



ew Directions

Tarrant County Public Health 2014 Annual Report



PROLOGUE



year of transition, 2014 was the beginning of new directions for Tarrant County Public Health (TCPH).

Health Director Lou Brewer retired in May after more than 14 years of service. She helped the department evolve following the attacks of September 11, 2001. She also led the department through the bioterrorism fears related to the anthrax attacks that fall, and all the public health changes that came from those two historic events.

In September, Veerinder Taneja became health director. A 13-year veteran of public health, Taneja previously served as deputy health officer and acting director of the Wayne County Health Department in Michigan.

He earned his medical degree (MBBS) from Manipal Academy of Higher Education in India and his Master of Public Health (MPH) from Eastern Kentucky University.



"TCPH has accomplished many wonderful things.

These accomplishments have laid a solid foundation from which we continue to build upon to ultimately better serve the Tarrant County community..."

— Vinny Taneja, MBBS, MPH

Tarrant County Health Director

In an effort to keep the public more informed and to better serve the community, the department also launched a new TCPH web page and shared a greater presence on Facebook in 2014.

This annual report embraces that new digital course of direction and introduces you to a few of the many hard-working public health employees serving Tarrant County.

A NEW LOCAL HEALTH AUTHORITY

n October 2014, Dr. Catherine Colquitt was sworn in as the health authority for Tarrant County.

In addition, she began serving as the interim medical director. Colquitt graduated cum laude from Texas Christian University with a Bachelor of Arts in biology, before graduating from Southwestern Medical School as a doctor of medicine. She completed an internal medicine internship and residency at the University of Texas Health Science Center at San Antonio and completed an infectious disease fellowship at Southwestern Medical School. Since 1996, Colquitt has run her own infectious disease private practice in Fort Worth. She has directed the AIDS Clinic at John Peter Smith Hospital and, as of 2014, worked in the Preventative Medicine Clinic at Tarrant County Public Health.



Health Director Vinny Taneja swears in Dr. Catherine Colquitt as local health authority of Tarrant County on September 30, 2014.



Local Health Authority Dr. Catherine Colquitt and Chief Epidemiologist Russ Jones attend a county briefing on Ebola in October 2014.

FIGHTING NEW INFECTIOUS DISEASES

s part of its mission to safeguard the community's health, TCPH's first priority is to identify diseases that threaten residents. In 2014, several new threats emerged and TCPH responded...

Middle East Respiratory Syndrome (MERS)

Middle East Respiratory Syndrome (MERS) is a viral respiratory illness new to humans. First reported in Saudi Arabia in 2012, it had spread to several other countries, including the United States, by 2014. Most people infected develop severe acute respiratory illness, including fever, cough and shortness of breath. Though this respiratory virus doesn't spread as easily as flu, it is still potentially deadly. No vaccine for this virus existed by the end of the year.

In May, TCPH epidemiologists received reports of two confirmed cases of MERS in the U.S. Though the cases did not pose any danger to county residents, TCPH alerted local healthcare providers as a precaution. In addition, DFW Airport posted health advisories for travelers to and from the Middle East. No additional cases occurred.



"The world is so interconnected now that diseases no longer know any boundaries. We must continue to keep a watchful eye out for any threats abroad that could reach our county through international travel. The best plan is to educate travelers arriving from those affected countries. The cooperation we shared with our airport partners during the year was a great start."

- Russ Jones, MPH
Chief Epidemiologist



FIGHTING NEW INFECTIOUS DISEASES (continued)

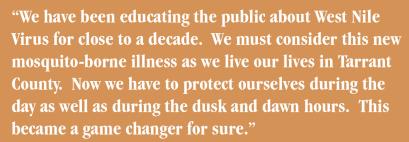


Asian tiger mosquito (Aedes albopictus)

Chikungunya

Chikungunya virus became a hot topic in Tarrant County in 2014 and set the stage for changes in the way public health responded to mosquito-borne illnesses. Discovered in the early 1950s near the border of Mozambique and Tanzania, Chikungunya has long been endemic in parts of Africa, Asia and the Indian subcontinent. It has occasionally occurred in Europe. In late 2013, Chikungunya virus was found for the first time in the Americas on islands in the Caribbean. It arrived in the continental United States by way of mosquito-bitten travelers returning from vacation. Chikungunya is a mosquito-borne virus that can cause rash, headache, muscle aches, fever and excruciating joint pain. The symptoms typically last seven to 10 days. It spreads from infected person-to mosquito-to person. The Aedes mosquito that carries the disease is primarily a daytime biter.

