

Report to Mayor Megan Barry

The Metropolitan Board of Health of Nashville and Davidson County

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March 23, 2016



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Protecting, Improving, and Sustaining Health



Metro Public Health Dept

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Megan Barry, Mayor

William S. Paul, MD, MPH, FACP
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March 23, 2016

The Honorable Megan Barry
Mayor of Metropolitan Nashville and Davidson County
100 Metro Courthouse
Nashville TN 37201

Dear Mayor Barry:

Section 10.104.6 of the Metropolitan Charter requires the Board of Health to “submit to the mayor, within six months after the beginning of each new term of office, a report upon the activities of the Metropolitan Board of Health and a comprehensive program of public health and indigent medical care.” Attached herewith you will find this Report.

The mission of the Health Department is broad—to protect, improve, and sustain health and wellbeing for all people in Metropolitan Nashville. The work of the agency is guided by the strategic plan and supports five Foundational Health Goals. These Foundational Health Goals correspond to key components of community health, and foundational capabilities of public health departments nationwide:

- Improve and Sustain Family and Child Well-being
- Promote and Support Healthier Living
- Create Healthier Community Environments
- Prevent and Control Epidemics and Respond to Public Health Emergencies
- Increase Access and Connection to Clinical Care.

Improving community health is not something MPHD or any other single organization can do alone. Beyond the operation of Department services, we work collaboratively with the community and across departments, organizations, and sectors to “diagnose” issues that impact health, wellbeing, and quality of life in our community, and facilitate and work on collaborative “prescriptions.” This means we believe we have a role as a full and vital partner and resource to you and the people of Nashville in advancing your priorities as they relate to health and well-being.

This Report is presented in three sections:

- 1) Examining Nashville’s Health;
- 2) Activities of the Metro Public Health Department; and
- 3) Collaborative Community Health Improvement in Nashville.

We thank you for your commitment to the health and wellbeing of our citizens, a commitment we share and value.

Sincerely,

Samuel L. Felker, J.D.
Chairman, Board of Health

William S. Paul, M.D., M.P.H., F.A.C.P.
Director, Metro Public Health Department

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I. Examining Nashville's Health

Davidson County has improved in health status in recent years, but our health and wellbeing face significant challenges. According to the [2016 County Health Rankings](#), Davidson County is the 13th healthiest county in Tennessee, but Tennessee ranks 43rd among the states. There is much room for improvement.

Any discussion of Nashville's health needs to recognize profound inequalities in health across our varied communities. Health rests on a foundation of safety, economic security, education, and autonomy, but many in Nashville are left behind when it comes to these fundamental social determinants of health. While many areas in Nashville are thriving and prospering, 30 percent of Nashville's children live in poverty. Nashville's life expectancy has been improving, but we are below the U.S. rate, and the least healthy Metro Council Districts experience rates of early mortality (death before age 75) that are at least five times higher than the healthiest ones (Chart 1). Inequality in health outcomes affects us in many ways, from infant mortality to HIV, from tuberculosis to diabetes.

Nashville's Health Indicators

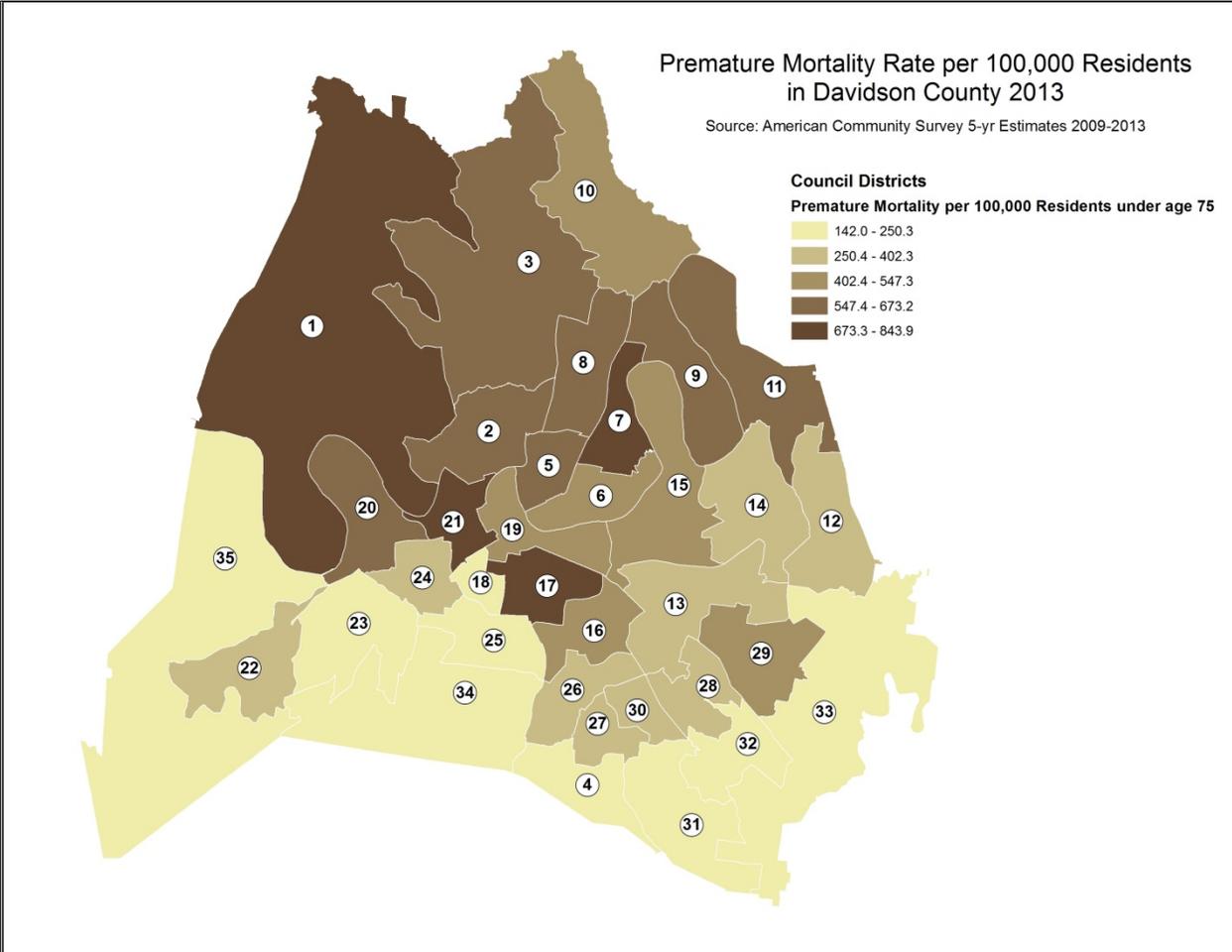
To size up our collective health we can look at a multitude indicators ranging from measures of medical care to measures of the fundamental determinants of health. Two resources that MPHD has made available for anyone to explore health in Nashville include the [Community Health Profile](#) and www.healthynashville.org, a portal that includes current data on many measures of our health and wellbeing, as well as content related to Nashville's Community Health Improvement Plan (CHIP).

