

Tarrant County Public Health

2008
Annual
Report



DIRECTOR'S Message

It has been another busy year at Tarrant County Public Health (TCPH), our sixth year in our facility at 1101 S. Main Street in Fort Worth.



With the support of our Commissioners and our community advisory committee, we received funding for two Nurse-Family Partnership teams to improve the health of first-time mothers and their children. The Nurse-Family Partnership also increases a child's readiness for school and their successful transition to young adulthood. Our epidemiology and environmental health teams spent the summer investigating three disease outbreaks, including *Salmonella* Saintpaul, pertussis and cryptosporidiosis. The hint of fall brought us evacuees from Hurricanes Gustav and Ike.

We also wished our retiring Medical Director/Health Authority, Dr. Elvin Adams, a wonderful transition to full-time gentleman farmer and volunteer clinic advisor. And we welcomed our new Medical Director/Health Authority, Dr. Sandra K. Parker.

As you read through this annual report, you will see that many other issues kept us busy as well.

Best in health,

A handwritten signature in blue ink that reads "Lou Brewer". The signature is fluid and cursive.

**Lou Brewer,
Director**



SANDRA K. PARKER, Medical Director

Tarrant County Public Health was pleased to announce the appointment of Sandra K. Parker, M.D. as the new Medical Director/Health Authority. Dr. Parker replaced Dr. Elvin Adams, who retired in July. She was most recently a civilian family practice medical officer with the United States Navy at the Naval Air Station Joint Reserve Base in Fort Worth.

Dr. Parker is a summa cum laude graduate of Angelo State University in San Angelo, Texas, and the University of Texas Health Science Center in San Antonio. She received numerous customer service awards during her years working for the Navy. She is a licensed physician in both Louisiana and Texas and a member of the American Academy of Family Physicians and the Texas Academy of Family Physicians.



TCPH also welcomed Dr. Catherine Colquitt as the physician for the Preventive Medicine Clinic. A native of Fort Worth, Dr. Colquitt is a graduate of Texas Christian University and the University of Texas Health Science Center at Dallas. She served her medical internship, residency and chief residency with internal medicine at the University of Texas Health Science Center (UTHSC) at San Antonio. She also did an infectious diseases fellowship with UTHSC at Dallas, worked at John Peter Smith Hospital's AIDS clinic and with TCPH's Preventive Medicine Clinic. Dr. Colquitt is board certified in internal medicine.

WATAUGA PUBLIC HEALTH Center opens

In July, Tarrant County Public Health opened its newest public health center at 6601 Watauga Road in Watauga.

The new public health center offers immunizations, chronic disease prevention services, travel health services and Women, Infants and Children (WIC) services.



SALMONELLA Saintpaul

In April 2008, a rare serotype of *Salmonella* known as Saintpaul began infecting individuals at a much higher rate than previously seen. Salmonellosis, the infection caused by the Gram-negative bacteria *Salmonella*, causes abdominal cramps, diarrhea and fever that may persist for several days.

In Tarrant County, 45 cases of *Salmonella* Saintpaul were confirmed, accounting for the second-highest number of cases in the state; cases ranged in age from 9 months to 88 years, with a median age of 34. Peak illness onset dates in Tarrant County occurred during the last week of May, with the latest reported illness occurring on June 22.

During the *Salmonella* Saintpaul outbreak, Tarrant County Public Health's Epidemiology and Health Information division assisted state and national public health agencies in containing the spread of *Salmonella* by conducting enhanced investigations of cases as well as disseminating public information regarding recalled food products and providing general education to the public.

The outbreak subsided in the latter part of the summer, after a total of 1,442 individuals were infected. The individuals were from 43 states, with 39 percent of the cases originating from Texas. A total of 286 people were hospitalized, and *Salmonella* Saintpaul may have contributed to two deaths in Texas.

Studies conducted by the Centers for Disease Control and Prevention, in conjunction with state and local health departments, indicated the consumption of raw tomatoes and jalapeño and serrano peppers as possible sources in the outbreak. Food and Drug Administration laboratories isolated the *Salmonella* Saintpaul outbreak strain from two jalapeño peppers and one serrano pepper originating from Mexico as well as from an agricultural water sample obtained from a farm in Mexico that supplied peppers to the United States.



Salmonella sp.

Cultivated growth of Gram-negative Salmonella sp. bacteria.

Photo and description from the Public Health Image Library, Centers for Disease Control and Prevention.

