



Metro Public Health Dept

Nashville / Davidson County

Annual Report

***People Creating Healthy
Conditions Everywhere***

Karl F. Dean
Mayor

William S. Paul, MD, MPH
Director of Health



NashVitality
*The spirit of a
healthy, active and green city*

December 2011

Our Governance

A six member Board of Health, appointed by the Mayor and confirmed by vote of the Metro Council, governs the Department. Current members are:



William Hance, JD, Chair

Assistant Vice Chancellor for Medical Center News and Communications,
Vanderbilt University Medical Center



Ruth C. Stewart, MD, Vice Chair

Clinical Faculty Family Medicine Physician, Meharry Medical College



Henry W. Foster, Jr., MD, FACOG

Professor Emeritus, former Dean and Vice President for Medical Services,
Meharry Medical College
Clinical Professor, Obstetrics and Gynecology, Vanderbilt University



Carol Etherington, MSN, RN, FAAN

Director of Global Health Studies, Vanderbilt University School of Medicine
Assistant Professor of Nursing, Vanderbilt University School of Nursing



Samuel L. Felker, J.D.

Attorney, Bass, Berry & Sims, PLC



Alicia Batson, MD

Psychiatrist, Centerstone



Samuel O. Okpaku, MD, PhD, Secretary

Clinical Professor, Vanderbilt University
Lifetime Board Diplomat, American Psychiatric Association
Served fifteen years on the Board, from October 1996 through July 2011

Table of Contents

Message from Mayor Karl F. Dean	2
Message from the Health Director and Board Chairman	3
MPHD Vision, Mission, Values and Functions	4
MPHD Report on Goals	5
Goal One: Improving Health and Well-being of Children.....	6
Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville	8
Goal Three: Ensuring Cleaner Air and a Safer Environment.....	12
Goal Four: Preventing, Detecting and Alleviating Outbreaks and Emergencies	14
Goal Five: Improving Access for Everyone to Needed Preventive, Medical and Behavioral Health Services	16
Service Locations	17

Cover photo of Nashville skyline: Gary Layda, Metropolitan Government

Message from the Mayor



As Mayor of Nashville, I am committed to helping Nashvillians lead healthier and more active lives. I greatly appreciate the work that the Metropolitan Public Health Department, Dr. Bill Paul, and the Board of Health have done to help work toward this goal.

Many people in Nashville are stepping up to the challenge to live healthier lives. In 2011, I issued the 100 Mile Challenge, which encouraged the people of Nashville to join me in walking 100 miles in our city's beautiful parks and greenways. The response was impressive: more than 4,000 people answered the challenge and, together, walked a total of 106,334 miles.

The Health Department's Communities Putting Prevention to Work (CPPW) initiative has implemented many projects that will make Nashville a healthier place for years to come. *Nashville GreenBikes*, a recreational bike-share program that provides free beginner bikes at locations throughout the city, has become so popular that we

are in the process of adding more locations. Community and school gardens are being strengthened and effectively sustained across the county. In addition, corner stores in food desert communities are beginning to offer fresh fruits and vegetables, as well as other healthy foods.

This is an exciting time for Nashville. Individuals, advocacy groups and Metro government are all working together under the umbrella of *NashVitality* to help Nashvillians make healthy choices every day.

The Health Department continues to touch people throughout Nashville in many ways that promote health and wellbeing. Nashville is a great place to live and work, and I commend the dedicated staff of the Health Department for their efforts to improve the health of our community.

Sincerely,

A handwritten signature in blue ink that reads "Karl F. Dean". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Karl F. Dean
Mayor

Message from the Health Director of Metropolitan Nashville and the Board Chairman

Public health touches everybody, not just the people who walk into our buildings. Cleaner air, safe restaurants, and protection from epidemics benefit all of us.

When Public Health works, sometimes it is easy to forget.

Epidemic diseases that used to disable children and strike fear into communities are now an afterthought because of infant immunization programs.