Looking at Nashville's health indicators there are some selected observations about the conditions that shorten our lives:

First, the biggest sources of all deaths, and of years of life lost, are **chronic diseases** including heart disease, cancer, and stroke. These account for a majority of early deaths. These diseases and deaths are driven largely by tobacco use, lack of physical activity, and unhealthy diets. Medical care and health insurance are important but they have a relatively small impact on death from these chronic diseases. Policy, systems, and environmental changes that reduce tobacco use, facilitate and promote physical activity, and advance healthier diets are crucial if we want to save lives and close the disparities in illness and death.

Second, **violent death** (suicides and homicides) and **accidental death** (which includes drug overdoses and car accidents) kill fewer people than chronic disease does; but as more younger people are affected, these preventable conditions have a profound impact on years of potential life lost.

Chart 1. Premature Death (Death before age 75) per 100,000 residents, by Council District.



II. Activities of the Metro Public Health Department

Why We Exist:

The Mission of the Department of Health is to protect, improve, and sustain health and wellbeing for all people in Metropolitan Nashville.

Our vision is “People creating healthy conditions everywhere.” This statement describes the core work of the department across our community. It also reflects a vision of people across Nashville creating healthy conditions in their homes, neighborhoods, schools, churches, workplaces, and one where our government and community routinely create healthier conditions through policies and practices. Finally, we envision MPH and Metro as a healthy place to work.

What We Do:

The scope of the MPH does change over the years, in response to public decisions at the local, state, or federal level that mandate functions or allocate funding for community priorities.

The work of the agency is guided by the strategic plan and supports five Foundational Health Goals. These Foundational Health Goals correspond to key components of community health, and foundational capabilities of public health departments nationwide:

- Improve and Sustain Family and Child Well-being
- Promote and Support Healthier Living
- Create Healthier Community Environments
- Prevent and Control Epidemics and Respond to Public Health Emergencies
- Increase Access and Connection to Clinical Care.

How We Succeed:

Our work in public health is rooted in three basic principles:

- Based in data and evidence, using the best available science to inform our work
- Engaged with and responsive to the community
- Focused on prevention and improving the ‘upstream’ factors that drive health and wellbeing.

Public health strategies that change the environment or change policies or systems are a significant focus in public health. Familiar examples include fluoride treatment of water, immunization systems and policies, and improving air quality. Newer examples include considering health in design of neighborhoods, roads, and buildings; increasing the availability of healthy foods; and creating smoke-free residential communities. All of these approaches are designed to help make the healthy choice the easy choice and to make people’s default decisions healthy decisions.

Foundational Goal 1: Improve and Sustain Family and Child Well-being

The survival of our infants and the health and wellbeing of our children are key markers of our overall health as a community. Healthy children learn better, and people with higher educational attainment enjoy longer, healthier lives.

Indicators

Infant mortality and low birth weight reflect community wellbeing as much as or more than they reflect the quality of health care services in a community. While there have been modest improvements in infant mortality rate in Nashville, there is a striking racial disparity. African American infants are nearly twice as likely to die in the first year as are non-Hispanic white infants.

We have learned from our analysis of infant and fetal deaths in Nashville that the most important actions that can be taken to prevent them are to improve women's health before pregnancy, and to prevent sleep-related deaths by ensuring that every infant sleeps in safe conditions: alone, on their back, in a crib without soft items that could cause suffocation.

Services

Help Us Grow Successfully (HUGS). This state-funded program uses targeted case management and home-based intervention services to pregnant/postpartum woman, and children through age five. Home visitors screen for and identify potential problems, provide education and connect families with resources in their community. The HUGS program seeks to prevent or reduce risks, as well as promote health and wellness. Referrals to the program are received through the Central Referral Program of the Health Department.

Healthy Beginnings. This state funded program serves as Metro government's only evidence-based home visiting program for preventing abuse and neglect of children of first-time mothers living in Davidson County. Accredited by Healthy Families America, Healthy Beginnings supports families' improved health and wellbeing across the life course.

