HEALTHY BALTIMORE 2015

A city where all residents realize their full health potential

Baltimore City Health Department
Oxiris Barbot, M.D., Commissioner of Health
Stephanie Rawlings-Blake, Mayor

ACKNOWLEDGEMENTS

The Baltimore City Health Department extends thanks to the following for their valuable contributions to this report: Paul Overly, Rafiq Miazad, Suzan Mankarious, Regina Rutledge, Ravikiran Muvva, Kompan Ngamsnga and Jonathan Gross of the Baltimore City Health Department; Oscar Ibarra of the Health Services Cost Review Commission; Helio Lopez of the Maryland Department of Health and Mental Hygiene; the Baltimore City Police Department; Baltimore City Liquor Board; Mayor's Office of Information Technology; Morgan State University, School of Community Health and Policy; Johns Hopkins University, Bloomberg School of Public Health; Union Memorial Hospital; Saint Agnes Hospital; Johns Hopkins Hospital; Bon Secours Hospital; Good Samaritan Hospital; University of Maryland Medical Center; Mercy Medical Center; Sinai Hospital; Harbor Hospital; Maryland General Hospital; and our non-profit organizations, including Baltimore Health Care Access, Baltimore Substance Abuse Systems, and Baltimore Mental Health Systems. They are credited individually as their contributions appear throughout this publication. Special thanks also to Mark Dennis for his photography and Erin Hyland of Jack Out Of the Box Designs for her graphic design work.

HEALTHY BALTIMORE 2015 PLANNING AND DEVELOPMENT COMMITTEE:

Lead Authors:

Michelle Spencer, Chief of Staff
Ryan Petteway, Social Epidemiologist
LaVeda Bacetti, Health and Policy Analyst
Oxiris Barbot, Commissioner of Health

Contributors:

Anne Bailowitz
Francine Childs
Rebecca Dineen
Jacqueline Duval-Harvey
Olivia Farrow
Rachel Indek
Leyla Leyman
Glen Olthoff
Dourakine Rosarion
Brian Schleter

Suggested citation:

Spencer M, Petteway R, Bacetti L, Barbot O. Healthy Baltimore 2015: A city where all residents realize their full health potential. Baltimore City Health Department; May 2011

ELECTRONIC ACCESS:

This publication can be accessed electronically at www.baltimorehealth.org/healthybaltimore2015.html. We welcome comments and feedback for ways to improve this document in future editions. We can be reached at 410-396-4398 or bchd_research@baltimorecity.gov.

Please review the Technical Notes section for data support information.

HEALTHY BALTIMORE 2015:

TABLE OF CONTENTS

LETTER FROM THE MAYOR

Dear Fellow Baltimore City Resident:

Baltimore City has many strengths, including world-class medical and academic institutions, engaged government, business and faith-based sectors, as well as a committed philanthropic community. All of these aspects of our society provide a strong foundation from which we can build a healthier city.

Healthy Baltimore 2015 distills and targets health priorities in our city. It details challenges and opportunities, and offers a pathway to reach a destination we all desire – long, healthy, productive lives.

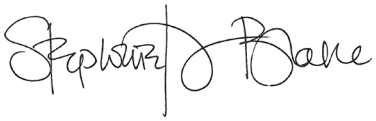
The health of our residents is key to the city's vibrancy and prosperity. Achieving good health, however, is more than a medical vision focused on individual responsibility. It is a vision that acknowledges the additive value of considering the greater health implications of decisions put before us — be they in government, business or education — and that the best solutions come when we break down silos.

This is what I want my leadership of Baltimore City to be about. As a start, I have directed every agency in City government to consider the health implications of our policies and regulations, with the goal of ensuring that we both avoid harm and unfair burdens and also promote your well-being. I look to our partners in educational and philanthropic institutions, the health industry, our business community, and our neighborhoods to participate in this transformation.

It is my intention for Baltimore City to become a national model for promoting healthy communities. A city that is the nation's hub for health — for medical practice, for health-informed policymaking, and for a citizenry that promotes and protects its own health.

I invite you to read *Healthy Baltimore 2015* and find the places where your involvement will help both you and your city.

Sincerely,



Stephanie Rawlings-Blake
Mayor
Baltimore City

LETTER FROM THE HEALTH COMMISSIONER

Dear Fellow Baltimore City Resident:

The Baltimore City Health Department is the oldest continuously running health department in the country. For over two centuries we have had the responsibility of ensuring the health and safety of the residents that make this city vibrant. Today that responsibility remains, but the health challenges facing our community are much more complicated. In order to achieve better health for all, we must refocus on what the health priorities for action are, what successful strategies should be considered and how to measure improvement.

