strengthened relationships with Denton, Collin and Dallas counties, the North Central Texas Council of Governments, TDH regional office, the FBI, the DFW International Airport, Fort Worth Water Department, the North Texas Regional Water District, the Texas Department of Public Safety, the Mayor's Council, and the University of North Texas Health Sciences Center.

In addition to responding to new or returning public health threats, TCPH stayed on track to accomplish the first year of its three-year strategic plan. Numerous products were produced through our Health Intelligence Center: the *Eye on Epi* newsletter, data tables on syphilis and GIS maps for WNV and infant mortality. TCPH was a vital partner in the community-wide effort to address the disparity regarding infant mortality. We provided data, maps, speakers and staff involvement in planning and educating the community. More than 300 TCPH employees participated in cultural competency training. TCPH sponsored the second statewide public health policy forum with participation from national, state and local health officials. The first annual corporate worksite wellness recognition program, Champions in Health, recognized business leaders in employee wellness programs. Two of our best practices (Teen Videofest and Texas SmartScape) continued to win national and state recognition through awards and replication of these programs in other countries and states.

As the cover conveys, we are transitioning into our new facility. This has taken much time, thoughtfulness and commitment on the part of many. **We are particularly appreciative of our public's support by voting for the bond monies to build our state-of-the-art facility, and to our County Judge and Commissioners and County Administrator for their vision.** 2003 shows every sign of being an even faster year. The staff and I offer our renewed pledge to serve you as we strive to safeguard our community's health.

This annual report highlights some of our **priorities** and **essential services** and conveys our commitment to a healthy Tarrant County.

The Best in Health,

A handwritten signature in black ink that reads "Lou K. Brewer". The signature is written in a cursive, flowing style.

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



Immunization Outreach team responds to a disaster.

PRIORITY

Emergency Preparedness

Enhanced Capacity

In the aftermath of Sept. 11, additional staff and resources were obtained through a federal grant to help TCPH better prepare for possible bioterrorism threats, public health threats and emergencies. The new staff has increased the department's preparedness planning; training efforts; day-to-day disease surveillance and notification; communication efforts; and increased the department's laboratory capabilities to perform on-site testing of mosquitoes to confirm whether the mosquitoes carry West Nile virus. Previously all tests were sent to TDH in Austin, with a waiting period of one to two weeks. Now with enhanced equipment and specially trained staff, tests are performed and results confirmed within two to three days. Additionally, the lab will enhance the County's and the region's ability to rapidly identify potentially dangerous biological agents. A 33-county region will refer suspicious items for testing to the TCPH lab. The new staff and resources were among the steps taken to continually improve public health's ability to respond to public health threats and emergencies.

Rapid Response

Within hours following the damage caused by the tornadoes of 2002, TCPH's immunization outreach teams were able to reach areas hardest hit to offer tetanus shots and other assistance to relief workers. The department maintains several such teams that are available on short notice to travel to, set up and administer immunizations in the event of a disease outbreak.

Health Alert Network (HAN)

The HAN, a secure computer network, electronically ties together community and county hospitals, local health departments and TDH, with links to the Centers for Disease Control and Prevention (CDC). The HAN has enhanced disease reporting and emergency communications among hospitals, municipalities and various local health units. Because it can quickly and effectively distribute important data and information throughout a secure network, it serves as an early warning system for possible bioterrorism events, while supporting public health efforts locally, statewide and nationally.

Geographic Information Systems

Geographic Information Systems (GIS) is a sophisticated computer technology that can "map" data by geographical locale. Gathering, compiling and preparing data in map form allows TCPH to identify disease trends on a general scale, as well as in specific Tarrant County neighborhoods. This capability not only improves response time to disease threats, but also augments day-to-day public health efforts.



Outreach team sets up a mini-clinic.

ESSENTIAL SERVICE

Mobilize partnerships to solve community problems

Covering the County

Three health response teams, strategically placed within the County, are helping to ensure day-to-day coverage and response to public health threats. Through partnerships with participating cities, each team is provided office space. The western team, which includes County Commissioner Precincts 1 and 4, is staffed by a public health nurse, a health threats investigator and an administrative assistant. The northeastern and southeastern teams, corresponding with County Commissioner Precincts 3 and 2, respectively, are each staffed by a public health nurse and an epidemiology investigator. The teams help better coordinate Tarrant County's emergency preparedness/bioterrorism response and build stronger community alliances.



Health response team members provide disaster first aid training to school nurses.