Family planning. Our family planning clinics at three sites serve more than 5,000 clients a year. Their mission is to prevent unintended pregnancy and improve pregnancy planning and spacing. The program provides preventive health exams and counseling, pregnancy tests, STD and HIV testing, emergency contraception and birth control.

School Health. The goal of the Public Health School Health Program is to promote student and staff health and wellness, which supports MNPS' efforts to improve academic achievement. The program comprises 60 registered nurses, 54 of whom are assigned to 137 schools: seven are at Harris Hillman and the remainder at a ratio of about three schools per nurse. The bulk of their work is providing skilled nursing services (tube feedings, catheterizations, diabetes care) as determined by the child's medical provider, requiring frequent shuttling from school to school. The nurses also identify students with medical conditions such as asthma, seizure disorders and allergies and develop Individual Health Plans (IHP) for each of these students. As time allows, the nurses also provide first aid with the aim of returning the student to class, if appropriate.

Women, Infants and Children (WIC). The WIC grant is among our largest, at about \$5 million a year. WIC is a national health nutrition program that served more than 30,000 Nashville residents last year. It provides nutrition education, breastfeeding promotion and education, monthly food prescriptions (packages) and referrals to improved access to social services. We operate four WIC clinic locations and have instituted a Mobile WIC program at 22 sites to make access easier, particularly for at-risk populations. WIC vouchers are redeemed in an amount exceeding \$14 million at local merchants (there are 94 vendors in Davidson County). We also operate in four area hospitals.

Collaborations

Fetal-Infant Mortality Review: A state-funded, MPH-led program that conducts comprehensive case reviews and maternal interviews for fetal and infant deaths. Findings of these reviews enable community members, health and social service providers, and policy makers to work together to improve systems of care and prevention for women and infants in Davidson County. One of the main analyses regularly performed is the Perinatal Periods of Risk Analysis, which helps us understand the factors that contribute to fetal and infant deaths, to identify gaps between population groups, and to identify specific possible interventions.

Alignment Nashville Children's Health Initiative: Alignment Nashville exists to improve the education and health of our community's youth by providing tools that bring the community together for more effective results than we could each accomplish alone. MPH provides leadership to the Children's health oversight committee as well as several subcommittees charged with developing initiatives to improve health and student outcomes. The initiatives are particularly focused on aligning resources in relation to MNPS. Committee projects include healthy starts, healthy eating and active living, behavioral health, primary care, adolescent sexual responsibility, and school food.

Child Death Review Team: The Child Death Review Team is a multi-agency group that reviews every death of a child who resides in Davidson County. The group strives to improve communication across relevant agencies, to enhance understanding of how and why children in our community die, and to make recommendations that help prevent future child deaths.

Accomplishments

MPH worked with Hospitals to change breastfeeding practices, and promotes and supports breast feeding through WIC. Community breast feeding initiation rates increased from 65.6% in 2010 to 83.5% in 2013

The Mobile WIC Program is an innovative approach to taking services to where the people are, and the Metro community has stepped up beautifully. Mobile Outreach promotes health equity and reduces health disparities, lowering barriers of time, cost and transportation. Our partners include MDHA, Nashville Public Libraries, Metro Parks, Center for Refugees and Immigrants of Tennessee, Casa Azafran, World Relief, Nashville International Center for Empowerment, several local churches, Millwood Manor Apartments, Progresso Community Center and the Branch Food Bank.

MPHD and other community agencies provide a variety of services that impact teen pregnancy. Nashville's teen birth rate has dropped by 63 percent in six years.

The Next 4 Years: Opportunities & Challenges

School Nursing Expansion: We are presenting a Public Investment Plan to increase the number of school nurses to be more in keeping with national guidelines. Nurses have a measurable impact on school attendance, and can help coordinate strategies for health issues that contribute to disparities and gaps in school performance. We would coordinate any expanded role for nurses with MNPS' strategies for student services (e.g., Community Achieves, Coordinated School Health).

Woodbine Replacement Facility: We have a need for a facility to replace the Woodbine Public Health Center the 87-year old school building that serves as our busiest site. We have developed a white paper that describes need in more detail.

Violence Prevention: The Healthy Beginnings program is an evidence-based program that aims to prevent Adverse Childhood Experiences and reducing inter-generational spread of unhealthy parenting. This could be one component of a longer term violence prevention strategy. MPH is working with partners to advance awareness and modify practices in clinical, nonprofit, and educational settings to better respond to Adverse Childhood Experiences (ACEs) and their impact on children's development.

Foundational Goal 2: Promote and Support Healthier Living

Nationally and locally, the top causes of chronic illness and death are unhealthy diet, physical inactivity, and tobacco use. Health behaviors impact 40% of early death, while health care impacts only 10-15%. Tobacco use is the number one preventable cause of death. Physical activity helps maintain a healthy weight and helps prevent many adverse health conditions. Children and adolescents aged 6-17 should have an hour or more of physical activity daily. Adults should do a minimum of 2½ hours of moderate-intensity aerobic activity weekly.

Indicators

Healthy Weight: Sixty-three percent of adults in Davidson County are overweight or obese as of 2013. A larger proportion of non-Hispanic black Davidson County residents are overweight or obese than non-Hispanic white residents. Coordinated School Health data for Davidson County estimate that about 35.6 percent of school children were overweight or obese in 2014, down significantly from 2008 but very similar to the rate in 2013. Being overweight is a risk factor for chronic illnesses including hypertension and diabetes, as well as adverse events such as heart attacks and strokes.

