

Knox County **Health Department**• Every Person, A Healthy Person



oo many people believe we have the best health care in the world. That might be true as far as effective medical treatment. But health is not just about effective medical treatment for people once they're sick or injured. Health care has only a 10 percent impact on the causes of premature death.

Together, we must transform the way our country approaches health. We need a greater focus on prevention and wellness so we don't need treatment as often. We need to better address the broader issues that affect health — from poverty to poor housing, education, transportation and the environment. It's not enough to individually make choices that will improve our own health. We need to make sure everyone in all communities has the chance to make those same healthy choices."

- American Public Health Association

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LETTER TO KNOX COUNTY



Martha Buchanan, M.D. Director, Knox County Health Department

very person, a healthy person. This is undoubtedly a lofty organizational vision, but it's one we have embraced. It means that everyone in our community has the opportunity to be healthy. That they not only have access to quality medical care, but access to healthy food, and safe places to play, learn and work. It means our community has timely, accurate health information. It also means that we, as a community, value health – that we place our resources, time and effort on prevention and ensuring good quality of life for everyone.

As you'll read in this report, public health covers many different facets, some of which are not often associated with health, such as education, housing, poverty, and others. Evidence has shown that we can expect the biggest public health improvements by addressing all of these issues. To that end, we work to promote a broad understanding of health, one that reveals the connections between health and other issues. This broad understanding is a first step in creating an environment where everyone has the opportunity to be healthy.

I hope you enjoy reading about our efforts in this report, which contains an overview of what we do. And while many of our major achievements go unseen - the outbreaks that didn't happen and the lives not lost to preventable chronic diseases or injuries - many more are tangible, measurable advances and are also outlined in this report.

We consider it a great honor to serve Knox County, and we will continue to search for better, even more effective ways to improve our community's health. As we plan for the future and the challenges that lie ahead, I encourage you to join us. Tell us what you think about our work, let your friends and family know what we're doing and what we offer, and most importantly, I encourage you to explore this broad definition of health and what it means for your family and community.

I welcome any suggestions and/or questions you may have. Please feel free to contact me directly at 865-215-5273 or you may email health@knoxcounty.org.

Gratefully yours,

Martha Buchanan, M.D.

Director, Knox County Health Department

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WHO WE ARE

As a public health agency, we work to promote and protect the health of our community where people live, learn, work and play. From education to regulation and from emergency preparedness to clinical care, our broad scope of work mirrors the World Health Organization's comprehensive definition of health: "a state of complete physical, mental and social well-being – not merely the absence of disease or infirmity."



VISION

Every Person, A Healthy Person

MISSION

To encourage, promote and assure the development of an active, healthy community through innovative public health practices

CORE VALUES

- Responsiveness and commitment to our community
- Accountability and integrity in our operation
- Excellence through evidence-based and innovative practices
- Leading by example

STRATEGIC PRIORITIES

- How do we continually assure that the Knox County Health Department infrastructure empowers us to be at the forefront of public health?
- How do we facilitate a community approach to better health?
- How do we establish communitywide understanding and value for public health?
- How do we respond effectively to our community's public health issues?



STRUCTURE

The Knox County Health Department is a division of Knox County Government under the supervision of Knox County Mayor Tim Burchett.

The Knox County Board of Health was established to serve in an advisory

KNOX COUNTY **BOARD OF HEALTH**

Martha Buchanan, MD Director, Knox County Health Department

Tim Burchett **Knox County Mayor**

Dianna C. Drake, Pharm. D President, Tennessee Valley Pharmacists Association, District Two

Rebecca E. Gompf, DVM, PhD, DACVIM Associate Professor, University of Tennessee Veterinary School

Jack E. Gotcher Jr., DMD, PhD University Oral and Maxillofacial Surgeons, LLC Chief of Staff, University of Tennessee Medical Center

John W. Lacey III, MD Chief Medical Officer, University of Tennessee Medical Center

James P. McIntyre, PhD Superintendent, Knox County Schools

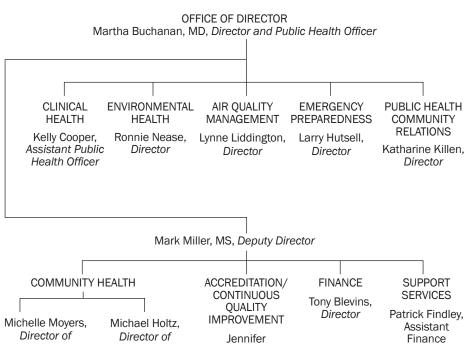
Patricia M. Williams, RN, MPH Retired



ORGANIZATION

KCHD consists of nine divisions, and employs more than 260 professionals including public health educators, epidemiologists, physicians, environmentalists, nurses, nutritionists, emergency preparedness specialists and many others.