Creating Corporate Champions

Partnerships, alliances, cooperative efforts and a common goal create a synergy that bridges gaps and creates needed programs and resources. Champions in Health promotes workplace wellness. It was started by TCPH and is now co-

directed by the Health Industry Council of the DFW Region. Champions in Health centers around encouraging and rewarding the development of workplace wellness activities; raising the awareness of the need for and benefits of worksite wellness programs and enhancing access to resources to guide the development of effective worksite wellness programs. The program's first award ceremony, held in 2002, recognized these north Texas employers for their efforts to improve and maintain the health of their workforce: Bell Helicopter Textron Inc.; the city of Fort Worth; The Fort Worth Transportation Authority (The T); Medical City Dallas Hospital and the University of North Texas Health Science Center.



Preventive Medicine Clinic doctor examines patient's hands for signs of syphilis.

ESSENTIAL SERVICE

Investigate and diagnose health problems and hazards

Syphilis increase confronted

After years of a steady decline, Tarrant County, like a number of other urban areas across the country, experienced a significant increase in syphilis cases that were in the early stages (early syphilis) in 2002. People with early syphilis pose a higher risk of transmitting the disease. Public health made the outbreak a priority. Staff first identified the associated

risk factors. Because rates also increased in Dallas County, the two counties partnered to form a syphilis response team tasked with developing and implementing an aggressive intervention plan. The plan targets at-risk populations in the affected areas through surveillance, education, screening, testing and case management. Additionally, medical community partners are involved in the response to help better target the team's efforts. Through this collaborative response, the rate of increase has stabilized. The plan will remain in place until the number of early syphilis cases is significantly reduced.

Tuberculosis screening expands

Homeless shelters are havens for those who have fallen on hard times and need a place to stay. Since the early 1990s, TCPH has performed voluntary tuberculosis (TB) screenings at local homeless shelters. The screenings yielded a low number of active cases. The low test numbers were in direct contrast to the increasing number of confirmed cases in people who listed a homeless shelter as a place of residence. Tuberculosis was being actively transmitted within the homeless shelter setting.

To address the problem, TCPH partnered with the largest homeless shelter in the County to perform mandatory chest X-rays and TB skin testing as a prerequisite to shelter admission. Intensive TB screening was provided on-site and a photo identification card was issued following the screening. Residents of the shelter must now present the ID card to gain entry to the shelter and access to its services. During 2002, 879 people were screened, which helped identify active cases as well as people exposed to TB who needed preventive treatment.



The Mantoux Tuberculin Skin Test is the preferred way to determine the presence of TB bacterium.

ESSENTIAL SERVICE

Monitor the health status of the community



Federal, state and local health officials meet with area nurses to discuss smallpox vaccination plans.

Preparing for Smallpox

In 1949 the last smallpox case occurred in the United States and in 1972 the last vaccinations were given in our nation. Smallpox is a serious, contagious and sometimes fatal infectious disease that has no specific treatment. Vaccination is the only preventive measure. In our history, outbreaks have occurred from time to time, but the disease was eradicated after a successful worldwide vaccination program.

TCPH began preparing for smallpox vaccinations in October 2002. Response team members attended training and trained others as well. As part of Phase I, members of public health and hospital response teams were vaccinated so they can respond to an outbreak without risk of contracting smallpox. Response team members are screened for anything that might rule them out as a vaccine candidate. Taking the vaccine is done voluntarily. Preparation against smallpox and other health threats or emergencies is TCPH's best defense; it strengthens the County's ability to safeguard our community's health.

Final national decisions about Phase II (vaccination of emergency medical services, fire department, law enforcement and additional medical care personnel) and Phase III (vaccination of the general public) will be implemented in accordance with guidelines from the CDC.



Department sanitarian gathers mosquitoes for testing.

West Nile Virus Entered the County

When a dead blue jay in northeast Tarrant County tested positive for West Nile virus (WNV), TCPH was already prepared. The department was on the lookout for any information related to horses testing positive, and mosquito surveillance was in place to look for and track any positive mosquitoes. Residents were asked to help keep the mosquito population down by eliminating standing water on their property and to take precautions when outdoors, especially at dusk or dawn, by wearing protective clothing and using mosquito repellent. Owners of horses and other equines were urged to get them vaccinated for the disease.

The first case of WNV in Texas was confirmed on June 18 in two dead blue jays in northwestern Houston. In early July, the first case in North Texas was identified in a dead blue jay in north Dallas County and the first case in Tarrant County was confirmed on July 25. By July 26, 2002, 104 birds, 36 mosquito pools, 20 horses and eight humans had been diagnosed in Texas with WNV.