On August 22, TCPH confirmed its first imported case of Chikungunya in a Mansfield resident who contracted the disease while vacationing in the Caribbean. TCPH alerted local health care providers to be aware of the disease, and provided information to help residents protect themselves from these mosquitoes. TCPH adjusted its mosquito surveillance and testing operations to include Aedes mosquitoes.



– Anita Kurian, MBBS, DrPH

Associate Director of Environmental Services





Associate Director Anita Kurian inspects mosquito larvae as part of the department's mosquito surveillance program.



For more information on Chikungunya, click here.

FIGHTING NEW INFECTIOUS DISEASES (continued)

Enterovirus-D68 (EV-D68)

In late September, just before the start of the flu season, the U.S. experienced a nationwide outbreak of Enterovirus-D68 (EV-D68). The CDC confirmed the presence of the virus in North Texas through laboratory testing. Enteroviruses, which usually cause mild cold-like symptoms lasting about a week, afflict up to 15 million people in the U.S. each year. The CDC called this particular strain of the virus unusually severe. TCPH alerted local health care and medical providers to be mindful of those most at risk, and promoted prevention messages through broadcast and electronic media.



"Anytime we see a respiratory virus like EV-D68, we immediately think about the infants, children and elderly. Those three demographics are especially susceptible due to weakened immune systems and require the greatest of care. In the case of EV-D68, we alerted our local health care community and educated them on this new threat. Fortunately, we did not see the number of cases we feared could be coming our way."

Whitney L. Thorpe, MHA, BSN Epidemiology Surveillance Coordinator



FIGHTING NEW INFECTIOUS DISEASES (continued)

West Africa Ebola outbreak

Perhaps no story in 2014 had a bigger effect on public health than the West Africa Ebola outbreak. The World Health Organization (WHO) declared it the worst outbreak in the four-decade history of tracking the disease. Ebola is a viral disease first identified in Africa in 1976. It is extremely infectious and spreads from person to person by contact with bodily fluids. According to the WHO in 2014, no specific treatment or vaccine existed, and the fatality rate could be as high as 90 percent.

This new threat hit home in late July when two Americans — Dr. Kent Brantly and aid worker Nancy Writebol — became infected while treating Ebola patients in Liberia. Rescue crews flew both Brantly and Writebol back to a specialized hospital in Atlanta, GA, where they received an experimental drug and state-of-the-art health care. Some said the last-ditch effort saved their lives. Both recovered and walked out of the hospital in late August.

"The unfortunate passing of Mr. Duncan from Ebola will forever change the way we view, prepare and respond to emerging health threats in America. Public health had not seen a disease as deadly as Ebola in some time. The lessons learned from this outbreak better prepared us to deal with threats like these in the future."

Vinny Taneja, MBBS, MPH
Tarrant County Health Director

The disease threat became a reality for Tarrant County residents when, on September 30, Thomas Eric Duncan, a Liberian and recent visitor to the Dallas metro area, was admitted to Texas Health Presbyterian Hospital in Dallas with Ebola-like symptoms. Duncan received treatment, but would die days later. Nina Pham, a nurse who cared for Duncan, later tested positive for Ebola. She became the first person to contract the disease on American soil. The proximity of the first case prompted TCPH and county leadership to quickly put in place necessary procedures and resources to handle any additional cases. TCPH identified 43 contacts and began monitoring them for the requisite 21-days. Fortunately, by the end of the monitoring period, TCPH epidemiologists declared all the contacts in Tarrant County to be Ebola free.

This incident underscored the fact some of the worst diseases in the world are just a plane ride away.



For more information on Ebola virus disease, **click here**.

hough these new diseases became another part of our ongoing efforts to safeguard our community, recurring diseases continued to be a threat.