The WIC program now touches over half of the babies born in Nashville, and because it is successful, some might forget that the program helps fill gaps that were leading to malnutrition only a few decades ago.

A ten year investment in oral disease prevention in high-need schools here in Nashville has improved the percentage of K-8 children who are free of oral disease from 56% in 2001 to 79% in 2010. This means thousands of children are spared long term severe complications of preventable oral disease.

Our epidemic challenge for this generation is chronic disease, which for many of us is rooted in tobacco use, poor diet, and lack of physical activity. With the Communities Putting Prevention to Work project and the Nash-Vitality Campaign, Nashville has had a phenomenal opportunity to create healthier conditions where chronic disease is prevented, and to demonstrate the value of investment in public health.

Hospital bills and other medical costs easily add up to thousands of dollars, so it is reasonable to say that preventing a few hospitalizations saves a lot of money. That is what we are beginning to hear: people who started regular physical activity during the Mayor's 100 Mile Challenge have told personal stories of taking less medicine, needing fewer visits to the doctor, and being more productive at work.

Investment in public health and prevention does pay off. A study published in the August 2011 issue of *Health Affairs* suggested that public health investments at the local level correlate with community health outcomes.

As leaders of public health in this community, we are proud of the work accomplished by our dedicated staff. We are grateful to Mayor Karl Dean for his leadership and support. We also thank members of the Metro Council, other elected officials, members of the Board of Health, and every citizen that contributes to our community's effort to improve health in Nashville and Davidson County.

Thank you for taking the time to read our annual report and review our efforts to make Nashville a healthier city.



William N. Hance, JD
Board Chairman



William S. Paul, MD, MPH
Director of Health

A handwritten signature in blue ink, appearing to read "William N. Hance".

A handwritten signature in blue ink, appearing to read "William S. Paul".

Our Vision: People Creating Healthy Conditions Everywhere

Department Mission:

To protect and improve the health and well-being of all people in Metropolitan Nashville.

We Take PRIDE in Our Core Values:

Professionalism: We are well-trained, knowledgeable, capable and focused. We strive for excellence and innovation. We are accountable.

Respect: We listen. We care about our customers. We care about one another. We are courteous, friendly, attentive, prompt and effective in serving our customers, our partners and one another.

Integrity: We are honest, trustworthy and consistent. We are good stewards of the public resources in our care.

Dedication: We are passionate about providing excellent service. We are always available to protect the health and well-being of our customers and community.

Equality: We value diversity in our managers, team members, customers, and partners. We treat our customers, our partners and one another with fairness and impartiality. We accommodate the special needs of our customers. We strive to eliminate disparities and aim for equity and justice in health.

The Metro Public Health Department contributes to the health and safety of the city by working to:

- Identify, analyze and track public health conditions to help guide public health action
- Provide leadership in efforts to make the city a healthier place
- Efficiently deliver high-quality public health services
- Advocate for and enforce policies and laws that promote health
- Build partnerships that improve the reach and effectiveness of community action to improve health
- Respond to public health emergencies, including communicable disease outbreaks, terrorism and natural events