TCPH maintains a constant surveillance on a variety of infectious diseases, including WNV, and environmental issues to assure early detection and rapid response.



Teen Videofest producers show off their prize.

ESSENTIAL SERVICE

Inform and educate people regarding health issues

Teen Videofest is a key effort by the department to reach out to youth, their parents and community partners concerned with teen health issues. This annual contest challenges County youth to produce a video on an important teen health topic. Teen Videofest continues to grow. In 2002, 21 groups, including area middle and high schools, private schools, youth service organizations, home schools and faith-based organizations, resulted in a record 85 entries. Winning videos were featured in both the Fort Worth Film Festival and in the new "A Minor Video Festival," produced by neighboring Weatherford College.

The new **Public Health Education Network (PHEN)** professional development and training project was launched in 2002 to help ensure our workforce – and eventually the communities we serve and the partners we work with – are trained, educated and prepared to respond to public health emergencies. The program covers bioterrorism and emergency response training as well as career development and skills enhancement training. PHEN distributes public health training, distance learning courses, continuing education credits, professional development certifications, computer based training courses, workforce evaluations and bioterrorism preparedness education for the department.

The **TEAM Health Project** (Tarrant Empowerment Association for Minority Health) involves bringing together three of the County's minority groups to address general health disparities within their communities. TEAM Health members have been involved in three major health events providing information and awareness regarding health inequities affecting their community. An offshoot of this effort was the formation of three resource groups to address specific health issues and to coordinate joint activities within the African-American, Asian and Hispanic communities. These groups continue to meet to put on joint health fairs and to coordinate activities with their various organizations.

PRIORITY

Disparity

Infant Mortality The 2001 infant mortality rate for Tarrant County by ethnicity is Blacks, 12.5; Whites, 6.5; Hispanics, 7.1; and all others, 3.7. The rate is calculated based on the number of cases in each ethnic group per 1,000 live births. In the fall of 2002, Catholic Charities called a summit to discuss infant mortality and the disparities that exist. TCPH provided data, speakers and committee members to work on a community-wide action plan.



ESSENTIAL SERVICE

Research and apply innovative solutions



Health Data at Your Fingertips

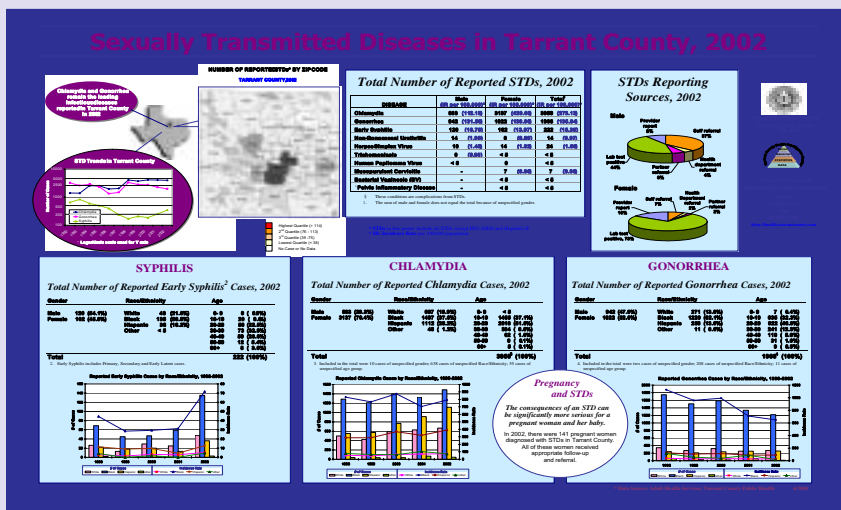
The Health Intelligence Center (HIC) is part of the Epidemiology and Health Information division of the department. The HIC coordinates the consistent analysis and dissemination of health-related data generated within the health department and from other sources. Examples include data on reportable diseases and conditions, mortality data (including infant mortality data), HIV/AIDS, teen pregnancy, and maternal and child health. The HIC is staffed by a biostatistician, a research epidemiologist and other epidemiologists. The HIC coordinates the storage, analysis and dissemination of health-related data in a format that is usable for monitoring community health status, planning health services and programs and conducting relevant research in the community.

Reports, indicators, statistics and data can all be requested through the HIC. The data is useful in tracking, verifying and quantifying risk factors and health and demographic trends, among other things. Most available information can be requested at the County or Subcounty level from 1998 through 2001.