Attendees at the 2014 Carnaval de Salud line up for free flu shots.

Influenza (flu)

Influenza (flu) is year-round in the United States. The typical flu season starts in September and peaks in January or February. In 2014, TCPH reported the flu as being widespread across the county. It peaked in January, but began declining over the next few months. By the end of the 2013-2014 season, 11 influenza-associated adult deaths had been reported. The 2014-2015 flu season peaked early, though TCPH did not receive any flu-related death reports by the end of 2014.



Fort Worth Mayor Betsy Price (left) and TCPH Associate Director Ann Salyer-Caldwell (right) smile with a Walgreens' pharmacist (middle) after receiving their annual flu shots.



"Flu was not new to public health in 2014, but it continued to remind us how to best prepare for what could be coming next. Every year, thousands of people are hospitalized with the flu. Flu shots remained the best prevention, along with routine hand washing, covering your mouth when you cough or sneeze, avoiding close contact with people who were sick and staying home when you didn't feel well yourself."

Ann Salyer-Caldwell, RD

Associate Director of Community Health Promotion



(continued)



TCPH Vector Control Specialist Kris Kovack uses a microscope to sort mosquitoes trapped for WNV surveillance.

West Nile Virus (WNV)

West Nile Virus (WNV), unknown in Tarrant County before 1999, remained a localized threat in 2014. TCPH mosquito surveillance detected the first WNV positive mosquito of the season in June. In August, the number of positive tests rose sharply and the department confirmed the season's first positive human case of WNV. Ground level spraying helped control the number of mosquitoes across several municipalities and parts of unincorporated Tarrant County. Thanks to new laboratory equipment, enhanced mosquito testing allowed for quicker identification of the virus and faster response times in 2014. The WNV season ended with a total of 4,582 mosquito pools tested and 323 positive results. TCPH's North Texas Regional Laboratory confirmed a total of 12 human cases of WNV. Fortunately, all recovered.



"Our mosquito surveillance throughout the season further convinced us that West Nile virus is here to stay. We continued to remind residents of the importance of taking personal protective measures to safeguard against this disease. Residents were told to routinely dump standing water on their property, use repellent and dress for dusk to dawn."

David Jefferson, RS, MS *Environmental Health Manager*



For more information on West Nile virus, click here.

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Measles

With the exception of a localized Measles outbreak in 2013, the disease had been rare across Tarrant County in previous years. TCPH epidemiologists confirmed only one case in 2014. It involved a person exposed while travelling outside of Texas, who developed symptoms and became contagious while in Tarrant County. The patient received care while TCPH epidemiologists monitored close family members and friends. Thanks to a quick response, no other cases developed.



"We take the health of any traveler who returns to Tarrant County with signs or symptoms of a disease seriously. In the case of this measles patient, we received cooperation from everyone involved and felt confident the public was safe. It reminded us of how interconnected the world we live in is, and how important vaccinations are. Measles is a preventable disease."

Catherine A. Colquitt, MD

Local Health Authority and Medical Director



(continued)

Pertussis

Pertussis, also called "whooping cough," begins like a cold, with a runny nose, sneezing, mild fever and cough. It develops slowly and usually starts to occur in strong coughing fits. This type of coughing may last for six or more weeks. Pertussis is usually mild in older children and adults, but it often causes serious problems in babies. After a record 700 cases in 2013, TCPH responded in 2014 with an aggressive media campaign to educate the public about the importance of pertussis vaccinations. Multiple subject matter experts from across the department shared time in front of the camera and microphone. The year ended with an estimated 468 pertussis cases, down 33 percent from the year before.



"Pertussis is a disease caused by bacteria. Pertussis is usually mild in older children and adults, but it often causes serious problems in babies. The more we did to remind parents of the benefits of a pertussis shot, the less we saw the disease move throughout our community. Our public outreach was a big help."