Breastfeeding Initiation: Breast milk is widely acknowledged to be the most complete form of nutrition for most infants, with a range of benefits for their health, growth, immunity, and development. This indicator shows the number of babies born in Davidson County who were ever breastfed. In 2013, 83.5 percent of babies born were breastfed at hospital discharge. This number shows an increase from the 2012 rate of 73.6 percent.

Tobacco Use: Roughly one in five Davidson County adults and about one in eight teen-agers smoke. Usage among teens is greater in white and Hispanics than in African Americans.

Services & Programs

The Tobacco Control Program includes the following activities:

- **Baby & Me Tobacco Free: Tobacco Free Program:** A smoking cessation program created to reduce the burden of tobacco use on pregnant and post-partum women and their babies.
- **Breathe Easy Campaign:** Seeks to work together with landlords, tenants, and the community to voluntarily increase the number of smoke-free multi-unit housing properties in Nashville.
- **Teens Against Tobacco Use (TATU):** A peer teaching tobacco prevention program that recruits high school students to mentor middle school youth about the dangers of smoking.
- **Clinicians Efforts Against Secondhand Smoke Exposure (CEASE):** Trainings and tools are available for pediatric clinicians to reduce children’s secondhand smoke exposure.

The Chronic Disease and School Health Promotion grant involves public health action to prevent and control diabetes, heart disease, obesity and associated risk as well as promote school health through nutrition, health, and physical education. Selected activities include

- Recruiting and training child care facilities to establish healthy policies and practices to become Gold Sneaker certified. To date, fourteen child care centers have succeeded.
- Promoting community gardens
- With MNPS, planning initiatives and events to promote healthful nutrition among students.

Collaborations

Nashville has a long history of collaboration to promote healthier living.

Healthy Nashville Leadership Council. Responsive to Mayor’s Executive Order #27, this group assesses Nashville’s health and systems that support or suppress it; prioritizes key public health issues, and recommends and facilitates implementation of strategies for improvement. See also section III, Collaborative Community Health Improvement.

Alignment Nashville. For children (especially in MNPS) Alignment Nashville’s Healthy Eating Active Living (HEAL) and Student Nutrition committees work to expand opportunities for children to eat healthy food and be active.

Health in All Policies. Facilitated by MPH, this collaboration among Metro Department heads helps focus Metro departments on the health implications of their policies and programs. A leadership roundtable of approximately 12 department heads, and department coordinators from several departments, helps sustain attention to health in policies and programs of these departments.

Accomplishments

MPHD continues to work with other Metro departments and Nashville's largest employers to promote a "healthy workplace prescription" that establishes policies supporting physical activity, healthy vending and food service, tobacco-free workplaces, lactating mothers, and alternative transportation options.

Building Healthy Cities: Nashville represents a collaborative effort with the Nashville Civic Design Center to extend the *Plan of Nashville* with a special focus on health and how the built environment of the city can promote better health. The expected publication date is next month.

The Next 4 Years: Opportunities & Challenges

Health in All Policies: Progress in improving Nashville's health by reversing the epidemic of chronic disease will require sustained efforts over many years. The following strategies are recommended by experts and being implemented across the country:

- Multi-Sector approach: Policies and programs spanning different government departments can affect availability of healthy food and safe opportunities for physical activity.
- Place-based strategies: Choices to eat healthy and be active are greatly affected by policies and environments that shape neighborhoods, workplaces, and schools.
- Sustained attention to correcting disparities and inequities in health risk by race/ethnicity and income is crucial.

Foundational Goal 3: Prevent and Control Epidemics & Respond to Public Health Emergencies

Control and prevention of communicable diseases is a core public health function. Whether the threat is Zika virus, Ebola, pandemic influenza, an outbreak of food-borne illness, a tuberculosis case in a homeless shelter, or increasing HIV cases in young people, MPHD must be ready and respond.

Indicators

Immunizations: Our immunization rates for two-year-olds in Nashville have improved in recent years and remain steady with completion of the full series between 70 percent and 75 percent.

Tuberculosis: Nashville's TB rates remain significantly higher than those for Tennessee as a whole and the U.S. with a case rate of 5.6 cases per 100,000 in 2014. Since 2010, the rate of this airborne disease has plateaued, but cases are increasingly complex with multiple comorbidities and increasing resistance to first-line antibiotics.

Sexually Transmitted Infections (STI): Chlamydia is the most common STI in Davidson County, with over 4,300 cases reported in 2015.

New Cases of HIV infection dropped by about 25% between 2008 and 2014, and HIV deaths dropped by 46%. Community measures of viral load have improved as providers address quality of the care systematically. Racial disparities are significant.

Services

Notifiable Disease. MPH D works with health care facilities and clinicians, as well as with the Tennessee Department of Health, to detect and investigate identify new risks or changing patterns of disease, and respond to public health outbreaks and emergencies. MPH D also provides education to patients, providers, and the public to prevent the spread of disease in the county.

Public Health Emergency Preparedness. The department maintains overall preparedness for public health threats and emergencies, which is routinely assessed after emergencies and exercises. MPH D has tested its Point of Distribution (POD), CHEMPACK, and Biohazard Detection System plans. All staff are required to complete training in emergency response and incident command as part of the onboarding process when hired.

Comprehensive Disease Control Programs. MPH D operates comprehensive control programs that include surveillance, outreach and disease intervention, and clinical services for TB and for STI. We do routine testing at the county jail for TB and STDs.