- Mortality data
- Reportable disease data
- Behavioral risk factor-related data
- Intentional and unintentional injury data
- Maternal and child health data
- Work-related deaths
- Demographic profiles
- Teen pregnancy information

There's more The department's Health Monitoring and Assessment Project (MAP) will soon produce a comprehensive community health report card. The report card will profile the

community's health status in the following domains: maternal and child health, infectious diseases, chronic diseases, environmental health and social and mental health. The County's health status indicators are based on statewide strategic health status indicators and also will be compared with Healthy People 2010 benchmarks.



Tarrant County-specific health information compiled by our Health Intelligence Center is available online (<http://health.tarrantcounty.com>) or in print.

ESSENTIAL SERVICE

Link people to needed personal health services



Chronic Disease and Injury Prevention employee offers diabetes information and referral to health fair visitor.

Chronic Disease/Injury Prevention (CDIP) continually works to address health disparities within the County. Examples of community agencies and organizations CDIP now regularly links clients to and the types of services they provide include:

- American Heart Association (AHA) refers residents who need more information on heart healthy programs and support groups
- American Cancer Society provides breast and prostate cancer training where we become ambassadors of information while promoting the importance of early detection
- Do It For Me Mom, where we link underserved African-American women with funding for breast exams and case management
- Tarrant County Diabetes Collaboration, where we utilize their expertise and provide residents with much needed screenings, information and referrals
- John Peter Smith Hospital provides instructor training for CDIP staff, which allows County employees and community residents to receive CPR certification through public health
- Other linkages include low-cost contracts with agencies for breast cancer treatment and case management: Harris Methodist Hospital, mobile mammography; Cancer Care Services, breast and cervical cancer screening; Tarrant Pathology Associates, professional biopsy pathology services; Ruth's Place – Granbury, breast and cervical cancer screening; Planned Parenthood, family planning; University of Texas - Southwest, case management; YWCA, general health services; San Miguel Church, counseling; Buen Pastor Church, counseling; Women's Diagnostic of Texas, screening mammograms and breast evaluations; Tarrant County Diabetes Collaboration, diabetes education



Health educator provides information to help smokers. Display shows tobacco's effects on the body.

Public Health's Essential Services

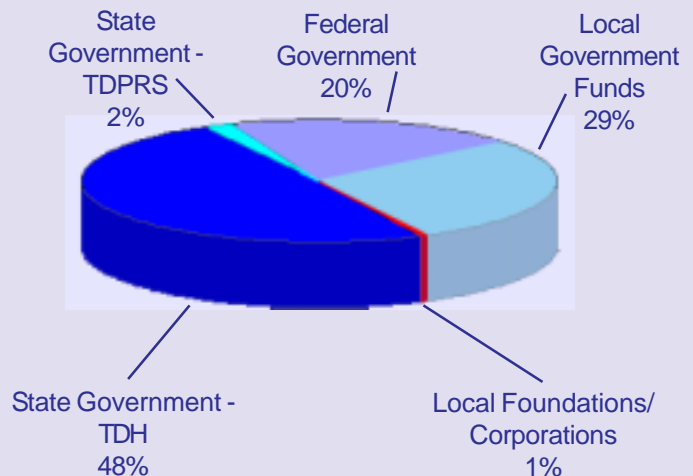
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1. Monitor the health status of the community.
2. Investigate and diagnose health problems and hazards.
3. Inform and educate people regarding health issues.
4. Mobilize partnerships to solve community problems.
5. Support policies and plans to achieve 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.

2002 Budget

FY 2002 FUNDS BY SOURCE

<u>Fund Sources</u>	<u>Total</u>	<u>%</u>
Local Government Funds	\$ 7,383,767	29%
Local Foundations/Corp.	\$ 142,127	1%
State Government-TDH *	\$12,643,578	48%
State Government-TDPRS**	\$ 500,000	2%
Federal Government	\$ 5,149,600	20%
	\$25,819,072	100%