Guy Dixon, Ph.D., HCLD (ABB) *Laboratory Services Division Manager*



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Tuberculosis (TB)

Tuberculosis (TB) infects one-third of the world's population, and kills three million people every year (a quarter of the world's preventable deaths). That is why it is the mission of TCPH's Tuberculosis Elimination Division to prevent, control and eliminate TB among the people of Tarrant County. In 2014, the department began offering the newest TB infection regimen – 12 total doses, given once a week for 12 weeks. This differs from the traditional delivery method of daily doses dispensed over nine months. The new regimen cuts the total number of doses down from 270 to 12. Furthermore, the 12 doses are taken under observation, instead of being self-administered. The new regimen accounted for an 81 percent completion rate of those treated, up from 61 percent the year before.



"We received grant money that allowed for the weekly delivery of the medication and observation of the patient. This dramatically improved our compliance numbers. We noted a 20 percent improvement in the patient completion rate. We felt this program charted new territory in 2014 and continued moving our treatment methods in the right direction."

Jeremy Gallups, BSN

Tuberculosis Prevention Control Manager

CHRONIC DISEASES ARE HERE TO STAY

n addition to these preventable diseases, TCHP continued to fight chronic diseases and their related issues in 2014.



Freedom From Smoking

Many chronic diseases that lead to death are related to tobacco use. It is a leading preventable cause of death in the United States. More than half of all current smokers in Tarrant County in 2014 tried to quit in the past year, but failed. To combat this, TCPH launched the Freedom From Smoking program in November. The four-week program addresses the key issues of managing stress, nicotine withdrawal, weight control and long-term strategies for maintaining a smoke-free lifestyle.



"The Freedom From Smoking program looks at every aspect of addiction, which is important. We give our participants the skills needed to fight their cravings, address the scenarios they will face, and tell them what to expect. The person they see in the mirror has to be the ultimate priority. This program teaches them how to be that person."

Keisha Leatherman *Health Educator*



CHRONIC DISEASES ARE HERE TO STAY (continued)

17P Initiative

Preterm birth is the leading cause of infant death in Tarrant County. Babies that are born too early can have health complications, such as brain damage, breathing and vision problems. TCPH's 17P Initiative aims to increase gestational length and reduce those problems. The initiative took a new path in 2014 by developing relationships with the major Medicaid providers in Tarrant County.



"We realized how valuable the relationship to the Medicaid organizations in Tarrant County is, so we formed stronger relationships with them. They are as motivated as we are to reduce the pre-term birth rate in Tarrant County and can easily open the doors to the doctors' offices where the 17P Initiative makes the most impact. We began to see an impact by the end of the year."

Stephani Adams, MPH *Prematurity Program Coordinator*



PROGRAMS AND INITIATIVES LEAD THE WAY

any of TCPH's programs, services and support functions took big steps forward in 2014.



Continuous Quality Improvement (CQI)

In 2013, TCPH set out to establish a program to improve the department's overall effectiveness at safeguarding the community's health. Leadership gave birth to CQI, and in just its second year, the program achieved its goal of

better internal communications and employee satisfaction. CQI leadership also launched the first Health Quality Week and encouraged various TCPH divisions to showcase their customer service projects.



TCPH's Tuberculosis Elimination Division receives the award for Best Project from Florastine Mack (pink), the 2014 CQI Chair.



"Our second year proved to be more rewarding than we could have hoped. Our newly launched Health Quality Week showcased all of the customer service projects our staff completed throughout the year. To see it all come together in one week was a real testament to the strength and teamwork of our TCPH staff."

Florastine Mack, MSHP, BSN

Community Health Promotions Manager

PROGRAMS AND INITIATIVES LEAD THE WAY (continued)

Delivery System Reform Incentive Payment (DSRIP)

In 2014, TCPH once again participated in the five-year federal incentive program known as DSRIP. The grant money provided by this program opened doors to new services, added programs across the department and increased staffing where more help was needed. Highlights included the development of three health promotion programs, the development of a program to reduce pre-term birth, the expansion of two infectious disease clinics, the enhancement of sexually transmitted disease outreach/education to the youth population and the integration of a Health Information Exchange (HIE).



"DSRIP funds helped local transformational ideas to become a reality. This is an essential ingredient to improving the care and health in our communities while decreasing cost."

Cory Clark, MBA *Project Portfolio Manager*



LEADERSHIP IN OUR COMMUNITY

e continue to be active and involved in the community.