The Ryan White program provides funding for medical providers in the community to provide comprehensive care to individuals living with HIV. Unlike other programs within the Health Department, the Ryan White Part A Program monitors HIV-positive people and the care they receive in a 13-county area in Middle Tennessee, not just in Davidson County. MPH D receives \$4.6 million per year directly from the federal government for the Ryan White HIV Program. We are one of fifty U.S cities that receive these funds due to the large number of people living with HIV disease and the number of new infections that occur each year in our community. In the 13-county area, the number of new HIV cases diagnosed in 2013 was 215 and new cases have been decreasing for the past four years. Davidson County residents account for 78% of the HIV cases in this region.

Collaboration

MPH D's Public Health Preparedness Team works to ensure that all government, business, health care systems, organizations, and the public are prepared for large scale epidemics and emergencies. MPH D participates in emergency planning with many partners, including the Metro Office of Emergency Management, the Tennessee Emergency Management Agency, Tennessee Department of Health, American Red Cross, and Metro Police and Fire departments. Coordinated planning with Nashville's acute-care hospitals is maintained via an established hospital committee, the Tennessee Highland Rim Healthcare Coalition, in MPH D plays an important leadership role.

Nashville Regional HIV Planning Council. Planning and prioritization of the HIV care resources in Nashville are performed by this group. Also called the Ryan White Part A Planning Council, this formal body is appointed by the Mayor. MPH D is responsible for collaborating with the planning council and ensuring that they complete activities under the federal requirements.

Accomplishments

MPHD staff and leadership responded to community concerns about Ebola by communicating with hospitals and other community stakeholders and by monitoring health status of people who recently traveled to affected countries.

During the most recent federal assessment, technical review scores for Cities Readiness Initiative, a regional plan for response to a bioterrorism event, showed improvement and Nashville was rated 99 out of 100.

The TB program routinely renders 100% of patients non-infectious and cured.

In 2015, the Ryan White program provided services to 4,034 persons. The quality of care provided by the contracted providers is excellent; 84% of persons served had a suppressed viral load compared to the national average of 72%. This not only improves the health of the patient, but protects the entire community by decreasing the likelihood of a person becoming infected with HIV disease.

The Next 4 Years: Opportunities & Challenges

The emergence of Zika virus as a health threat will heighten need for public communication and interest in mosquito control in the spring and summer.

Increasing community resilience and preparedness for emergencies at the household and neighborhood level, particularly in economically challenged neighborhoods. The preparedness program is also working to address mental health issues during emergencies and ensure that operations can continue during major emergencies.

Improving HIV management using coordinated efforts and quality improvement practices across the continuum of care. MPHD and other providers must sustain efforts to increase the proportion of HIV infected individuals who know their status and are maintained in high quality care.

Foundational Goal 4: Create Healthier Community Environments

The Department provides a range of Environmental Public Health services including inspections of food service establishments and public facilities and provides pest control and septic system consultation and regulation as well. This report focuses on two areas of particular strategic importance for Nashville: Air Quality and Animal Care & Control.

Air Quality

Clean, healthy air prevents asthma episodes, doctor and hospital visits, lost work and school days and even deaths due to poor air quality. National Ambient Air Quality Standards (NAAQS) are developed by the Environmental Protection Agency (EPA) based on known and measurable health hazards from dirty air.

Indicators

Nashville's success in achieving clean air is measured by the number of days in the year that the air in Nashville meets these standards, which we have done in recent years. In 2014, the NAAQS were met 100 percent of the time, including the 2008 8-hour ozone standard of 0.075 ppm.

Motor vehicle traffic and the weather are major factors in our ability to meet the EPA standards. Ozone, the pollutant that poses our biggest challenge and the one for which we most often exceed EPA standards, is created from vehicle exhaust during hot summer weather.

Services

The Air Quality program monitors ambient air quality, enforces new and existing air pollution regulations, provides compliance assistance to the regulated community, inspects and issues permits to new and existing air pollution sources, compiles emission inventories, provides public education and outreach, provides the Air Quality Index and Pollen Count for Davidson County, partners with TDEC to provide the Air Quality Forecast for Middle Tennessee, and formulates air pollution control strategies needed to attain and maintain compliance with the national standards.

Radon, a naturally occurring gas, is second to tobacco smoke as a cause of lung cancer. EPA publishes recommendations for measuring and mitigating exposure to radon in occupied buildings. Ordinance 088-526 requires MPHD to ensure that Metro buildings, including schools, are regularly tested for radon and that worksites with levels above the action threshold are remediated. MPHD continues to conduct testing for Metro buildings according to the ordinance, and is helping guide actions by Metro agencies to re-test and reduce radon levels in areas found to be above the EPA action threshold.

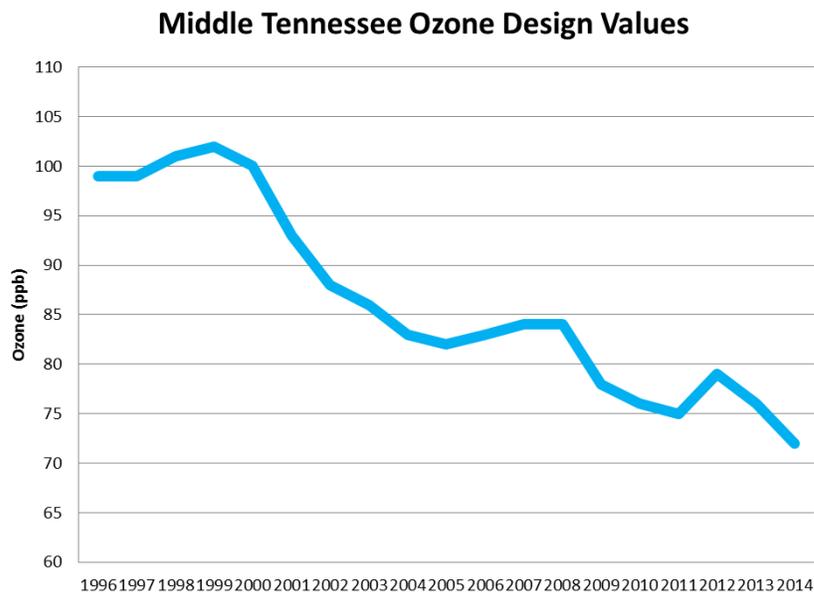
The Vehicle Inspection Program exists to improve air quality through emissions testing of light duty gasoline and diesel vehicles. MPHD oversees and monitors the testing done by Metro's vendor, currently OPUS Inspection. Smog forming emissions -- volatile organic compounds (VOC) and nitrogen oxides (NOx) -- are thereby reduced. According to EPA's MOVES model, VOC emissions are reduced approximately 651 tons per year, or 1.8 tons per day, and NOx emissions are reduced approximately 657 tons per year or 1.8 tons per day.

