

2014-2015 Annual Report



Knox County
Health Department
Every Person, A Healthy Person



“Better health is central
to human happiness
and well-being.”

– World Health Organization

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LETTER TO KNOX COUNTY



Martha Buchanan, M.D.

Director, Knox County
Health Department

The 2014/2015 fiscal year was momentous. Major public health events included the Ebola outbreak in West Africa, which required significant preparedness efforts and work to dispel misinformation right here in Knox County. We were immersed in transforming our Community Health Assessment, a report that identifies our county's priority health issues, into a product that is more user-friendly and meaningful. We launched a new program to reduce Neonatal Abstinence Syndrome. And we implemented the state's new food code in Knox County – a considerable educational effort on the part of our Environmental Health staff.

Fortunately, we continued to see a shift in the public's perception of health to a broader definition, one that embraces the effect education, income and cultural factors have on our health. How people think of health is essential in creating an environment where everyone has the opportunity to be healthy. We were also pleased that people are understanding not only the human impact of health but also the economic cost.

While all this is encouraging, we still have considerable challenges ahead, especially related to obesity, physical inactivity, tobacco and substance use, and mental health. We know that no single entity can improve our community's health. And to that end, we continue to build and strengthen our partnerships with medical providers, hospitals, nonprofit organizations, schools and many others to bring about change.

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 evolving definition of health, and what it means for your family and community.

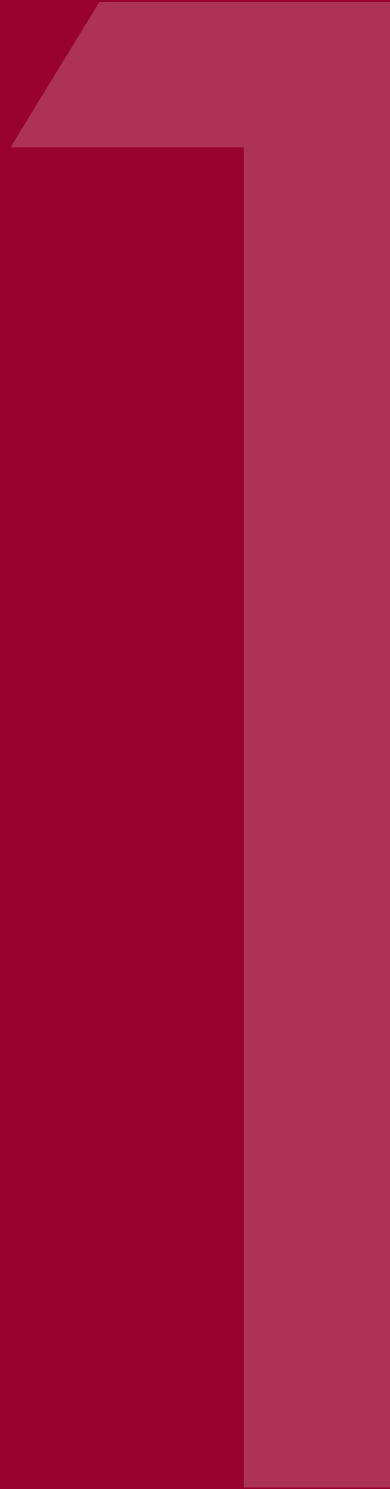
I hope you enjoy reading about our efforts in this report, which contains a broad overview of what we do. We consider it a great honor to serve Knox County, and we will continue to search for better, even more effective ways to improve health. I welcome any suggestions or questions you may have. Please feel free to contact me directly at 865-215-5273, or you may email health@knoxcounty.org.

Gratefully yours,

A handwritten signature in blue ink, appearing to read 'Martha Buchanan', with a long horizontal flourish extending to the right.

Martha Buchanan, M.D.

Director, Knox County Health Department



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 preventive 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
- Excellence through evidence-based and innovative practices
- Accountability and integrity in our operation
- 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 serves an advisory role.