KNOX COUNTY HEALTH DEPARTMENT



Valentine,

Director

Community

Development

& Planning

Community

Assessment &

Health Promotion

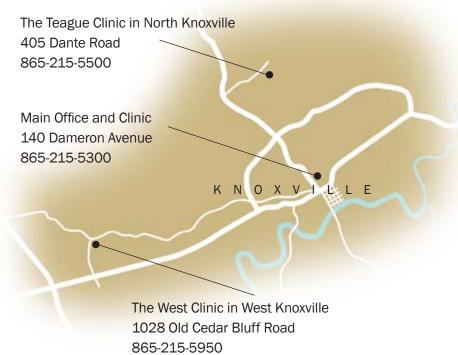


ABOUT KCHD

GENERAL INFORMATION

- Hours of operation: 8 a.m. 4:30 p.m.
- Days and hours of service may vary per department.
- Main: 865-215-5000
- Email: health@knoxcounty.org
- Online: www.knoxcounty.org/health
- Facebook: Knox County Health Department
- Twitter: @KnoxCoHealthTN
- On the first Wednesday of each month all offices and clinics are closed in the morning for staff in-service. On these days, the main location opens at 10 a.m. The Teague and West clinics open at 10:30 a.m.

LOCATIONS





WHAT WE DO

We track and monitor diseases, conduct extensive health education and outreach, provide and connect people with care, enforce food safety and air quality laws and regulations, prepare for public health emergencies, and more — all with the goal to ensure the conditions in which every Knox County resident can be healthy. While a medical provider typically treats those who are sick, most of our work centers on preventing illness and injuries from happening in the first place.

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MONITOR AND INVESTIGATE DISEASES

To effectively respond to our community's health issues, we must identify and monitor major health problems, determine risk factors for disease, and then define the best approaches for prevention. Our team of epidemiologists conduct follow-up investigations of more than 50 infectious diseases considered to be hazardous to the community. In accordance with state law, medical providers must report all cases of these diseases to us, as the local public health authority. All reported cases are investigated to prevent the spread of illness. A disease investigation may consist of one epidemiology nurse or a special team of public health professionals. Specific protocols ensure a rapid and effective response.

An outbreak is defined as two or more cases of similar illness that have a common exposure. In the 2013/2014 fiscal year, we investigated eight outbreaks. Shigellosis and norovirus were the culprits in most of the outbreaks. Both are highly contagious gastroenteritis illnesses. Most people recover without treatment, but these illnesses can cause severe complications for the very young, very old and those with chronic conditions. Both illnesses can also be prevented with general infection control measures, such as proper hand washing.

Outbreaks can happen anywhere, including public pools, assisted living facilities, daycares, churches, restaurants, schools and many other locations. The variation in setting and source of infection sends an important message to our community: Good hygiene and safe food-handling practices are important measures for reducing illness.

"The health of the individual is almost inseparable from the health of the large community...." – Howard K. Koh, MD, MPH 20 | 2013-14 KCHD ANNUAL REPORT

PROVIDE AND **CONNECT CARE**

We provide several areas of clinical care including HIV/AIDS testing and treatment, family planning, breast and cervical cancer screening, immunizations, STD screening and treatment, and others. Services are provided by physicians, nurse practitioners and highly-trained medical professionals who are supported by a qualified staff.

Our Center of Excellence (COE) is an HIV/AIDS treatment center serving qualified adults in Knox and the 16 surrounding counties. Services include health assessment, medical care, case management and nutritional counseling. COE served more than 600 clients during the 2013/2014 fiscal year.