Collaboration

The Air Quality program implements federal regulatory requirements in concert with state and regional partners. MPHD supports and aligns with other efforts to promote sustainability and a cleaner environment. MPHD works with the **Clean Air Partnership of Middle Tennessee** to increase voluntary efforts to improve air quality.

Accomplishments

- Worked with MNPS to measure radon levels in all schools and implement controls that brought all of them under the EPA action level.
- Worked with TDEC to abate a large, illegal asbestos landfill in north Nashville—now transformed to affordable housing.
- As of November, 2014, coal is no longer burned in Nashville/Davidson County.
- Despite a 20% increase in population over the past 20 years, Nashville has experienced drastic reductions in ambient air pollution concentrations.



The Next 4 Years: Opportunities & Challenges

Change in Air Quality Standards. In 2015, EPA revised the ozone standard from 0.075 parts per million to a lower concentration of 0.070 ppm. Middle Tennessee’s attainment status with this new standard will be based on data collected between 2014 and 2016. At this time, it is likely that Nashville will remain in attainment with the standard. However, high ozone concentrations in 2016 could result in a three-year average over the new standard and possibly a non-attainment designation. Also, with the more stringent ozone standard, Nashville may see more Air Quality Alert days. These are days during which pollutant levels are forecasted to be at or above the standard. Alerts are posted to caution those that may be most at risk and provide information regarding actions to be taken to help reduce pollution on those days.

New Contract for the Vehicle Inspection Program: Metro’s current contract with OPUS Inspection ends June 30, 2017. The public process of obtaining bids and selecting a contractor for the Vehicle Inspection Program is under way. The proposed testing program will include some changes and innovations, such as self-service kiosks and remote sensing, to complement the existing testing program.

Animal Care & Control

Service requests related to animals are among the most frequent calls received by the health department.

Indicators

This chart shows significant progress Nashville and Metro Animal Care and Control have made in the last few years. Highlights include significant drop in animal intake, increases in adoptions, development of rescue partnerships, a decline in the number and percent of animals euthanized.

	2011	2012	2013	2014	2015
Animal Intake	10,667	9312	9263	8468	6423
Strays	5223	4644	4883	4083	2968
Owner Surrenders	5444	4668	4380	4386	3455
Adoptions	1228	1211	1612	1575	1986
Transfer to Rescue Partner	59	113	289	1200	1267
Returned to Owner	573	557	518	545	521
Humanely Euthanized*	7151	6626	6217	4555	2359
Percent of Intake Euthanized*	67%	71%	67%	54%	27%

*excludes wildlife and owner requested euthanasia

The euthanasia rate for 2016 to date (January and February) is below 20 percent.

Services

MACC works with individuals and organizations across Nashville to help domestic animals find caring homes, decrease over-population of cats and dogs through spaying and neutering, supports widespread rabies vaccinations, and promote responsible pet ownership.

Accomplishments

In the last three years MACC has made significant progress. Here are selected improvements:

- Rapidly advanced communication and live-release practices during leadership transition at MACC using existing MPHD staff.

- Recruited a new management team that includes an experienced and seasoned manager and a veterinarian specifically trained in shelter medicine and population management.
- Established same-day service for field requests for service.
- Developed a volunteer program with a full-time volunteer and event coordinator.
- Expanded the use of social media and earned media to build community goodwill and improve communication, with a substantial turn-around in public perception of MACC. Current Facebook “likes” are over 11,000.
- Noted a dramatic decline in shelter intake for which the community at large and the persistent spay/neuter efforts of Nashville Humane Association and others such as Pet Community Center, deserve recognition.
- Increased adoption events, promotions,
- Established partnerships with transfer and rescue organizations
- Secured budget improvement and contract with Pet Community Center for expanded community spay-neuter availability.
- Percentage of animals euthanized has declined by 60% in 3 years.

The Next 4 Years: Opportunities & Challenges

Nashville as a community has made great progress and is positioned for additional progress in animal welfare and animal control. We will collaborate to leverage and maximize public and private strengths and to better work together to achieve community goals. MACC has developed its action plan for progress in 2016 and beyond, which will be shared with community stakeholders as a community plan of action on animal welfare is developed in the coming months.