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

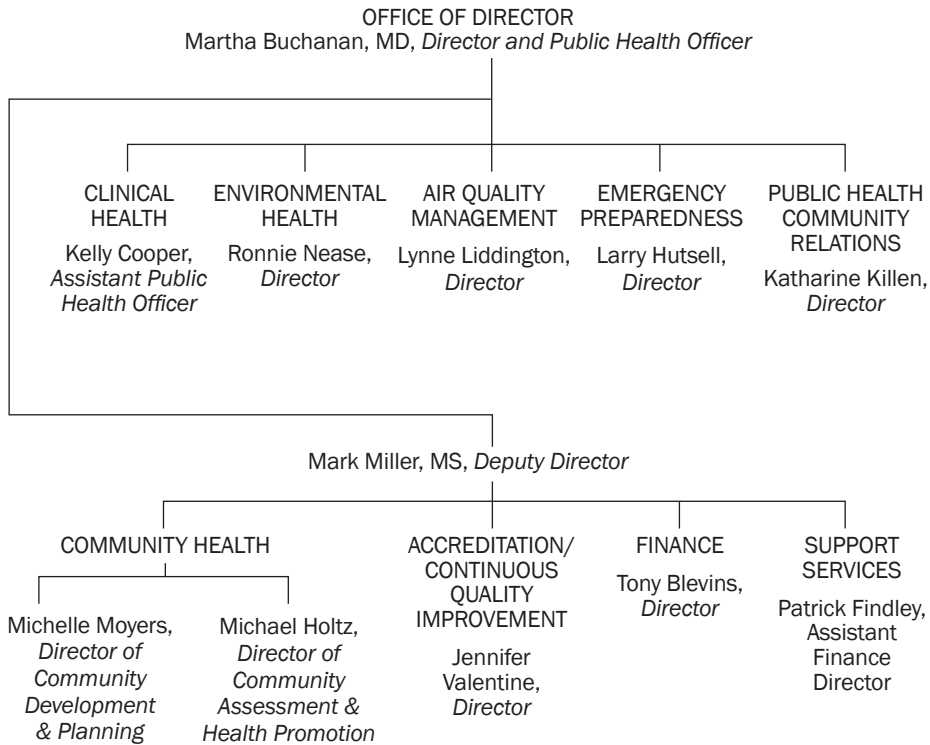
Patricia M. Williams, RN, MPH
Retired



ORGANIZATIONAL CHART

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

KNOX COUNTY HEALTH DEPARTMENT





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

The Teague Clinic in North Knoxville
405 Dante Road
865-215-5500

Main Office and Clinic
140 Dameron Avenue
865-215-5300

The West Clinic in West Knoxville
1028 Old Cedar Bluff Road
865-215-5950





WHAT WE DO

We identify and monitor major health issues, conduct extensive health education and outreach, provide and connect people with medical care, enforce food safety and air quality laws, 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.



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.

Their scope of work includes serving in a leadership role on the Knox/East Tennessee Healthcare Coalition, a network of health care organizations, providers and regional partners that are committed to strengthening the health care system in preparation for emergencies. Our EP division also partners with the Knoxville Police Department to host Workplace Violence and Active Shooter trainings for local day cares and long-term health care facilities. And they co-sponsor and assist in planning the annual Family Safety and Preparedness Fair. More than 1,000 people attended last year's fair, and were able to receive invaluable information on how to prepare themselves and their families for emergency situations.

In addition to these ongoing efforts, this division demonstrated their outstanding work during the 2014 West Africa Ebola outbreak. Our EP staff conducted internal training and exercises for our staff; planned and led a regional Ebola tabletop exercise with more than 60 participants from the East Tennessee region; directed a full-scale Ebola exercise with more than 30 health care organizations across the region; and assisted all area hospitals and emergency medical services with internal preparedness, planning and exercises during this time. The Ebola epidemic 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 and communication efforts for any public health threat.

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.



CONDUCT HEALTH EDUCATION AND OUTREACH

Public health officials across the nation are working to transform the way our country views and approaches health. We need a greater focus on prevention and wellness so we don't need treatment as often. We need to make sure everyone in all communities has the chance to make healthy choices. And that's just what several of our divisions do every day.

Made up of public health educators and experts, the Community Health division works to encourage system changes that create a culture where healthy lifestyles are the norm. They also provide information to the public about health risks, disease prevention and wellness. This division's work covers a wide range of topics and includes chronic disease prevention, violence prevention, tobacco control, HIV/STD prevention, child and teen health promotion, and much more.

Two excellent examples of this department's work include the SAIL and NEAT programs. The SAIL, or Stay Active and Independent for Life, program was created to reduce falls among senior adults, which are the leading cause of fatal and nonfatal injuries for this age group. The program trains community instructors and recruits facilities to offer evidence-based fall prevention classes. There are currently six SAIL classes in Knox County at several senior centers and churches.