COLLABORATION WITH

First Responders

More than 100 local police cadets have gained a greater appreciation for how TCPH can and will assist them in the event of certain local emergencies. TCPH's new program, *Public Health 101*, focuses on the roles and responsibilities of public health in emergencies.

TCPH's Advanced Practice Center (APC) helped develop *Public Health 101* because it realized that law enforcement typically does not understand public health's capabilities and practices, nor does it routinely engage public health in emergency response. *Public Health 101* introduces first responders to what public health can do in an emergency response and it facilitates greater coordination with public health.

The training targets new recruits because they're already receiving training at the Public Safety Institute, a facility used to train law enforcement officers for many jurisdictions across North Texas. The training emphasizes basic steps first responders can take to work with TCPH, including identifying the kinds of emergencies where TCPH should be involved as well as who to contact at TCPH and how to reach them. The training ideally occurs after participants have first obtained instruction on the principles of the national Incident Command System (ICS) as well as the proper procedures for responding to events involving hazardous materials.

Specific topics covered in the training include the goals of public health, public health preparedness practices, principles of epidemiology, the Strategic National Stockpile, isolation and quarantine situations, the threat of avian influenza, and "white powder" incidents. For each topic, attention is given to the information TCPH can share with first responders, what information TCPH needs from first responders, and the tools and methods available for cross-agency communication and collaboration.

In tests taken before and after the training, students have shown significant improvement in their knowledge of the issues covered. Accordingly, TCPH intends to further develop and refine *Public Health 101* in continued collaboration with local law enforcement and other agencies that respond to emergencies.

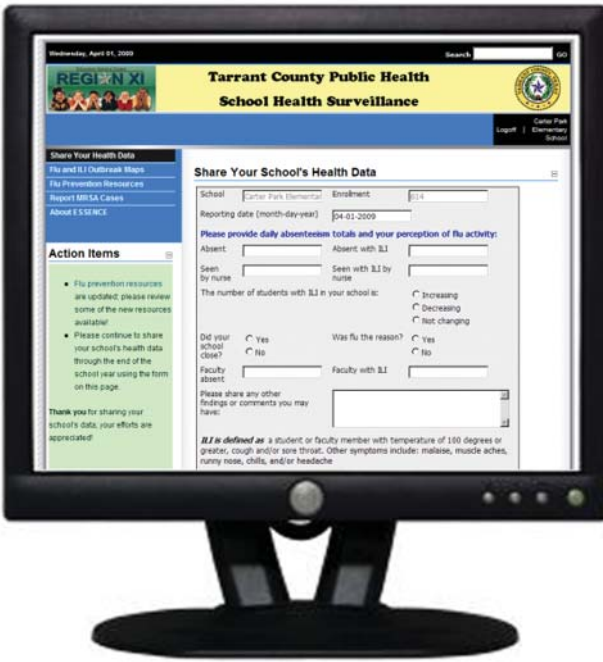
SCHOOL HEALTH SURVEILLANCE System expands

The School Health Surveillance System (SHSS), launched in 2007 by the APC, is a successful, growing program that is strengthening relationships between local schools and TCPH.

As a Web-based communications portal, the SHSS provides a fast, convenient way for schools to share info with TCPH about absenteeism, influenza and other health data, including cases involving a growing health problem common in schools – Methicillin-resistant Staphylococcus Aureus (MRSA). School nurses also use the system to access a wealth of information, including

analysis and news from TCPH, flu prevention resources, maps showing flu activity across the county and region, and suggested actions school nurses, students or parents can take to mitigate health threats.

SHSS data, obtained from more than 100 Tarrant County schools, has yielded valuable insight on changing health patterns in local schools. The data helps TCPH more effectively gather lab specimens and decide how best to apply its health resources.



The system has attracted attention in Texas and beyond as an innovative way to partner with school nurses. TCPH and its Advanced Practice Center are now managing nearly \$400,000 in new funding from the Texas Department of State Health Services (DSHS) to:

- add Tarrant County childcare facilities and school-based clinics as system participants;
- enhance the capacity of the North Texas Regional Laboratory, housed at TCPH, to test specimens for flu and other viruses, including rhinovirus, rotavirus and enterovirus; and
- expand the program with concurrent pilot projects in neighboring Dallas and Denton counties.

In October 2009, DSHS will evaluate the program's results and consider continued support.