Commissioner Roy Charles Brooks poses with TCU nursing students, TCPH staff and members of the Blue Zones Project-Fort Worth to celebrate International Walk to School Day.

Tarrant County Community Health Improvement Plan (CHIP)

At a meeting in March, TCPH introduced a Community Health Improvement Plan (CHIP). The CHIP included the culmination of joint study and research that began in 2012. It involved concerned citizens, local businesses, community leaders, academicians and health officials. It addressed specific health issues affecting people who live, learn, work and play in Tarrant County. This group, now known as Tarrant County Voices for Health, identified aspects of local education, environment, health care access and community partnerships that must be addressed to improve the community's health. This meeting introduced their plan and laid out steps for its implementation. The group celebrated a milestone event in October at an International Walk to School Day event, held at C.C. Moss Elementary School in Fort Worth.

"With the help of nursing students from TCU, the Blue Zones Project-Fort Worth, Tarrant County Commissioner Roy Charles Brooks' office and members of Tarrant County Voices for Health, we showed the students at C.C. Moss Elementary school in Fort Worth how fun and healthy it can be to safely walk to school. It turned out to be just the kind of start we had hoped for. We expect even bigger results in the years to come."

Yvette Wingate, MPA
Health Fauity Coordinator



For more information on CHIP, click here.

LEADERSHIP IN OUR COMMUNITY (continued)

Center for Health Equity

TCPH established the Center for Health Equity in 2014, in an effort to address differences in the incidence, prevalence, mortality, burden of diseases and other adverse health conditions that exist among specific population groups in the county. Health equity entails special efforts to improve the health of those who have experienced social or economic disadvantage. Policies and practices aimed at promoting the goal of health equity will not immediately eliminate all health disparities, but they will provide a foundation for moving closer to that goal.



"As Tarrant County Public Health moves into a new era, we recognize it will take the collaborative effort of many to eliminate health disparities in Tarrant County. We are excited about the development, implementation and evaluation of new policies, programs and activities to support a broad-based health equity movement. Through collective impact, small steps result in big changes toward making our community healthier for all."

Yvette Wingate, MPA
Health Equity Coordinator



EPILOGUE

ooking back, TCPH made great strides throughout 2014. The department took a more active stance with the media and promoted positive programs and expert

speakers on a variety of public health topics. By December, the department had re-launched its website, which projected a fresh look for TCPH, and allowed direct input and additional functionality. The changes promised to make TCPH a more effective communicator in the community. Thanks to additional DSRIP funding, TCPH began developing a video production unit to increase TCPH's electronic footprint. The department also developed strategies to launch a YouTube Channel, Twitter page and other social media accounts in 2015.



Health Director Vinny Taneja addresses the local broadcast media regarding the first death of the 2014-2015 Influenza Season.



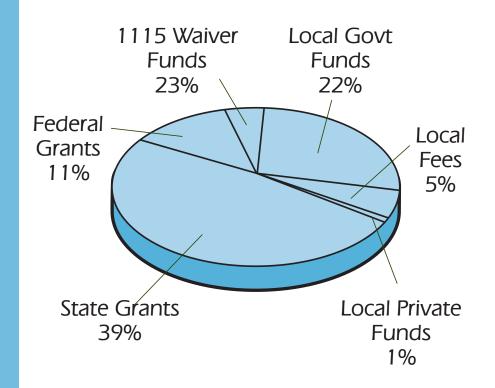
"TCPH successfully transitioned in 2014 to new leadership and positioned itself for a bright future. The tools are in place now to move the department, and the county, into the new era of public health."

— Vinny Taneja, MBBS, MPH

Tarrant County Health Director

FY14 TOTAL FUNDS INFORMATION

Local Private FundsState Grants	
	<u> </u>
	\$40,071,970
Federal Grants	\$5,726,332
1115 Waiver Funds	\$11,855,658



DEPARTMENT WORKLOAD MEASURES

The following table provides a three-year glimpse of TCPH activities and/or the numbers of people involved. Fluctuations in some numbers may be due to changes in reporting requirements.