Created to combat childhood obesity, the NEAT, or Nutrition Education Activity Training, program is designed to promote healthy eating and physical activity to children. The program reaches more than 2,300 children in afterschool programs who are at high-risk for developing unhealthy lifestyles. Seeking to enhance the program and create healthy environments, we developed the NEAT Approved designation, which couples policies for nutrition and physical activity with role modeling. To date, more than 20 afterschool sites have achieved the NEAT Approved designation.

Funded by the U.S. Department of Agriculture, the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) provides nutrition and breastfeeding education, growth screenings, vouchers for healthy foods, and referrals to community resources. This program improves birth outcomes, decreases anemia, and lowers the risk of obesity for participants. During the 2014/2015 fiscal year, our WIC Program served more than 17,000 Knox County residents. WIC also facilitates the Knox Breastfriends Group, a support group for breastfeeding mothers and their babies. This group reaches nearly 2,000 breastfeeding moms through the Facebook page and meets in person monthly.

Health care has only a 10 percent impact on the causes of premature death.

Epidemiology is the study of patterns in health-related events in society.



ASSESS POPULATION HEALTH AND INVESTIGATE DISEASES

To effectively respond to our community's health issues, we must have a deep understanding of the challenges we face. Our epidemiology division leads this investigative work by studying health-related events in society and searching for trends and patterns. They collect data, analyze existing data and share this information with the community. This comprehensive work hit a high point recently with the release of our 2014/2015 Community Health Assessment, which involved more than a year and a half of data collection and analysis. The assessment outlines our community's priority health issues. Releasing this report is a crucial step in building a healthier community. This information helps our staff and our partners evaluate community needs and program performance, make policy decisions, and plan for the future.

Our epidemiology division also monitors 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 further 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.

In 2014/2015 per the Centers for Disease Control and Prevention's (CDC) nationwide active post-arrival monitoring program, our epidemiology staff monitored 12 travelers returning from the West African countries affected by Ebola. Our staff made direct contact daily for the 21-day monitoring period to check for symptoms as required under the CDC program.

Our epidemiologists also investigated 12 outbreaks last year with two being interstate investigations. An outbreak is defined as two or more cases of similar illness that have a common exposure. The primary causes of last year's outbreaks included norovirus, salmonella and cryptosporidium. These illnesses can be prevented with general infection control measures, such as proper hand washing. Outbreaks can happen anywhere, including public pools, assisted living facilities, day cares, churches, restaurants, schools and many other locations. The variation in setting and source of infection sends an important message to our community: Good hand 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 larger community...”

– Howard K. Koh, MD, MPH



PROVIDE AND CONNECT CARE

We provide several areas of preventive care and treatment including family planning services, breast and cervical cancer screening, HIV/AIDS testing and treatment, immunizations, STI screening and treatment, and others. Services are provided by 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 conducted more than 2,100 patient encounters during the 2014/2015 fiscal year.

Focused on reducing the impact of sexually transmitted infections and tuberculosis, our Communicable Disease Clinic conducted more than 10,300 patient encounters in the 2014/2015 fiscal year. Services include confidential screening, treatment and education.

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 6,400 patients during the fiscal year.


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.

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.

Our Home Visiting Services consist of social counselors and nurses who promote child health, safety and development, while also working to prevent child abuse. Conducting more than 1,200 office and home visits in the 2014/2015 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 operate two satellite public health centers in West and North Knoxville. Services at these offices include well check-ups for children on TennCare; immunizations; newborn screening tests; women’s health services; and screening and testing for sexually transmitted diseases.

In addition, we help ensure access to health care services for our community through other providers. One example is our contract with Cherokee Health Systems to provide primary care to qualified, low-income residents through the Knox County Indigent Care Program. To support this effort, our Social Services division provides case management for those enrolled in the program, a service that is designed to improve patient outcomes.



Public Health Law is a vital tool in ensuring the conditions in which every resident can be healthy.

PROTECT HEALTH

Our Environmental Health and Air Quality Management divisions enforce public health laws to prevent and reduce potential health threats. By helping ensure cleaner air and safer food, these laws help create some of the conditions needed so that every Knox County resident can be healthy.

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.

In 2015, the State updated the Tennessee Food Code for the first time in nearly 30 years. Our Environmental Health staff worked with every Knox County restaurant and grocery and convenience store to educate their staff on the significant changes to the food code, which focuses more on risk factors that have the potential of causing foodborne illnesses.

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; and permitting of air contaminant sources, such as boilers, manufacturers, gas stations, dry cleaners and many others. This work culminated recently with Knox County achieving attainment, a U.S. Environmental Protection Agency designation meaning that our air quality meets the national standard.

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



Population health can't be mandated by one authority, but is the responsibility of the entire community, working together.