Focused on reducing the impact of sexually transmitted diseases, tuberculosis and HIV/AIDS, our Communicable Disease Clinic conducted approximately 11,000 patient visits in the 2013/2014 fiscal year. Services include confidential testing, treatment and education.

Managing more than 8,000 patient visits last year, our Women's Health Clinic provides family planning services, pregnancy testing, GYN wellness care, as well as breast and cervical cancer screenings, education and referral.

Our Dental Clinic provides primary prevention, emergency dentistry, oral health education and oral surgical procedures to qualified Knox County residents. The Dental Clinic served more than 6,000 patients during the fiscal year.

To reduce the prevalence of vaccine-preventable diseases, our Travel and Immunization Clinic staff provide routine and international travel vaccinations. During the fiscal year, the staff managed more than 8,500 immunization visits.

KCHD also operates two satellite public health centers in West and North Knoxville. Services at these offices include well check-ups for children on TennCare; preventive health services, such as immunizations and newborn screening tests; women's health services; and screening and testing for sexually transmitted diseases.

Our highly skilled workforce maintains excellent knowledge of other programs in the community to appropriately refer patients when needed. We also ensure access through other health care providers in our community. One example is our affiliation with Cherokee Health Systems to provide primary care to qualified Knox Countians.



CONDUCT HEALTH **EDUCATION AND OUTREACH**

Obesity and obesity-related diseases, such as diabetes, heart disease and stroke, have implications not only for the individuals and families affected but for the larger community as well, causing decreased workforce productivity and increased health care costs. Obesity is preventable by encouraging system changes that create a culture where healthy lifestyles are the norm. Nutrition and physical activity education, breastfeeding promotion, health policy advocacy, and worksite wellness initiatives are just some of our outreach efforts aimed at reducing obesity.

The Special Supplemental Nutrition Program for Women, Infants and Children (WIC), which safeguards the health of women and children who are at risk for poor nutrition. also uses education and outreach to improve health. Funded by the U.S. Department of Agriculture, WIC provides supplemental healthy foods, nutrition and breastfeeding education, cooking classes, screenings and referrals to other health services. This program improves birth outcomes and the growth of nutritionally at-risk infants and children. During the 2013/2014 fiscal year, our WIC Clinic served more than 17,000 Knox County residents.

Designed to increase the number of children on TennCare who receive preventive health screenings, the Knox County TENNderCare program provides education and outreach through various activities. One example is Child Health Week, a state-designated week in October that our staff uses as an opportunity to promote communitywide understanding of our most pressing child health issues.

Our Home Visiting Services consist of social counselors, nurses and care coordinators who promote child health, safety and development, while also working to prevent child abuse. Conducting more than 1,400 home visits in the 2013/2014 fiscal year, this group offers several programs, including Children's Special Services (CSS), Help Us Grow Successfully (HUGS), newborn screening follow-ups and others.

We also conduct extensive outreach regarding violence and rape prevention, health equity, fall prevention, tobacco use prevention and control, food safety, teen pregnancy prevention and many other areas. Providing accurate and reliable information to the public about health risks, healthy behaviors, disease prevention and wellness are crucial to improving public health.

Public Health Law is a vital tool in protecting and promoting the health and safety of a community as well as ensuring the conditions in which every resident can be healthy. 24 | 2013-14 KCHD ANNUAL REPORT

PROTECT HEALTH

To prevent and reduce potential health threats, our Environmental Health and Air Quality Management divisions enforce public health laws.

The Environmental Health division enforces state regulations of permitted facilities, including tattoo studios, public swimming pools, restaurants, grocery stores, child care facilities, school cafeterias, hotels and others. We conduct more than 11,600 food-related regulatory inspections each year and provide extensive food safety education. Together, this work helps ensure our food is prepared, stored and served properly.

Our Environmental Health staff also enforces Tennessee's Groundwater Rules and Regulations, which includes issuing permits for subsurface sewage disposal systems and investigating complaints related to failing septic systems. Maintaining efficient sewage disposal systems helps protect our groundwater and property from contamination.

Environmental Health also conducts rabies vaccination clinics each May as well as a seasonal mosquito monitoring program to prevent the spread of West Nile Virus.