Healthy Baltimore 2015 sets clear priority areas for improving health and detailed indicators by which we can evaluate our progress in moving the city forward. The agenda we have laid out is robust and ambitious. It has to be, because every day there are Baltimoreans that live too sick and die too young.

Healthy Baltimore 2015 is both a response to the present challenges and a practical plan for preventing future health problems. It reflects our efforts at highlighting the areas that hold the most potential for transformative improvements in Baltimore's health status. As such, the goals and indicators provided in the report go beyond traditional health measures and explore the root causes that tend to drive health inequities. For example, the plan looks at the relevance of where we live, work and play on health outcomes; and how oftentimes they play as significant a role in making us sick as they do in keeping us healthy.

What is made abundantly clear by *Healthy Baltimore 2015* is that no one goal can be achieved by the Health Department or any other institution working alone. A health-in-all-policies approach that breaks down silos between the various sectors of our society is our best hope for success. It calls for commitment from every city agency, the health industry, the private sector, and our neighborhoods, and it provides an organized framework for their participation.

We offer *Healthy Baltimore 2015* as the blueprint to improving and sustaining the health of every Baltimorean, now and in the generations to come. Our vision is simple: *a city where all residents realize their full health potential*.

Sincerely,

Oxiris Barbot, M.D.
Commissioner of Health

FRAMEWORK

Healthy Baltimore 2015 is Baltimore City Health Department's comprehensive health policy agenda for the City, articulating its priority areas and indicators for action. This plan highlights areas where we can have the largest impact on reducing morbidity and mortality and improve the quality of life for City residents. The plan includes data that reflect the groups with the largest inequities by race, gender, education, or income to further highlight opportunities for addressing health inequities. Each priority area is equally important.

VISION

A city where all residents realize their full health potential.

PRIORITY AREAS

Healthy Baltimore 2015 sets ambitious, yet reachable, improvement goals for the following priority areas:

1. Promote Access to Quality Health Care for All
2. Be Tobacco Free
3. Redesign Communities to Prevent Obesity
4. Promote Heart Health
5. Stop the Spread of HIV and Other Sexually Transmitted Infections
6. Recognize and Treat Mental Health Needs
7. Reduce Drug Use and Alcohol Abuse
8. Encourage Early Detection of Cancer
9. Promote Healthy Children and Adolescents
10. Create Health Promoting Neighborhoods

Each of these priority areas has measurable objectives for improvement with leading indicators that will be tracked and reported on annually.

Certain indicators focus on straightforward health outcomes such as reducing premature deaths from cardiovascular disease. Other indicators are more descriptive and focus on social determinants of health, such as density of vacant buildings within communities. As such, the goals and indicators in this report go beyond traditional public health measures; they also describe the level to which fundamental drivers of health inequities such as poverty and low educational attainment affect health outcomes. Taken as a whole, traditional public health measures and social determinants of health reflect the importance of where we live, work, and play on our health.

THE IMPORTANCE OF PARTNERS

Healthy Baltimore 2015 recognizes that individuals and communities must have the opportunity to make choices that impact their health regardless of race, income, or education. This agenda for change also acknowledges that a local public health department cannot successfully implement the plan working alone: the authority and expertise to act on and influence many root causes of health inequities frequently lies within other sectors of society. The City's success can only be realized by involving every instrument of Baltimore City's government and other levels of government, the health care industry, motivated neighborhoods, individual citizens, academic institutions, community-based organizations, and the business community.

Partners can contribute to the success of *Healthy Baltimore 2015* in many ways. These varying levels of engagement include, but are not limited to:

1. Communication – Displaying or distributing health information materials within each of the ten priority areas

2. Facilitation – Actively participating in interventions such as incorporating wellness at work programs into the business day

3. Integration – Actively considering the potential health impacts of pending business or policy decisions

BECOME A PARTNER

The success of Healthy Baltimore relies on the diverse partnerships of our neighborhoods, businesses, academic institutions, community-based organizations, non-profit agencies, medical institutions, foundations, and schools. To become a partner, contact us at health.commissioner@baltimorecity.gov.

STRATEGIES

Achieving the aggressive goals set forth by *Healthy Baltimore 2015* requires a multi-pronged approach that organizes collaborative efforts and creates synergies to improve the health of all Baltimore residents.