BUILD PARTNERSHIPS

By serving as a catalyst for partnerships with a variety of organizations and coalitions, we can have a profound impact on the health of our community. A great deal of our work centers on building and maintaining these relationships and combating issues together. Our coalition work 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, the FAITH Coalition, Food Policy Council, Knox Adolescent Partners in Prevention Initiative (KAPPI), Knox/East Tennessee Healthcare Coalition, and others.

One example of our partnership work comes from our Women's Health Clinic and Community Health division, who together developed a program with Renaissance Recovery Group, Helen Ross McNabb and the Knox County Detention Center to provide family planning services and education to women. The education centers on a variety of harmful behaviors during pregnancy, including the dangers of opiate use. The effort is one intervention we've implemented to help address the increase in Neonatal Abstinence Syndrome (NAS) cases.

To learn more about NAS, our epidemiology division recently partnered with the University of Tennessee's Department of Public Health to research the facilitators and barriers for obtaining birth control among opioid-dependent women in methadone-assisted treatment. Data from nearly 300 respondents were collected and analyzed, and shared with the Tennessee Department of Health.

Our Health Planning staff partnered with Nourish Knoxville to increase access to fresh fruits and vegetables among SNAP/EBT recipients. Together, we were able to bring in the U.S. Department of Agriculture (USDA) who held an educational session for our local farmers. This session provided farmers with information on the USDA's free resources, such as card readers, that help farmers accept SNAP/EBT benefits. More than 30 local farmers and five farmers markets signed up at the event to receive the free equipment.

Our Health Promotion division partnered with the Walter P. Taylor Boys and Girls Club of the Tennessee Valley to launch a program for girls in fourth to eighth grade. The goal was to prevent teen pregnancy by normalizing healthy behaviors, teaching self-care and self-respect, and connecting youth to positive role models. KAPPI members plan program sessions and activities.

Our Tobacco Use Prevention and Control staff partnered with local health care practitioners to provide them with the evidence-based 5A's training. The 5A's (Ask, Advise, Assess, Assist, Arrange) is a brief tobacco intervention that providers can quickly adopt in their practice to help their patients quit. The training encourages providers to help users plan their quit attempt and stay in contact with their patients, providing a supportive role.