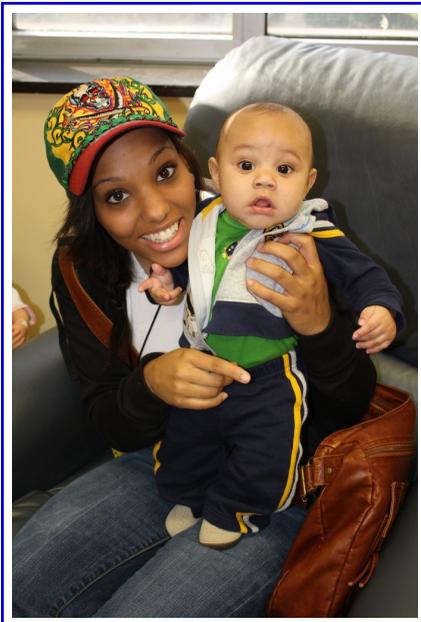
MPHD Report on Goals

Goal One: Improving the health and well-being of children	2006	2007	2008	2009	2010
Percent of infants born with low birth weight	9.8%	9.3%	8.7%	9.1%	NA
Number of preventable child deaths (0 -17 yrs)	22	29*	24	25	NA
Percent of 24-month-old children adequately immunized against preventable disease	85.5%	84.5%	81.70%	79.5%	72.6%
	2006-07	2007-08	2008-09	2009-10	2010-11
Percent of school children evaluated that are overweight/obese (Coordinated School Health)	27.7%	23.6%	36.10%	38.10%	38.20%
	FY2007	FY2008	FY2009	FY2010	FY2011
Percent of children evaluated who are free from untreated oral disease	68.4%	73%	74%	77%	79%
Goal Two: Increasing physical activity and healthy eating and reducing tobacco use in Nashville	2005	2006	2007	2008	2009
Percent of adults who are current smokers — Behavioral Risk Factor Surveillance System (BRFSS)	21.2%	–	–	22.4%	20.4%
Percent of adults who are overweight or obese (BRFSS)	64.2%	–	–	60.5%	68.0%
Percent of adults who exercise (BRFSS)	71.3%	–	–	75.9%	74.1%
	2002-03	2006-07	2008	2009	2010
Percent of high school students who smoke — Youth Risk Behavior Survey	23.0%	21.3%	NA	NA	12.8
Goal Three: Ensuring cleaner air and a safer environment	2006	2007	2008	2009	2010
Percent of days with air quality in good to moderate range	97.5%	95.9%	99.2%	100%	99.7%
Number of animal bites	707	732	868	779	633
Number of animals impounded	13,251	13,210	13,433	12,955	12,437
Number of animals spayed and neutered	748	1,092	994	994	948
Number of adoptions		1,702	1,359	1,338	1,148
Goal Four: Preventing, detecting and alleviating outbreaks and emergencies	2006	2007	2008	2009	2010
Rate of active tuberculosis cases (per 1,000)	10.4	9.8	11.9	9.8	6.1
Rate of primary and secondary syphilis (per 100,000)†‡	5.9	12.0	13.0	11.5	9.1
Number of persons tested for HIV	9,139	9,249	6,943	9,389	14,484
Goal Five: Improving access for everyone to needed preventive, medical and behavioral health services	2006	2007	2008	2009	2010
Number of HIV patients receiving care	2,595	2,663	2,590	2,390	2,651
Number of HIV/AIDS related deaths	61	57	46	41	NA
Number of uninsured clients linked to medical and mental health services	9,820	9,589	3,962	4,895	4,408

*Unconfirmed or provisional • †MPHD Division of Epidemiology analysis of STD data from STDMS (morbidity records) for 2006 - 2007. State level data from Tennessee Department of Health (NETSS). • ‡2008 revision of population estimates from the Tennessee Department of Health (TDH) Office of Health Statistics used to calculate local and state rates. • Dates denote calendar year if not specified otherwise. FY = Fiscal Year. NA = Not Available

Goal One: Improving Health and Well-being of Children

- 12,337 Child Preventive Health Visits (physicals, head lice, immunizations) were provided
- 6,075 home visits were completed, providing at-risk households with education, services, resources, and compassion to help reduce infant mortality
- 1,863 young adults received education related to healthy choices and healthy lifestyles
- 4,243 high school students received education related to public health careers
- Over 168 youth participated in step teams at 12 community centers across Davidson County. Youth benefited from the physical exercise, team interaction, health education and nutrition. Step teams perform precision movements while reciting positive health messages
- 2,499 adolescents received education related to healthy choices and healthy lifestyle
- 103 parents received education to support youth in making healthy and responsible decisions
- 1,661 children received Early Periodic Screening Diagnosis and Treatment (EPSD&T) Physicals
- 100 children received car seats through home visiting programs



Goal One: Improving Health and Well-being of Children

- School nurses completed 75,023 medical procedures in Davidson County schools, enabling children with chronic health conditions to attend school
- 27,657 children were seen in school clinics

School Nurses Help Children Stay in School



School Nurses provide essential procedures for children with chronic health conditions.