A few selected opportunities for improvement from MACC’s plan are listed:

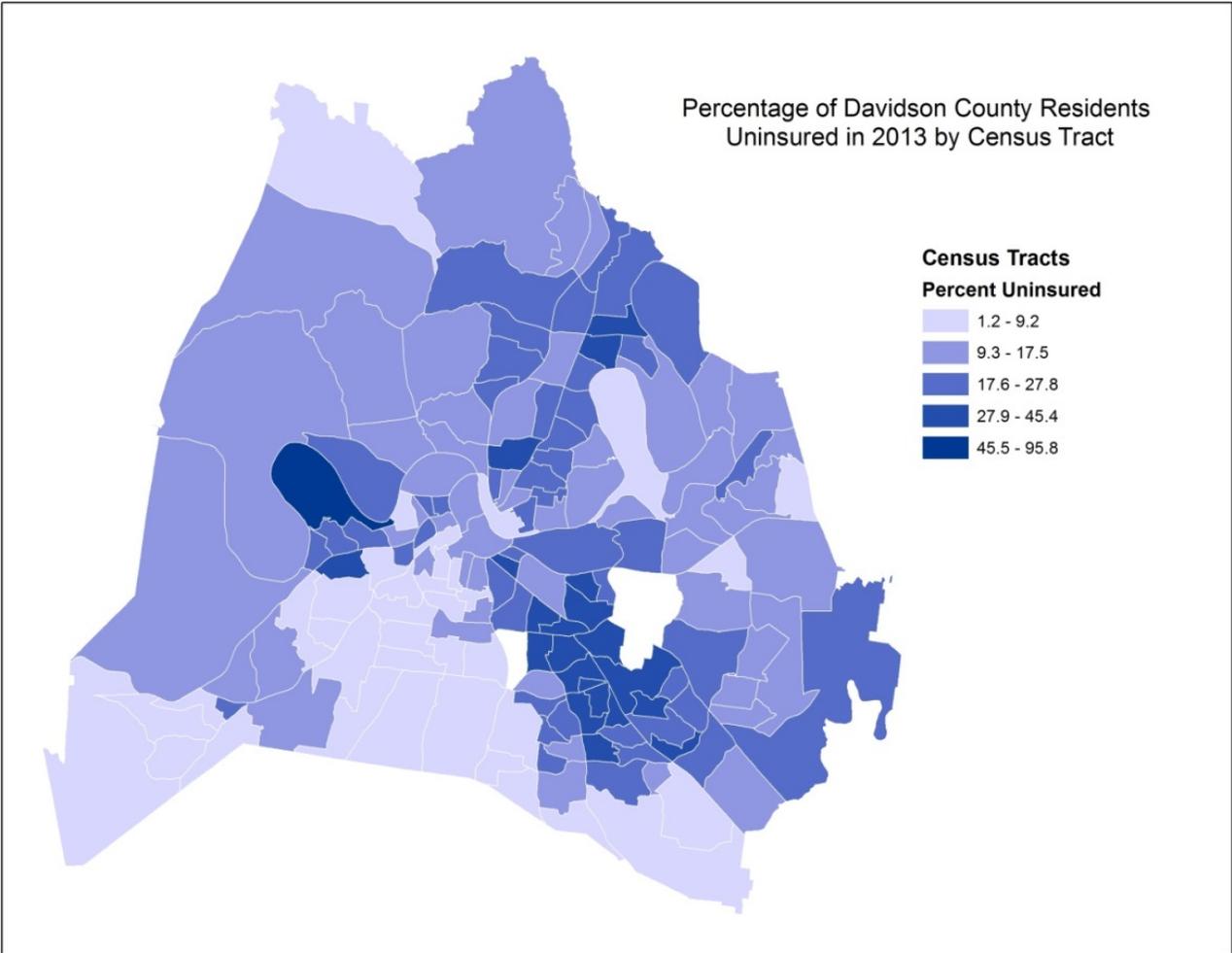
- **Expand Trap, Neuter, Vaccinate, Return** through community partnerships to better address community cats. Consider ordinance changes to advance spay/neuter rates.
- **Continue Support for high-volume, low-cost spay neuter** efforts.
- Build programs for **fostering, transport of animals, and return to owner**.

Foundational Goal 5: Increase Access and Connection to Care

MPHD is not a provider of traditional primary care services, but it is our goal to increase access and connection to care.

Indicators

In 2014, the American Community Survey reported 19.5 percent of adults aged 18-64 in Nashville were uninsured. Although there have been some improvements in health insurance coverage with the implementation of the Affordable Care Act, there are still significant numbers of people in our state who fall in the coverage gap. Whatever the level of insurance, community based safety net services for mental health care and adult dental care have significant gaps.



Services

Correctional Health Care. MPH D manages health care at the county jail via contract, currently with Correct Care Solutions.

Homeless Health Care. We continue to invest in health care for the homeless through a contract with Neighborhood Health, who is Nashville’s health care for the homeless grantee.

Project Access Nashville. This program plays a role in connecting uninsured patients in Nashville to a network of primary care safety net clinics that serve patients based on their ability to pay.

Presumptive Medicaid Eligibility. We are training staff to become certified application counselors through the insurance marketplace to fill a gap in the system. All pregnant citizens are eligible for TennCare up through delivery and slightly beyond. We often see these women early in their pregnancies and can provide “presumptive eligibility,” which provides TennCare coverage for 45 days, during which time they are expected to enroll formally. Too often they do not follow through and enroll and they lose health insurance coverage at a critical time for them and their babies. Our staff will walk them through the process.

Collaboration

MPHD is active in the **Safety Net Consortium of Middle Tennessee**, which convenes safety net providers to communicate, coordinate efforts, and develop communitywide strategies for addressing gaps in the safety net.