The primary responsibility of the Air Quality Management division is to achieve and maintain the U.S. Environmental Protection Agency's National Ambient Air Quality Standards in Knox County, which are designed to protect public health. This is accomplished in many ways, including the continuous monitoring of fine particulate matter and ozone in the outdoor air; issuance of air quality health alerts and daily forecasts; permitting of air contaminant sources, such as boilers, cement manufacturers, asphalt plants, dry cleaners and many others; computer modeling of air pollution dispersion; and air toxics evaluation and control.

The Air Quality Management division also performs compliance and complaint investigations, provides asbestos demolition and renovation permits, issues residential open burning permits, and provides technical and educational services.

After 9/11, health departments across the U.S. took on the role of emergency planning to protect public health in the event of a large-scale medical disaster. 26 | 2013-14 KCHD ANNUAL REPORT

PREPARE AND PLAN FOR EMERGENCIES

KCHD's Emergency Preparedness (EP) Program enhances community preparedness by encouraging and supporting readiness planning efforts among all community members, from individual households to large corporations. The EP Program also fosters relationships with federal, state and local governments, as well as non-governmental organizations to prepare for and respond to potential hazards.

One example of this division's excellent work occurred in January 2014 when our EP staff was contacted by an area hospital with concerns about a ventilator shortage. Upon further investigation by our staff, it was determined that the region was experiencing a ventilator and critical care bed shortage. The EP staff, with our leadership, coordinated the response efforts between public health, the Regional Medical Communications Center and area hospitals. Together we were able to move medical devices and patients to reduce the burden on any one facility. Our Epidemiology staff worked closely with area hospitals to gather data to determine the cause. While the culprit was not one specific illness, this event illustrated the importance of the trust that the EP division has fostered with our partners in the medical community. It also demonstrated that we must continue diligent and thorough planning efforts.

Another example of the EP Program's efforts comes from the team's Emergency Preparedness Educator, who met with every long-term health care facility (nursing homes, assisted living facilities, etc.) in Knox County last year to discuss their emergency plans. As a result, approximately 40 long-term health care facilities have partnered with us to dispense medications and/or vaccines to their employees, employees' family members, patients and residents in the event of a bioterrorism or pandemic incident.



BUILD PARTNERSHIPS

By serving as a catalyst for partnerships with nonprofit organizations, health care providers, local government, faith institutions, law enforcement, neighborhood associations, employers, schools and many other organizations, we can have a profound impact on the health of our community.

One example is our partnership with the University of Tennessee Department of Public Health. To better connect public health academia with real-world practice, we established the first academic health department (AHD) in Tennessee. This partnership serves a variety of purposes intended to improve workforce training and education, research and resources. The AHD allows us to provide a practice setting where graduate students apply what they learn in the classroom. During the 2013-2014 academic year, 227 students contributed more than 7,560 hours through internships and clinical rotations. Student disciplines included nutrition, child and family studies, nursing, pre-med, communications, family medicine and internal medicine.

Knox County Schools is a crucial partner in our work to improve population health. Our Oral Health Program provides preventive dental care, education and screening to more than 4,200 children in eligible Knox County elementary schools each year. Tooth decay is the most common chronic disease of childhood, yet it is largely preventable. This collaboration allows us to provide free care to at-risk children in the convenience of their own school.