2014/2015 ACCOMPLISHMENTS



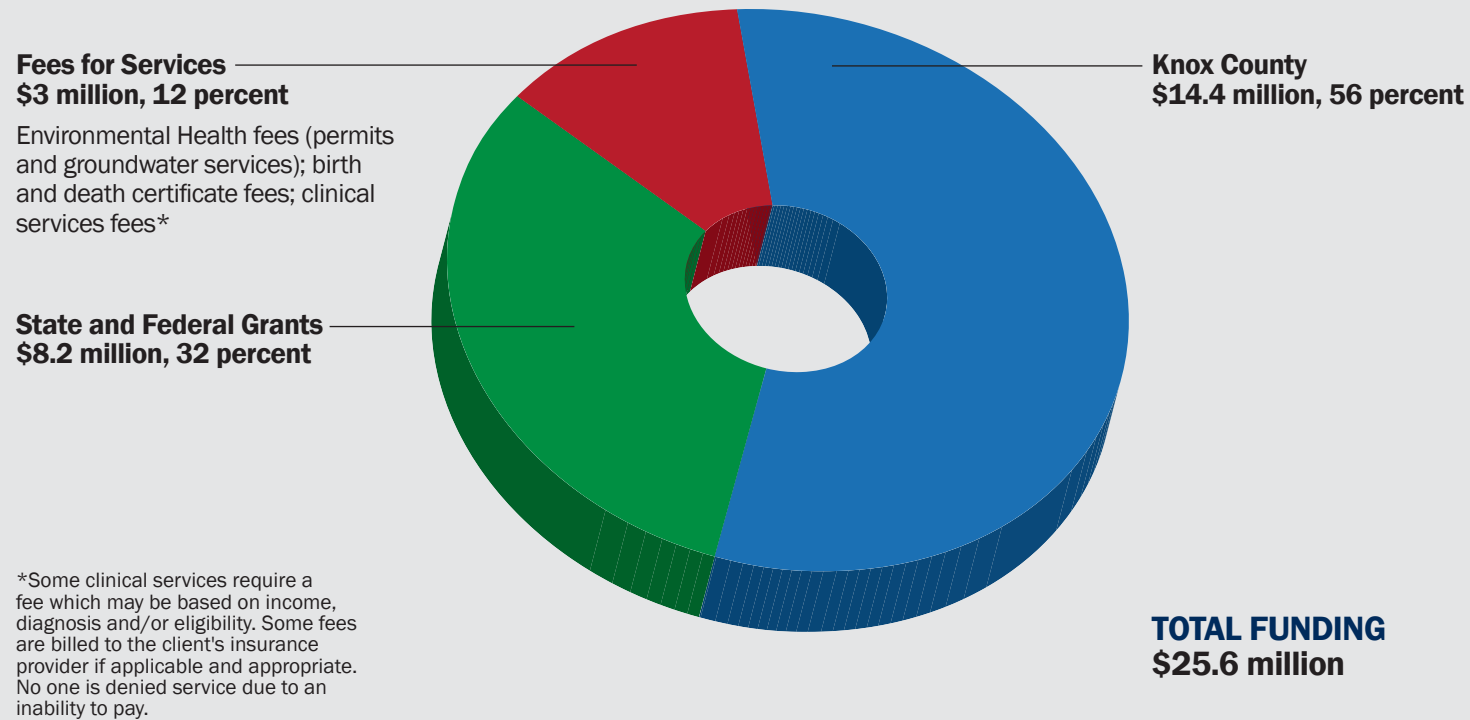
2014/2015 ACCOMPLISHMENTS

- We coordinated a waterborne illness tabletop exercise, one of the first of its kind in the state, that focused on critical infrastructure issues. A key facilitator for the Knox/East Tennessee Healthcare Coalition, our Emergency Preparedness staff coordinated the exercise with more than 150 participants from regional health care organizations, linking them with their water utility district, emergency management representatives, and ancillary water-dependent organizations (such as dialysis centers). Numerous lessons were learned and improvement plans are being implemented today, based on the information shared during the exercise.
- To improve access and remove barriers to care, we partnered with the Viral Hepatitis Division of the Tennessee Health Department to offer free Hepatitis B vaccinations to persons incarcerated at the Knox County Detention Center.
- To educate the public about Ebola, we partnered with regional hospital systems and other health organizations to host an unprecedented community forum on Ebola. Broadcast by local media, the forum provided accurate and timely information to address community concerns. Medical experts from each partner organization discussed the disease, its treatment and the collaborative measures being taken to deliver the best possible response, if ever needed, to protect population health.
- We collaborated with approximately 35 area lactation consultants to redesign our Community Breastfeeding Resources Guide, with the goal to make it more attractive to both providers and mothers. The language was simplified and information on Tennessee laws that protect public breastfeeding was added. More than 6,400 guides were distributed to thirteen perinatal practices and hospitals. Breastfeeding is a public health priority because of its significant benefits for both mother and child, not the least of which is a reduced risk of obesity for the child.
- Our epidemiology staff released its Health-Related Quality of Life Survey and completed the data collection for its 2014 Knox County Behavioral Risk Factor Survey (BRFS). The quality of life survey evaluated the overall birth and mortality trends in Knox County, the prevalence of major forms of chronic diseases, and other factors affecting the health and well-being of Knox County residents. The BRFS includes information from more than four thousand