DEPARTMENT WORKLOAD MEASURES	2012	2013	2014
BCCCP ¹ - Pap smear screens	560	711	606
BCCCP ¹ - Breast exams	1,010	1,039	829
BCCCP ¹ - case-managed clients	399	398	217
Pregnancy tests & referrals	699	598	437
Flu shots provided	8,202	14,152	14,041
Immunizations provided	51,690	119,130	96,894
WIC ² - visits	686,603	652,496	616,333
Health education - health events, presentations	587	644	670
Health education - referrals	12,117	11,371	13,254
Communicable disease reports investigated	5,543	4,959	4,494
New HIV cases reported	189	253	292
STD clinic visits	5,543	5,860	7,063
STD disease intervention, field investigations	3,639	3,200	3,198
Clinical lab tests performed	60,003	53,558	53,027
HIV/STD cases investigated, partners notified	513	670	898
Preventive Medicine Clinic (PMC) HIV care caseload	997	985	965
PMC clinic visits	5,432	5,489	5,283
Travel Health Services clinic visits	3,643	3,378	2,778
TB clinic visits	15,811	16,416	13,907
TB contacts screened as part of disease			
intervention investigation	329	808	1,155
TB cases in Tarrant County	72	70	77
Percent of foreign-born TB cases	41	64.3	70.1
Suspected TB cases treated preventively	124	77	196
HIV co-infections (cases only)	1	2	0
Drug-resistant cases (TB)	4	4	7
Directly Observed Therapy doses			
administered in the field (TB)	11,280	9,313	8,772
DOPT ³ doses administered (TB)	9,215	8,835	10,182
Contacts investigated (TB)	565	808	1,155
Total on therapy (TB)	141	147	83
Total with latent TB infection	626	943	1,146
Food establishment inspections	6,151	5,683	6,374
Swimming pool inspections	1,015	1,005	961
Onsite sewage facilities permitted	212	204	377
Food handlers trained/certified	13,311	15,983	15,285
Mosquito pools tested for WNV	647	4,290	4,794
Milk and dairy lab tests performed	18,691	17,785	18,018
Water lab tests performed	19,811	19,761	19,242

¹ Breast & Cervical Cancer Control Program

Women, Infants & Children Program

Directly Observed Preventive Therapy

MORBIDITY TABLE

Numbers represent people with confirmed cases in 2013. These are new cases TCPH knows about.

Morbidity in Tarrant County						
DISEASES	2012	2013	2014			
Acquired Immunodeficiency Syndrome (AIDS)	38	43	57			
HIV Seropositive	189	176	169			
E. Coli 0157:H7 Infection	33	49	55			
Hepatitis A	6	< 5	10			
Hepatitis B	15*	8	< 5			
Hepatitis C	<5*	< 5	< 5			
Meningitis Meningococcal**	< 5	< 5	< 5			
Pertussis	162	700	467			
Salmonellosis	340	342	353			
Shigellosis	105	142	247			
STD: Chlamydia	7,792	8,429	8,382			
STD: Gonorrhea	2,103	2,152	2,579			
STD: Syphilis: Congenital (< 1 yr.)	8	7	8			
STD: Syphilis: Primary	50	52	55			
STD: Syphilis: Secondary	108	104	116			
STD: Syphilis: Other	68	120	64			
Tuberculosis	75	70	77			
West Nile Virus	280	9	16			

NOTE: Less than five cases (≤ 5) are not reported to protect patient confidentiality.

^{* 2012} case counts reflect only acute Hepatitis B & C infections; chronic Hepatitis B & C infections are not reportable and are no longer tracked

^{**} Meningococcal disease cases include blood infections as well as meningitis cases.

IN MEMORY



TCPH lost one of its longest-serving employees in 2014. Douglas Fabio, an associate director who worked for TCPH since 1988, passed away in April. Fabio represented TCPH's interests in many local, state and federal health-related activities and organizations. He often worked with state leaders on legislation that impacted public health statewide. He oversaw several department areas and was always willing to assist programs

at any level to help them succeed and thrive. His dedication and determination helped obtain critical support for many of TCPH's current outreach programs. Douglas Fabio was a cheerful public servant and a great ambassador for TCPH. He is missed.

Look for us on:













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