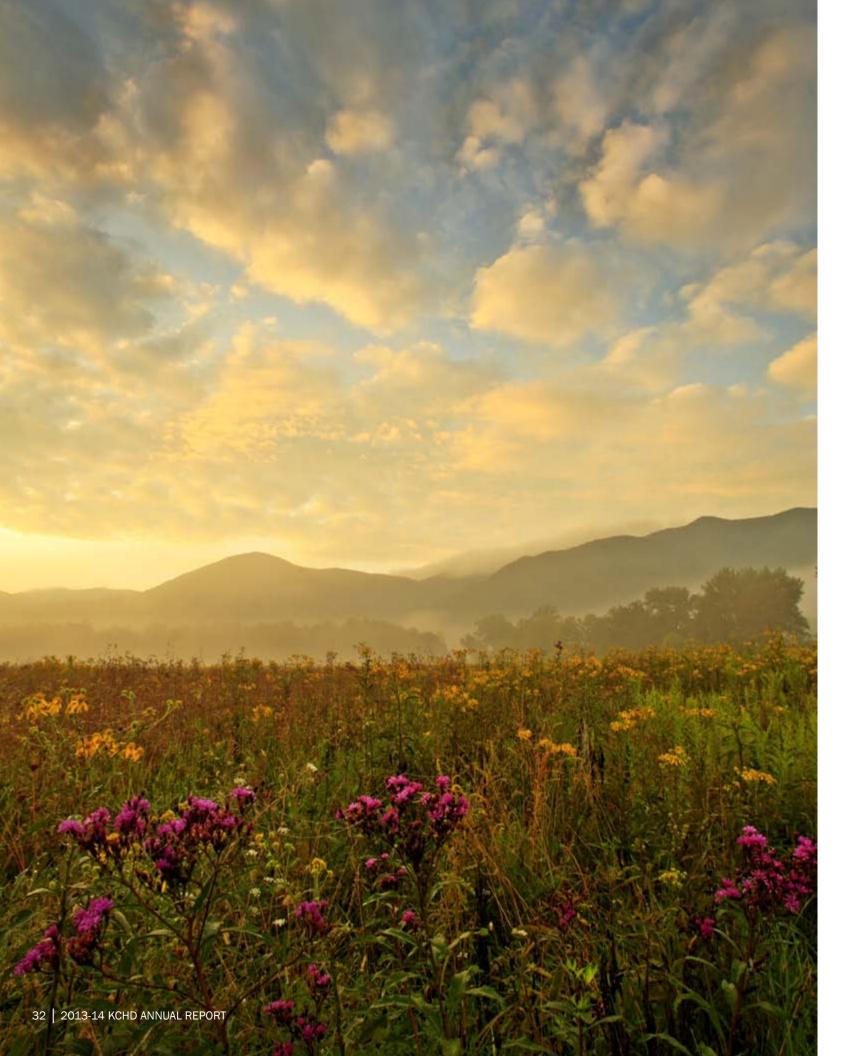
We also partner with Knox County Schools as well as day cares, private schools and Head Starts to conduct our in-school FluMist program, which vaccinates nearly 25,000 children each year. Since children are the major transmitter of the flu, this program helps significantly reduce the burden of influenza and influenza-associated diseases in our schools, businesses, hospitals, medical offices and families.

Whether we are convening a coalition, providing staff support and facilitation, or serving as a member of a group, our partnership work varies greatly and includes: the Community Health Council, Smoke-Free Knoxville, Knox County Youth Health Board, East Tennessee Safe Sleep Initiative for infants, Knoxville-Knox County Senior Safety Task Force, Food Policy Council, Five Points Up, East Grand Division Health Care Coalition, and many others.