Our primary strategies in advancing indicators within each priority area will be:

1. Policy Development – Drafting and advocating for laws, regulations, and other policies to improve environmental, economic, and social conditions affecting the health of Baltimore City; we will employ a Health in All Policies philosophy to ensure our reach and aim

2. Prevention, Quality and Access – Emphasizing preventive health care, improving quality of care, and expanding access to care for all populations

3. Community Engagement – Informing, educating and engaging Baltimoreans to improve their health and the health of their communities

The Baltimore City Health Department will lead efforts to convene stakeholders within each of the priority areas over the next several months to further delineate strategies.

In summary, *Healthy Baltimore 2015* promotes a holistic approach to reversing the City's poorest health outcomes and reframes our approach to longstanding health priorities and issues. As part of this process, the Baltimore City Health Department will lead an interagency task force, with representation from all City agencies, to examine the potential health implications of policy decisions under consideration. *Healthy Baltimore 2015* represents the first phase of the Health Department's commitment to transforming public health in Baltimore. In this process, we anticipate that Baltimoreans will have more opportunities to make and pursue health-promoting choices where they live, work and play.

1. PROMOTE ACCESS TO QUALITY HEALTH CARE FOR ALL

A central point of health reform is redesigning the health care delivery system to improve a population's quality of life and life expectancy. It is clear that an insurance card in every resident's hand is only one aspect of improving access to care. A more critical component is how well our healthcare system can be retooled to be more patient centered. Diabetes and hypertension are two of the leading indicators within this priority area that contributes to heart disease, the leading cause of death in Baltimore City. Asthma is one of the health conditions that accounts for the greatest loss of productivity either through missed work days or school absenteeism.

A. Decrease hospitalization rate for ambulatory care sensitive indicators by 15%

HOSPITALIZATION RATE FOR ASTHMA BY RACE, *BALTIMORE CITY, 2010*

Age-Specific Rate (per 100,000 population)

	All	Black	White
Less than 5 years	53.9	67.5	15.0
5-17 years	78.1	97.3	21.1
18-44 years	90.0	135.1	23.7
45-64 years	144.6	192.2	52.4
65+	52.5	63.1	34.0
Total	419.2	555.2	146.2

Source: HSCRC, 2010, Primary diagnosis only; CDC Wonder 2009 population estimates.

HOSPITALIZATION RATE FOR DIABETES TYPE I AND II AND HYPERTENSION BY RACE *BALTIMORE CITY, 2010*

Age-Adjusted Rate (per 100,000 population under age 75)

	All	Black	White
Diabetes, Type I	87.1	103.2	61.0
Diabetes, Type II	213.6	272.6	108.7
Hypertension	95.5	136.6	15.0

Source: HSCRC, 2010, Primary diagnosis only, Diabetes with and without short-term complications; CDC Wonder 2009 population estimates.

B. Decrease rate of emergency department visits for ambulatory care sensitive indicators by 10%

RATE OF EMERGENCY DEPARTMENT DISCHARGE FOR ASTHMA BY RACE *BALTIMORE CITY, 2010*

Age-Specific Rate (per 100,000 population)

	All	Black	White
Less than 5 years	4934.0	6580.3	1225.3
5-17 years	2936.1	3776.8	494.8
18-44 years	1615.4	2409.6	428.7
45-64 years	1359.6	1884.8	306.5
65+	261.7	374.1	62.7
Total (age-adjusted)	1866.0	2582.0	422.8

Source: HSCRC, 2010, Primary diagnosis only; CDC Wonder 2009 population estimates.

RATE OF EMERGENCY DEPARTMENT DISCHARGE FOR DIABETES TYPE I AND II AND HYPERTENSION BY RACE, *BALTIMORE CITY, 2010*

Age-Adjusted Rate (per 100,000 population under age 75)

	All	Black	White
Diabetes, Type I	23.1	28.3	12.3
Diabetes, Type II	325.2	440.6	116.6
Hypertension	398.5	576.1	94.3

Source: HSCRC, 2010, Primary diagnosis only; CDC Wonder 2009 population estimates.