In addition to providing scheduled medications, school nurses also provided the following:

- 6,905 injury/first aid visits
- 15,862 illness assessments
- 22 mental/behavioral health support visits
- 141 individual health education visits
- 4,628 other health-related encounters

School Oral Disease Prevention Program

- Health Department dental hygienists provided personal oral health education to 17,615 students in Title I schools
- 11,188 students received dental screenings in our community
- 24,443 sealants were placed on children's teeth to protect them from tooth decay
- A 10-year investment in oral disease prevention improved the percentage of K-8 children who are free of oral disease from 56% in 2001 to 79% in 2010



Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

Communities Putting Prevention to Work (CPPW)

On March 19, 2010, MPHD was one of 44 communities in the country to be awarded a CPPW grant to address healthy eating and active living through policy, systems, and environmental change strategies.

CPPW assisted with the following initiatives:

- Mayor Karl Dean signed an Executive Order formalizing Nashville’s “Complete Streets” policy, ensuring that public streets are built to accommodate all modes of transportation, including walking, bicycling and mass transit.
- November 2010, Nashville Public Television aired a one-hour episode NPT Reports: Children's Health Crisis - Obesity. Surgeon General Regina Benjamin was on hand to launch the episode.
- In December, 2010 Nashville formed a Food Policy Council. The Metro Council passed a Food Policy Council Resolution in January 2011.
- In February, 2011, the “School Nutrition Advisory Committee” officially formed under the Alignment Nashville structure to increase healthy options on the lunch trays.
- In February 2011, CPPW announced the opportunity for individuals and organizations to develop initiatives that increase access to healthy eating and active living within their community. Five awards totaling \$105,275 were announced in March: Good Food for Good People (\$6,000 and \$25,000) Vanderbilt Castles (\$25,000), African American Cultural Alliance (\$25,000), and Corinthian Baptist Church (\$24,275).



Surgeon General Regina Benjamin helped launch Nashville Public Television’s episode “NPT Reports: Children’s Health Crisis – Obesity.”

Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

Communities Putting Prevention to Work (CPPW)

On March 22, 2011, Nashville's Mayor Karl Dean officially launched NashVitality, a city wide campaign, to promote healthy, active and green opportunities for everyone in Nashville. Created in partnership with Metro Public Health's CPPW campaign and multiple community partners, the campaign supports stated goals that include improving school food, implementing a bike-share, promoting active living, building school and community gardens, fostering healthy corner stores and providing access to greenways. The campaign is posted on the NashVitality website (www.nashvitality.org) which serves as a hub for information about healthy living in Nashville.

Mayor Dean kicked off the NashVitality campaign with a "Walk 100 miles with the Mayor challenge." Over 4,000 Nashvillians participated in the challenge, completing over 105,999 miles during a six-week time period.



The NashVitality campaign placed advertisements like the one above in highly visible locations such as local print media and billboards to promote a healthy, active and green spirit.



Mayor Karl Dean speaks at the launch of NashVitality and the Mayor's Walk 100 Miles Challenge. Joining Mayor Dean were Dr. Bill Paul, then Tennessee Commissioner of Health Susan Cooper and Calvin Anderson, Blue Cross Blue Shield Vice President of Corporate Affairs.

Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

34,933 clients were screened for tobacco use in all MPHD clinics

Eliminating Exposure to Secondhand Smoke: Promotion of smoke-free environments

- 73 smoke-free home and car policies were signed by individuals (July 1, 2010, thru June 30, 2011)

Enforcement of the Tennessee Nonsmoker Protection Act

- The MPHD's Food Protection Services Division enforces the Tennessee Nonsmoker Protection Act in all food establishments that fall under its authority for inspections
- MPHD's Food Protection Services Division issued 446 advisory letters and nine warning letters. No civil fines were assessed

Preventing Youth Tobacco Use

- Tobacco Retailer Noncompliance Rate (percentage of retailers in Davidson County cited for selling tobacco to minors, data from the Tennessee Department of Agriculture's Tobacco Enforcement Program), rose from 3.28% in 2009 to 4.32% in 2010, although still under the 2010 state average of 10.09%

Davidson County Tobacco Data: Adult Tobacco Use (BRFSS)

Adult tobacco use in Davidson County fell to 20.4% in 2009, below the 2009 Tennessee use rate of 22%, but above the national rate of 17.9%



Step teams promote healthy messages.

Goal Two: Increasing Physical Activity and Healthy Eating and Reducing Tobacco Use in Nashville

Walk to School Day

Sixty-five Metro Nashville Public Schools participated in the International Walk to School Day event, which was one of eight events during the 12th Annual Walk Nashville Week.



Breastfeeding Welcomed Here

In May, 2011, the Metro Board of Health signed a resolution in support of community actions to increase breastfeeding rates in Davidson County. Following this resolution, the CPPW Community Breastfeeding Work Group launched the "Breastfeeding Welcomed Here" initiative. Over 30 local businesses took the pledge to provide a welcoming environment for breastfeeding mothers and to educate their staff on the current law protecting a woman's right to breastfeed in public.



A Closer Look

Based on the 2009 BRFSS, in Davidson County, more men are current smokers (24.5%) compared to females (16.8%). Non-Hispanic black residents (19.6%) report being current smokers less frequently than non-Hispanic white residents (21.6%). Educational attainment is inversely related to one's smoking status: 41.2% of residents with less than a high school education report they are current smokers compared to just 7.6% of residents who graduated from college or a technical school.

Having smoked a cigarette in the past 30 days has declined sharply among high school students based on the 2010 Youth Risk Behavior Survey when 12.8% reported this behavior compared to 21.3% in 2007.

Goal Three: Ensuring Cleaner Air and a Safer Environment



Metro Public Health Department is required by the Board of Health Regulation No. 9 and a Metro Ordinance to evaluate Metro Public School buildings and other Metro buildings for radon. During the past fiscal year, 62 schools and 45 other public buildings were tested for radon. In addition, retests after diagnostics and mitigation activities are ongoing in buildings where radon levels met or exceeded EPA action levels.

Of the 1,237 persons trained to manage food service operations, 15 spoke Chinese, 74 spoke Spanish, and 1,148 spoke English. Nashville's growing diverse population requires that training classes be offered in several different languages.

Animal Control

- 17,591 complaints from citizens were answered
- 581 animals were returned to their owners
- 17,860 citizens visited the shelter
- 1,148 adoptions represent a decrease of 4.4% from 1,198 in FY10 (decrease is thought to be due to economic conditions)

Food Protection

- 13,378 food service establishment inspections were conducted
- 564 complaints and service requests were answered
- 738 food service permits were issued
- 1,237 persons were trained to manage food service operations

Public Facilities and General Sanitation

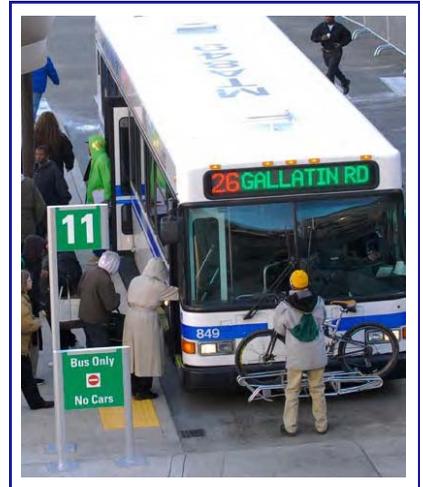
- 13,345 premises were inspected for pests and rodents
- 683 swimming pools were inspected
- 703 hotels/motels were inspected
- 767 child care centers were inspected
- 194 schools were inspected
- 1,337 mosquito batches were tested for West Nile virus
- 200 homeowners learned how to protect themselves from biting mosquitoes during Backyard Inspection Day
- 3,734 health violations were detected and notices issued
- 2,549 health violations were abated