DETECTING Pathogens

The North Texas Regional Laboratory (NTRL) is important to public health's ability to safeguard the community. It continues to enhance the capacity to detect human enteric pathogens in human clinical specimens, water and food samples. The NTRL utilizes a variety of methods to detect enteric pathogens, including standard bacteriological culture, biochemical panels for identification, and rapid real-time molecular detection. During the past year, the NTRL participated in the investigation of several communicable disease outbreaks by providing laboratory testing during a norovirus outbreak at a correctional facility, a *Salmonella* Saintpaul outbreak linked to raw jalapeño and serrano peppers, and a cryptosporidiosis outbreak linked to a local recreational water facility.

In 2008, the NTRL completed the multi-year process for accreditation by the National Environmental Laboratory Accreditation Conference (NELAC). The NTRL is accredited to perform total coliform testing by the Colilert 18 method and the multiple tube fermentation method, and *Escherichia coli* enumeration for public drinking water systems.

The NTRL provides the EPA-mandated monthly total coliform testing for approximately 450 public drinking water systems in the North Texas region.



“BE A LOCAL HERO” Campaign

The Tarrant County Medical Reserve Corps (MRC), begun in 2004, has evolved tremendously this past year. The mission of the MRC is to establish a network of local medical and non-medical volunteers who are willing to assist before, during and after a public health emergency.

Using evaluations and recommendations from a social marketing firm and regional focus groups in Collin, Dallas, Denton and Tarrant counties, TCPH staff began an aggressive recruitment and retention campaign.

In mid-2008, an Advisory Committee was formed to assist the MRC in performing its duties and responsibilities, formulating strategies and recommendations to increase membership, as well as outlining qualifications and standards for MRC members. The committee also will be tasked with devising a vision for MRC service to the community in the future. The seven-member, multi-disciplinary committee is composed of MRC volunteers.

A Web site designed for the four-county area, www.bealocalhero.org, was launched in 2008 and receives approximately 2,500 hits monthly. The site allows volunteers to register, view the orientation and training calendar and sign up for job assignments. For example, during Hurricane Ike shelter operations,

several MRC nursing volunteers logged on to accept job assignments at local shelters for coastal evacuees.

An aggressive recruitment campaign, using various media outlets such as cable television, radio, billboards and Internet advertising, resulted in an increase of 20 to 30 volunteers per month, increasing our total response capacity to 1,430. The radio advertising was a joint effort among the four-county area with each county selecting a station comparable to their population’s demographics and running simultaneous ads with an 800-telephone number that routed volunteers to the respective MRC coordinators in each county. All four counties reported an increase in volunteers in 2008.

To round out 2008, volunteers across Tarrant County were welcomed for their role in disaster response by Tarrant County Judge B. Glen Whitley. The welcome opened up a summit hosted by TCPH and other local volunteer organizations. Speakers provided information and training. Participants received lunch and door prizes throughout the day and gave the program high marks in their evaluations.



PUBLIC HEALTH'S Hurricane response

Following Hurricanes Gustav and Ike, shelters in North Texas were opened to provide needed services to hurricane evacuees from Louisiana and South Texas. Tarrant County Public Health responded by activating its Department Operations Center, from which staff could manage the TCPH response and interact with shelter operators and emergency management staff throughout the county. Other TCPH responses included:

- daily briefings to key TCPH and response staff;
- performing environmental assessments of county shelters;
- performing daily epidemiological surveillance at county shelters;
- providing public health liaisons to emergency operation centers in Fort Worth, Arlington and Tarrant County;
- deploying Medical Reserve Corps volunteers to shelters to aid with triage and referral;
- providing prescriptions for evacuees and coordinating with jurisdictions for help with those prescriptions, and assisting shelters with referrals for chronic disease services such as dialysis.

Many TCPH employees provided services to support the evacuees. TCPH is fortunate to have experienced staff ready to meet the challenge of evolving situations such as this.



Health Threats Investigator Wayne Johnson meets briefly with the manager of a Red Cross emergency shelter set up for hurricane evacuees.

OBESITY Prevention

In an effort to increase awareness and prevention of childhood obesity, Tarrant County Public Health's Chronic Disease Prevention (CDP) collaborated with United Way of Metropolitan Tarrant County, Cook Children's Insurance Plan, Medical Center of Arlington and the Junior League to launch the Amos Elementary FitFuture program. TCPH helped develop a questionnaire and physical activity and vital statistics data collection tools. These tools are being used to determine each child's perception of his/her nutrition and physical activity habits as well as the status of their physical activity and Body Mass Index (BMI).