* TDH-Texas Department of Health

** TDPRS-Texas Department of Protective and Regulatory Services

Community Health Information

Tarrant County Selected Disease Morbidity Summary					
DISEASE	1998	1999	2000	2001	2002
Acquired Immunodeficiency Syndrome (AIDS)	224	132	167	140	153
HIV Seropositive (anonymously reported until 1999) ¹	225	114	309	199	258
E. coli O157:H7 Infection	6	4	13	16	6
Hepatitis ² : Type A	111	129	143	203	110
Type B	92	32	22	247	332
Type C	25	20	32	369	2,526
Meningitis: Aseptic	362	176	267	522	304
Meningococcal	17	14	5	20	14
other bacterial	29	29	12	26	10
Pertussis ³	13	24	15	21	83
Salmonellosis ⁴	131	151	165	185	341
Shigellosis	123	198	256	84	184
STD: Chlamydia	4,076	3,711	4,097	3,970	3,740
Gonorrhea	3,324	2,779	2,730	2,210	1,889
Syphilis ⁵ : Congenital (<1 yr.)	2	3	3	6	4
Primary	8	10	8	18	37
Secondary	13	11	14	20	63
other	148	184	161	211	108
Tuberculosis	113	109	102	109	108

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 Latest pertussis numbers reflect a nationwide increase in pertussis during 2002.
- ⁴ Salmonellosis figures tend to fluctuate as a result of reporting and laboratory testing.
- ⁵ Higher numbers of primary and secondary syphilis reflect an increase of cases reported in the Dallas/Fort Worth Metroplex.

Additional workload measures

Breast and Cervical Cancer Control Program: Seven staff members became certified CPR instructors. Five staff were trained as diabetes educators.

Family Violence Prevention Program: The program conducted bullying prevention education and sponsored 10 billboards with anti-bullying messages throughout the County.

Immunization registry: This registry came online last year, enabling our partners access to consented immunization histories of County residents. Its use has helped prevent duplication of immunizations, resulting in time and cost savings, more convenience and less discomfort for our clients.

“Nutrition Education at the Library”: This WIC-initiated program placed nutrition-related storybooks at 12 area libraries, enabling WIC families to learn more about nutrition.

Program and Service Measures 2002	
Breast and Cervical Cancer Control Program	
medically underserved women screened	850
Environmental Health	
total food establishment inspections	4,483
total pool inspections	500
total OSSF (on-site sewage facilities) permitted	715
total food handlers trained/certified	8,517
total West Nile virus cases in Tarrant County	5
HIV/STD Program (Sexually Transmitted Diseases)	
HIV pre- and post-test counseling sessions	11,588
clients provided HIV/STD prevention education	6,300
clients tested for HIV	7,041
HIV/STD cases investigated, partners notified	4,361
STD clinic visits	7,916
high-risk clients tested for Hepatitis C	1,490
client caseload for Preventive Medicine Clinic	621
Immunizations	
total clients immunized	82,013
International Travel Clinic *	
total clinic visits	4,939
North Texas Regional Laboratory	
tests provided to a 49-county area in TX**	125,305
Tuberculosis Elimination	
total TB cases in Tarrant County	108
suspected cases treated preventively	219
HIV co-infections (cases only)	7
drug-resistant cases	9
percent of foreign-born cases (%)	44
directly observed therapy doses administered	11,669
DOPT doses administered ***	8,458
total contacts investigated	2,430
total on therapy	327
total positive reactors	1,229
Women, Infants, Children (WIC) Supplemental Nutrition Program	
flu shots provided ****	9,500
monthly average caseload	43,750
monthly average contribution to local economy	\$23,988,739

* In 2003 International Travel Clinic changed its name to Travel Health Services

** North central Texas area

*** Directly Observed Preventive Therapy (DOPT)

**** 2002 was the first year flu shots were recommended for children 6 years and older.

About our new facility

As this publication goes to press, finishing touches are being placed on the new Tarrant County Public Health Facility. This two-story 80,000-square foot building includes:

- a state-of-the-art multiple use education center,
- a Biosafety Level 3 Laboratory,
- a health intelligence center,
- a health education resource center,
- offices dedicated to monitoring the local environment and promoting health education,
- Breast and Cervical Cancer Control Program, Adult Health Services, Tuberculosis Elimination Program and Preventive Medicine Clinics,
- a Travel Health Services office to provide residents traveling abroad with necessary health information and vaccines,
- childhood immunization and Women, Infants, Children (WIC) Program offices,
- an employee fitness center,
- the department's administrative offices,
- and exterior "SmartScape" landscaping to enhance the local habitat while minimizing pollution runoff.

We are proud of our new facility and look forward to being of even greater service to the community.

Our Vision:

Healthy people in healthy communities.

Our Mission:

Tarrant County Public Health applies the highest standards of personal and organizational excellence to promote community health, prevent disease and injury, and assure a healthy and safe environment.



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