Goal Three: Ensuring Cleaner Air and a Safer Environment

- Nashville met National Ambient Air Quality Standards 364 out of 365 days during the past fiscal year.
- MPHD continues to partner with the Mayor's Office regarding Nashville's greenhouse gas emission inventory. We are currently assisting the Mayor's Office in selecting a contractor to update the inventory and develop a data collection tool to be used in the future to streamline the inventory process.

Air Quality

- 578,513 vehicles were inspected
- 2,736 inspections were performed
- 53,063 ambient air samples for various pollutants were collected
- 895 operating permits were issued to air pollution sources
- 76 complaints from citizens were handled
- 208 asbestos removal permits were issued



Combining the use of public transportation with walking or biking produces a cleaner environment, saves money, and increases physical activity

Air Pollution: Recommendations For Everyone

- Utilize public transportation
- Encourage individuals and organizations to create and implement policies related to reducing emissions
- Walk to work, library, grocery store, a friend's house
- Encourage ride sharing/carpooling
- Consider four day work week/flexible scheduling/telecommuting
- Designate "green" parking spaces for those who carpool or drive high-efficiency (fuel-flex, bio-fuel or hybrid) vehicles and covered bike parking

Goal Four: Preventing, Detecting and Alleviating Outbreaks and Emergencies



Immunizations (July 1, 2010, through June 30, 2011)

- 16,185 children were immunized through our Fast Track and preventive health clinics
- 6,972 vaccinations were administered through our adult immunization program
- 11,679 flu shots were given

The rate of TB in Davidson County during 2010 was 6.1 per 100,000 compared to a statewide rate of 3.0 and a national rate of 3.6 per 100,000.

Tuberculosis Control (2010 Calendar Year)

- 41,034 services were provided to persons receiving care through the TB Elimination Program
- 21,768 TB program visits were delivered
- 382 persons who were at risk due to close contact with TB patients were identified and evaluated for infection
- 991 persons received their TB treatment via directly observed therapy or directly observed preventive therapy

Sexually Transmitted Diseases and HIV/AIDS (2010 Calendar Year)

- 18,932 STD clinic visits were completed
- 244 HIV cases were reported to the Tennessee Department of Health
- 871 persons tested positive for chlamydia, syphilis and/or gonorrhea
- 1,597 field investigations were initiated and completed

Goal Four: Preventing, Detecting and Alleviating Outbreaks and Emergencies

Public Health Emergency Preparedness

The Public Health Emergency Preparedness (PHEP) Team continues to work within the Health Department and with public and private partners in the Nashville community to undertake the necessary planning and training to assure rapid, effective responses to emergency events.

Over the past year, MPH D's PHEP Team has:

- Designed, planned, and coordinated the city's first CHEMPACK exercise for the deployment of nerve agent antidotes throughout the city—a process that would be necessary following a large-scale bioterrorist event in Nashville.
- Enrolled 3,000+ volunteers into the Volunteer Mobilizer database to assist MPH D during emergency response efforts.
- Attained a 98% National Incident Management System (NIMS) compliance rate. NIMS training and documentation is federally mandated.
- Conducted Points of Distribution (POD) training for all MPH D employees. Employees now understand the purpose of PODs in rapidly dispensing medications to the Nashville and MSA population and the roles they would play during an emergency.
- Collaborated with businesses, facilities such as nursing homes and jails to develop plans for how these groups could assist their employees and those for whom they are responsible in the event of a terrorist action such as an anthrax attack.
- Allocated over \$600,000 from the MMRS grant to training, services and equipment to first responder agencies and community partners including Nashville Fire and EMS, First Harvest Food Bank, Metro Police Department and TN Poison Control.
- Improved its annual Technical Assistance Review (TAR) score from 62 in 2008 to 95 in 2010. The CDC designed this tool to measure progress in planning for countermeasure distribution and dispensing and to identify best practices and areas for improvement.