In the last two years, more than 200 manpower hours have been donated to the Amos Elementary FitFuture program. The hours dedicated included student assessments, data analysis, and health-based curriculum for the students. Another bonus of the partnership involved funding for the building of the Amos Good Health Gardens at the school, which included vegetables and flowers. The funds included grant funding that TCPH received for the prevention of obesity by increasing fruit and vegetable intake.

The Amos Elementary FitFuture efforts led to the development of a health awareness program for Amos Elementary parents and community members. The program provides free or reduced-cost screenings with basic chronic disease information in English and Spanish. So far, more than 100 screenings have been conducted, reaching more than 50 Amos Elementary community members and parents.

The Amos Elementary FitFuture program is being expanded. TCPH is collaborating with Arlington Public Libraries to create and launch a literacy program; the program will focus on health literacy for both children and adults. The children's component will use the *Curious George Goes to the Hospital* book as a foundation while the adult program will be based on the curriculum for "How to Talk to Your Doctor, and Get Your Doctor to Talk to You" presentation. The pilot program will launch during the spring semester and later expand to other schools in Tarrant County.

Complete cover photo: Amos Elementary School students (left to right), Cole Temple, Brad Trost, Cassandra Horn and Ashley Johnson decorate one of four flower and vegetable garden planters. Photo provided by Sophy Sam, FitFuture director, Amos Elementary School, Arlington, Texas.



GRANT ENCOURAGES CONSUMPTION OF Fruits and vegetables

Red, ripe tomatoes, juicy berries and plump watermelons are standard fare at farmers markets. These are not only delicious foods but powerful tools in the fight against overweight and obesity. The Tarrant County Public Health Behavioral Risk Factor Surveillance Survey indicated 38 percent of Tarrant County adults were overweight and 26 percent were obese.

The survey indicated that 75 percent of residents ate less than five servings of fruit and vegetables daily. To address these issues, the Texas Department of State Health Services funded Tarrant County Public Health to conduct a fruit and vegetable promotion.

The first steps were establishing a new farmers market in Pantego and the school garden at Amos Elementary.

In June, Tarrant County Public Health joined with the North Central Texas Farmers Market Association to promote the opening of a farmers market at the Pantego Bicentennial Park. The market sells fresh, locally grown fruit and vegetables. Through the support of such markets, nutritional interventions go beyond increasing individual awareness to increasing community-wide access to nutritious foods.

2009 efforts will include a county-wide campaign, promotion of the Resource Connection community gardens and more locations to purchase locally grown produce.



CRYPTO Outbreak


In June, a cluster of cases prompted an investigation when the laboratory results for eight people confirmed *Cryptosporidium* as the parasite that sickened them. Initial investigations eliminated public drinking water sources as a cause of the illnesses. Other potential sources such as food also were investigated and ruled out.

The subsequent investigation, coupled with local and federal laboratory testing, determined that the outbreak's common link for the original eight people and others who became ill was a local recreational water facility that had been contaminated. TCPH's Environmental Health division spent many days working to address the problem.

Tarrant County Public Health distributed information about precautions and prevention measures to members of the local health community, owners and operators of swimming pools, day-care facilities and recreational water-related businesses.

About four months after the initial notification, no more cases were reported. Five hundred-forty people from across the Metroplex were sickened. The investigations were conducted by Tarrant County Public Health, the Centers for Disease Control and Prevention (CDC) and Texas Department of State Health Services staff. Work performed by the TCPH staff was repeatedly complimented by the CDC representatives who were present and working with the department to stem the outbreak.

Cryptosporidium, found in the feces of infected people and animals, can contaminate soil, food, water, or surfaces. An individual becomes infected with the *Cryptosporidium* parasite by ingesting contaminated food or water or having contact with other contaminated objects. *Cryptosporidium* can be spread through swimming pools and lakes when swimmers swallow contaminated water. *Cryptosporidium* also can be found in water spray fountains, water parks and other recreational water settings such as rivers and ponds.

A photograph of Gary Rothbarth, an Environmental Health Sanitarian, sitting in a blue kayak on a body of water. He is wearing a light blue polo shirt, white shorts, a white baseball cap, and sunglasses. He is holding up a clear plastic container with a grid of colored squares, likely a water testing kit. The background shows a lush green shoreline with trees and a sandy beach.

*Environmental Health Sanitarian
Gary Rothbarth was part of the TCPH
staff who took part in managing the
crypto outbreak.*