Adult emergency dental care remains a prominent need. In 2014, local dental advocates, including MPHD, formed the **Middle Tennessee Oral Health Coalition** to advocate, build capacity, collaborate, and coordinate service efforts to improve the oral health of the dentally underserved. In the last budget cycle we increased our ability to fully utilize the dental clinic at Lentz, adding a part-time dentist, to help meet this need.

Get Covered Nashville Coalition is a collaborative effort to help enroll people through the Federally Facilitated Marketplace. MPHD has made space available for enrollment days and special events at the Lentz Public Health Center.

Under Mayor Barry's leadership, MPHD has started to convene stakeholders to **improve systems for mental health services** in Nashville. Community mental health providers as well as leaders in the criminal justice system have begun to develop a roadmap to better service and reduced reliance on the criminal justice system to manage mental health issues.

The Next 4 Years: Opportunities & Challenges

Nashville is poised to make progress on increasing the movement of care for patients with mental illness from correctional settings to care settings. Collaboration and systems change for people with mental illness is needed, and welcomed by most stakeholders. There are major gaps in community based care for mental illness. Over the next three years it is recommended that Metro through MPHD support a sustained community coordinating and planning group that will identify and implement strategies to strengthen community based mental health services and consistently steer ("Divert") ill patients from correctional approaches to appropriate care and case management. The initial program priority for the group is to strengthen Nashville's system of 24/7 Mental Health Urgent Care to provide more robust alternatives to arrest and detention for patients needing stabilization of mental illness.

As the Affordable Care Act continues to develop, it will change, but not eliminate, the need for safety net services in Nashville as well as the array of services that MPHD is funded to support.

III. Collaborative Community Health Improvement in Nashville

Health is bigger than health care. Our health is shaped by the places we live, learn, work, play, and worship, and rests on a foundation of social determinants such as education, economic stability and opportunity, safe and secure housing, social support, history of racial discrimination, and other factors. Collective community action to advance health (often called Community Health Improvement) has become an increasing focus of communities both in Nashville and nationally. This work emphasizes cross-sector collaboration and environmental, policy, and systems-level actions that make it easier for people to live long and healthy lives, and that directly affect the social determinants of health.

The Healthy Nashville Leadership Council (HNLC) serves as Nashville's strategic planning body for health improvement. This group is established by Executive order, appointed by the Mayor and coordinated by the health department.

Non-profit hospitals are required by the Affordable Care Act to conduct needs assessments and participate in community health improvement efforts. Both Vanderbilt and St. Thomas Health are represented on the HNLC, and we are increasingly aligning our efforts. In addition, under the leadership of Senator Bill Frist, a new non-profit has been formed, Nashville Health, which will endeavor to engage the health care industry in Nashville to join in efforts to improve health outcomes.

The HNLC completed a strategic assessment of Nashville's health in 2014. This Community Health Assessment (CHA) led to the identification of strategic priority areas for Nashville's health, and we are currently in implementation of Nashville's first Community Health Improvement Plan, or CHIP.

The plan identifies three areas of focus for concerted community action and spells out goals and objectives for each:

- Advance Health Equity
- Support Mental and Emotional Health
- Maximize the Built and Natural Environments to Support Health

These three priority areas align well with the policy priorities Mayor Barry has identified for her administration: Education, Public Safety, Transit/Infrastructure, Economic Development and Opportunity, and Quality of Life are all building blocks for a healthier people and a healthier city.

Summaries of the HNLC assessments of Nashville's health and progress on its plan of action are available on the Healthy Nashville website at <http://www.healthynashville.org/index.php>.

Advance Health Equity

The HNLC defined Health Equity in Nashville as the societal and systematic understanding and appreciation of differences among individuals and populations; where everyone is valued and has the opportunity to achieve optimal health and well-being.

Here are some of the CHIP actions related to this priority:

- In 2015, the Healthy Nashville Summit focused on health equity. [A report on health equity in Nashville](#) was developed in collaboration with the Robert Wood Johnson Health Policy Center at Meharry, as was a [set of recommendations](#) from the summit.

- The HNLC developed a [statement on the health impacts](#) of affordable housing, long commutes, and mixed-income housing, and presented it as part of the Metro policy discussion on inclusionary zoning.
- The Safety Net Consortium of Middle Tennessee is developing navigation tools that improve access to primary care services for diverse populations

Support Mental and Emotional Health

The CHIP goals related to this priority include better systems of care, and violence-free homes.

Here are some of the CHIP actions related to this priority:

- MPHD has joined with several partners to launch **ACE Nashville**, a collective-impact approach to advancing awareness of the profound health impacts of Adverse Childhood Experiences, preventing ACEs, and advancing the practice of “trauma-informed care” in education, health, and social sectors. Trauma-informed care changes the conversation from “what is wrong with you?” to “what happened to you?”
- Under Mayor Barry’s leadership, MPHD is convening mental health providers to reduce criminalization of mental illness and to improve systems of care. The Public Investment Plan being presented for Mental Health addresses this CHIP priority (see also Foundational Goal 5)

Maximize the Built and Natural Environments for Health

This priority area aims to build both availability and use of active transportation options, and to improve and protect the quality of air, land, and water.

CHIP actions related to this priority include

- Participated extensively in the development of the NashvilleNext comprehensive plan for Nashville, which is friendly to health in several respects.
- The HNLC’s partner in this objective, Walk Bike Nashville, has instituted Walk Bike University and is training community members on walk bike advocacy issues as well as teaching basic and advanced biking skills as well as safety skills for MNPS students.
- HNLC’s Active transportation group is researching policy options and opportunities to accelerate advancement of safe bicycling and walking.
- The Health in All Policies group, which includes a dozen Metro department heads, also is working on biking issues.