Staff train regularly in varied aspects of public health emergency preparedness.

Goal Five: Improving Access for Everyone to Needed Preventive, Medical and Mental Health Services

Based on the most current estimate, 98,464 Nashvillians are without health insurance.



WIC Program issued needed food vouchers to moms and children.



A senior citizen picks up a food package at Supplemental Food Warehouse.

Through the Bridges to Care and Pharmacy Program, WIC Clinics and a network of safety net providers, we work to assure that all Nashvillians, particularly the most vulnerable, have access to quality health care services

Bridges to Care

- 55,998 persons have been linked to a medical provider since the program's inception in February 2002
- 193,680 prescriptions have been filled (since 2002)
- 4,408 uninsured persons were linked to a regular source of primary care during FY 2011

Mental Health

- 987 people were screened for mental health and substance abuse issues
- 806 people were successfully linked to mental health and/or substance abuse services

Women, Infants, and Children (WIC) and Commodity Supplemental Food Program

- 39,872 food packages were provided to elderly persons
- An average of 18,211 persons per month were provided with WIC supplemental food vouchers and nutrition education services
- 218,540 WIC vouchers were issued.

Service Locations



Lentz Public Health Center
311 23rd Avenue North, 37203



Metro Animal Care and Control
5125 Harding Place, 37211

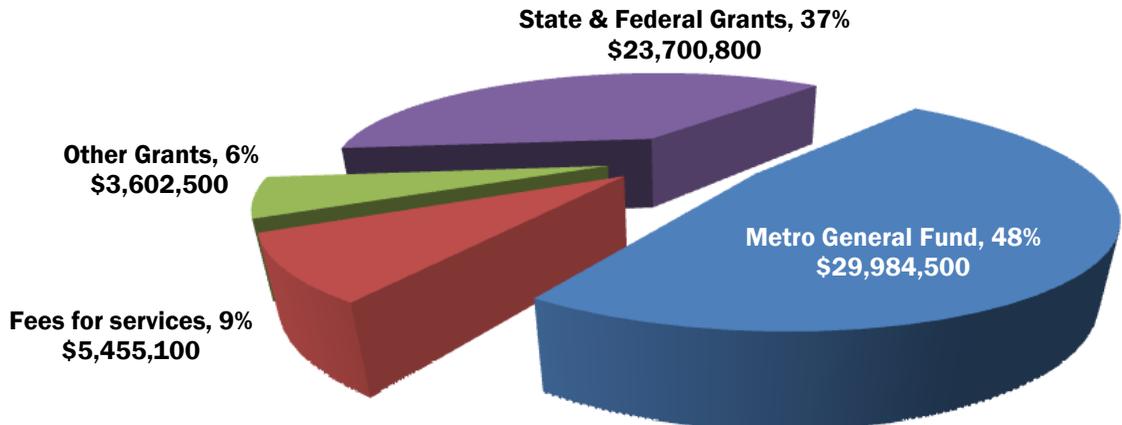
Woodbine Public Health Center
224 Oriol Avenue, 37210

East Nashville Public Health Center
1015 East Trinity Lane, 37216

Commodity Foods Warehouse
1417 Murfreesboro Road, 37217

South Nashville WIC Nutrition Center
3718 Nolensville Pike

Sources of Funding: \$62,742,900





Metro Public Health Department
311 23rd Avenue North
Nashville, Tennessee 37203
(615) 340-5616

www.health.nashville.gov

This report was prepared by Dr. Bill Paul, Jannie Williams, and Martha Bickley