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2013/2014 ACCOMPLISHMENTS

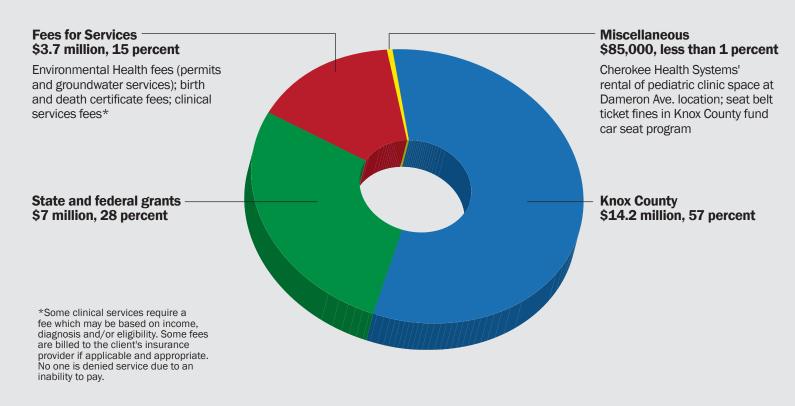


2013/2014 FISCAL YEAR ACCOMPLISHMENTS

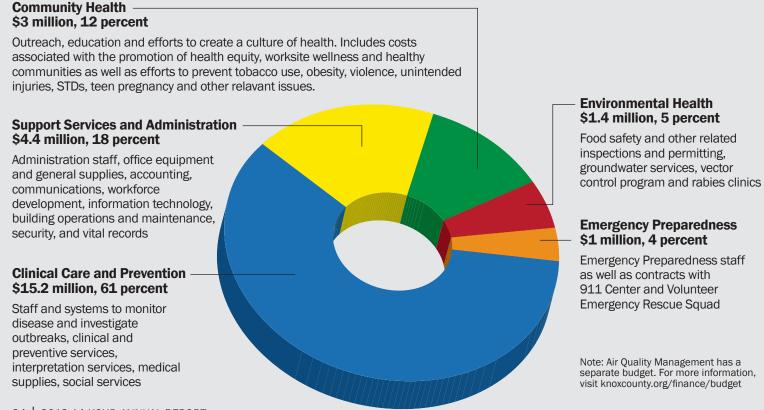
- After years of planning and months of intensive training, we became the first health department in the state to implement Electronic Health Records (EHR). EHR offers a host of benefits including improved quality of care, accuracy of diagnoses, health outcomes and care coordination.
- In November 2013, our Emergency Preparedness division helped plan one of the nation's largest preparedness drills. Involving more than 50 hospitals and health care organizations and 1,000 volunteers, the exercise tested the region's mass casualty incident plans and communications. A product of the East Tennessee Health Care Coalition, this exercise is evidence of the growing public safety partnership between hospitals and state and local jurisdictions for the response to threats and hazards.
- In early 2014, we began the yearlong process of data collection for our Community Health Profile. This massive effort melds existing local health statistics with newly gathered quantitative and qualitative data. The process includes phone and online surveys, focus groups and key informant interviews. The result, a report released in 2015, will provide publicly available data to help develop policies and programs, to inform elected and appointed officials about health issues and priorities, to provide measurement and direction for our own programs and initiatives, and to guide our public health system in the creation of its community health improvement plan.
- We were awarded a \$44,500 grant from the Tennessee Department of Health to research the barriers and facilitators for contraceptive use among women of childbearing age who are on controlled substances. To design effective interventions to combat neonatal abstinence syndrome (a condition in which an infant is born dependent on drugs), we must better understand those affected.
- To reduce smoking during pregnancy, secondhand smoke exposure among infants and children, and to prevent youth tobacco use, we received a three-year \$327,000 grant from the Tennessee Department of Health. Since receiving the funds, we have created two health educator positions and several new programs to address these issues.

- We completed our community's first "Walk and Watch" paint the pavement project in Lonsdale. The Lonsdale Loop provides a one-mile, painted pathway to encourage residents to utilize their neighborhood sidewalks and be more physically active, while also keeping eyes on the street to maintain safety.
- We launched Healthy Kids, Healthy Communities in South Knoxville. This program seeks to empower residents to create changes in neighborhoods to improve access to healthy activities. South Knoxville joins Lonsdale, Mascot and Inskip in this initiative, which includes enhancing public spaces so that the healthy choice is the easy choice.
- In partnering with community leaders and interested residents, we convened Five Points Up. This resident-led coalition plans to improve the health of those in the area by working to increase the sense of community. We also partnered with the University of Tennessee's Department of Public Health to complete a community health assessment, which will provide health data and guidance for Five Points Up.
- We created a Health Planning Manager position in part to better monitor policies that may affect public health, which includes everything from tobacco control policies to transportation policies (i.e., complete streets) that can affect access to physical activity. Monitoring policies and providing education when needed is an essential role of public health agencies.
- We enhanced and expanded our customer satisfaction survey to allow customers to provide feedback through email surveys and online access. This accessible survey empowers the customer and provides us with honest, insightful feedback, which is used to make changes and to ensure the best possible service.
- · To better serve our diverse community, we conducted a cultural and linguistic competence assessment of our staff. The results are being used to improve processes, programs and interventions throughout the organization.

2013/2014 KCHD FUNDING SOURCES



2013/2014 KCHD OPERATING EXPENSES



FINANCE

The Knox County Health Department serves a population of 436,929 in Knox County, according to the 2011 report of the U.S. Census Bureau. In the 2013/2014 fiscal year, KCHD had an operating budget of approximately \$25 million.

For more detailed budget information, please visit knoxcounty.org/finance/budget

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