C. Decrease percent of insured individuals who report having unmet medical needs in last 12 months by 20%

PERCENT OF INSURED RESIDENTS WHO REPORT HAVING UNMET MEDICAL NEEDS IN LAST 12 MONTHS BY RACE AND BY INCOME *BALTIMORE CITY, 2009*

	Unmet Medical Needs (%)
All	15.2 %
Black	19.8 %
White	8.3 %
Lowest income (<15K)	26.3 %
Highest income (75K+)	1.1 %

Source: Baltimore City Community Health Survey, 2009

2. BE TOBACCO FREE

In 2009, the percentage of adult smokers in Baltimore City (28.3%) was higher than Kentucky and West Virginia – the two states tied for the highest percentage of smokers (25.6%) in the country.[1] Tobacco use is one of the most preventable causes of death and disease for men and women. There are no safe tobacco products, nor is there a risk-free exposure level for adults, children or pregnant women. Tobacco is a major contributor to early heart attacks, strokes, chronic lung diseases and cancers. There is also compelling evidence of the harmful impact of secondhand smoke to nonsmokers and children who suffer from respiratory infections. Smoking is also associated with preterm births, stillbirths, and low birth weight.

A. Decrease percent of adults who currently smoke by 20%

PERCENT OF ADULTS WHO CURRENTLY SMOKE CIGARETTES BY GENDER AND BY INCOME
BALTIMORE CITY, 2009

	Current smokers (%)
All	28.3 %
Male	35.1 %
Female	22.8 %
Lowest income (<15K)	36.0 %
Highest income (75K+)	15.1 %

Source: Baltimore City Community Health Survey, 2009

B. Decrease percent of teens who currently smoke by 20%

PERCENT OF HIGH SCHOOL YOUTH, WHO REPORTED SMOKING TOBACCO PRODUCTS AT LEAST 1 DAY DURING THE 30 DAYS BEFORE THE SURVEY BY GENDER
BALTIMORE CITY, 2007

	Current smokers (%)		
	All	Male	Female
High School youth	11.7 %	10.0 %	13.8 %

YRBS, Baltimore, 2007 "Smoke" defined as using any of the following tobacco products; cigarettes, cigars, cigarillos, or little cigars, or to have used chewing tobacco, snuff, or dip.

C. Decrease rate of births to women who report smoking during pregnancy by 15%

RATE OF PREGNANT WOMEN (OVER 20 YEARS) WHO GAVE BIRTH IN 2009 WHO REPORTED USING TOBACCO DURING PREGNANCY BY RACE AND EDUCATIONAL ATTAINMENT
BALTIMORE CITY

	Rate (per 1,000 live births)		
	All	Black	White
All	92.1	98.6	87.7
High School (HS) or less	148.3	134.0	199.7
More than HS	25.1	31.5	20.8

Source: Maryland Vital Statistics, Baltimore City, MD, 2009. Birth record indicates smoking cigarettes.

3. REDESIGN COMMUNITIES TO PREVENT OBESITY

Obesity is a serious public health issue in Baltimore City that not only impacts overall quality of life, but is also linked to serious health conditions, such as cardiovascular disease, high blood pressure and diabetes. Combating obesity requires increasing physical activity levels and improving dietary patterns, including the consumption of more fresh fruits and vegetables. However, if our surroundings do not support these approaches, then the likelihood of making significant gains is diminished. Redesigning obesity-promoting environments means making it easy for people to eat healthy and be physically active by changing the conditions where we live, work and play. Building healthy communities means increasing access to healthy and fresh food by improving public transportation and other creative strategies that reduce the impact of food deserts. Communities designed for health promotion provide safer opportunities for residents to walk to schools, parks, recreational facilities, and markets — enabling them to lead physically active lifestyles.

A. Decrease inequities in supermarket access by 15%

SUPERMARKET ACCESS DISPARITY BETWEEN HIGHEST-ACCESS AND LOWEST-ACCESS COMMUNITIES, *BALTIMORE CITY, 2011*

	Estimated Travel Time to Nearest Supermarket (Min.)
Highest-Access Communities	1.8
Lowest-Access Communities	29.1
Disparity Ratio	16.0

Source: BCHD analysis of 2011 Center for a Livable Future data: 2000 Census vehicle ownership

B. Increase percent of adults getting recommended levels of physical activity by 20%

PERCENT OF ADULTS (18+) WHO REPORTED MEETING HP 2010 RECOMMENDATIONS FOR AT LEAST MODERATE PHYSICAL ACTIVITY FOR EVERY WEEK IN THE PAST MONTH BY GENDER *BALTIMORE CITY, 2009*

	Fully meeting recommendations (%)		
	All	Male	Female
All adults 18+	53%	59.5%	47.9%

Source: Baltimore City Community Health Survey, 2009.