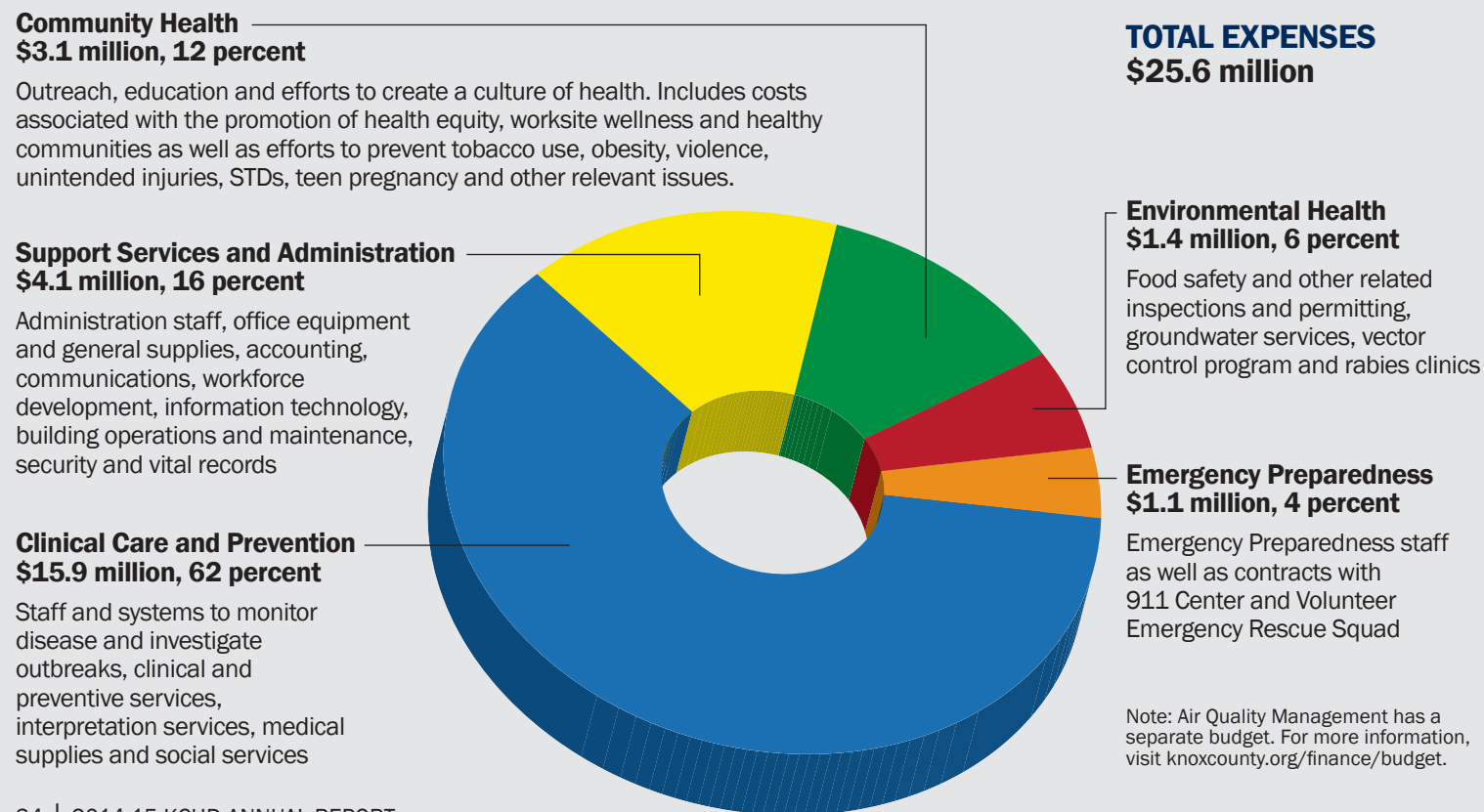
Knox County adults on a wide variety of health-related behaviors and risk behaviors. This is the fourth time the BRFS has been collected locally in Knox County and the first time that the sampling methodology included cellphone-only households. Both reports contributed to the health department's Community Health Assessment.

- We launched an initiative to mobilize our community for cancer prevention by encouraging HPV vaccination. The initiative works with pediatricians, cancer survivors, parents and youth-serving professionals to increase awareness and acceptance of the vaccine. Supported by a grant from the National Association of City and County Health Officials, the initiative is planning professional education programs and a social media campaign for the coming year.
- The National Association of Counties (NACo) selected Knox County as one of three counties in its first-ever County Health Learning Challenge. The team, led by Knox County Health Department staff, was selected because of "the short- and long-term vision of the county in improving the built environment, the proven ability to collaborate across the county and its understanding of the needs of the community."
- We launched a very successful Walking School Bus in the Karns community with the support of school officials, the school PTA and community members. This comes after Knox County Engineering and the health department celebrated the construction of more than a mile of sidewalk in Karns in May 2013. The Karns Walking School Bus is one of four established Walking School Bus programs at Knox County elementary schools.
- The East Tennessee Wellness Roundtable (ETWR) is a leader in providing evidence-based worksite wellness professional development opportunities in Knox County. As the facilitating agency for ETWR, we increased community participation in this initiative by nearly 50 percent last year. The group's membership includes approximately 400 local worksite wellness professionals from more than 200 area businesses. Members were offered presentations by experts on topics such as improving employee utilization of mental health services, prescription drug abuse and many others. Worksite wellness is a public health priority because a healthy workforce reduces healthcare costs, has improved productivity and fosters a positive entrepreneurial climate.

2014/2015 KCHD FUNDING SOURCES



2014/2015 KCHD OPERATING EXPENSES



FINANCE

The Knox County Health Department serves a population of 436,929, according to the 2011 report of the U.S. Census Bureau. In the 2014/2015 fiscal year, KCHD had an operating budget of approximately \$25.6 million.

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