C. Decrease percent of adults who are obese by 15%

PERCENT OF ADULTS (18+) WHO ARE OBESE, BY INCOME, *BALTIMORE CITY, 2009*

	Obese (%)
All	33.8%
Lowest income (<15K)	39.4%
Highest income (75K+)	16.5%

Source: Baltimore City Community Health Survey, 2009

4. PROMOTE HEART HEALTH

Cardiovascular disease is the leading cause of death in Baltimore City as in the rest of the state and nation. The major risk factors for cardiovascular disease are smoking, high cholesterol, high blood pressure, physical inactivity, being obese and overweight, and diabetes. There are other factors such as stress, excessive drinking, and poor outdoor air quality that also contribute to heart disease. The leading indicators within this priority area illustrate premature death from cardiovascular disease and self-reported access to medical care once a major risk factor, high blood pressure, has been identified.

A. Decrease rate of premature deaths from cardiovascular disease (CVD) by 10%

PREMATURE DEATH RATE FROM MAJOR CVD BY RACE AND BY ADULT EDUCATIONAL ATTAINMENT, *2009*	
	Age-Adjusted Rate (per 100,000 population)
All	325.3
Black	347.9
White	289.7
HS or Less	316.5
Some College/Associate's	131.3
Bachelor's or More	81.9

Source: BCHD analysis of Maryland Vital Statistics data, 2009; 2009 Census.

B. Increase percent of adults with high blood pressure on medication by 10%

PERCENT OF ADULTS DIAGNOSED WITH HBP WHO REPORT TO BE CURRENTLY TAKING MEDICINE FOR HIGH BLOOD PRESSURE BY GENDER BALTIMORE CITY, 2009			
	Hypertensive adults under doctors care within last 12 months (% under control)		
	All	Male	Female
Adults (≥18)	82.5%	77.7%	86.3%

Source: Maryland BRFSS, Baltimore City, 2009

5. STOP THE SPREAD OF HIV AND OTHER SEXUALLY TRANSMITTED INFECTIONS

Baltimore City has been disproportionately affected by HIV while continuing to demonstrate high rates of Chlamydia, Gonorrhea and Syphilis. Identifying and treating HIV and other sexually transmitted infections (STI's) early and simultaneously is important. Individuals with HIV who have other STI's are more likely to transmit HIV to their sex partners. Additionally, individuals with STIs are more likely to become infected with HIV. Additionally, individuals with STIs are more likely to become infected with HIV. Efforts to address this ongoing epidemic must be attentive to the role that social factors such as poverty, educational attainment, substance abuse, and health literacy play in shaping health opportunities. Addressing these underlying social factors will significantly enhance our preventive public health interventions.

A. Decrease number of Syphilis cases by 25%

PRIMARY AND SECONDARY SYPHILIS INCIDENCE RATE BY GENDER AND BY RACE
BALTIMORE CITY, 2009

	Incidence Rate per 100,000 population
All	22.3
Male	39.5
Female	7.0
Black	30.9
White	6.1

Source: Baltimore City Heath Status Report, 2009

B. Decrease number of new HIV infections by 25%

REPORTED CASES OF HIV DIAGNOSIS PERCENT BY GENDER AND BY RACE
BALTIMORE CITY, 2008

	Number (N) HIV reported cases
All	932
Male	65.2 %
Female	34.8 %
Black	87.1 %
White	10.0 %

Source; Baltimore City HIV/AIDS Epidemiological Profile, Center for HIV Surveillance and Epidemiology, IDEHA, MD DHMH, 2009

C. Decrease rates of Gonorrhea and Chlamydia in adolescents by 25%

RATE OF YOUTH 10-19 WITH GONORRHEA AND CHLAMYDIA BY RACE
BALTIMORE CITY, 2009

	Age-specific Rate (per 100,000 population)		
	All	Black	White
Gonorrhea	1234.3	1329.8	141.5
Chlamydia	4778.9	5589.1	449.9

Source: BCHD Morbidity reports for # of case;2009 CDC Wonder for Census population data.

6. RECOGNIZE AND TREAT MENTAL HEALTH CARE NEEDS

Mental health is essential to overall health. Untreated mental illness can lead to devastating consequences, including homelessness, incarceration, unemployment and/or drug or alcohol abuse. However, a wide array of effective mental health services and treatments is available to allow children and adults to live healthy, productive lives. Therefore, it is essential that we decrease the number of adults who report having unmet mental health care needs by ensuring access to mental health services. Additionally, identifying signs of mental illness early and targeting at-risk youth can prevent or lessen the impact of serious mental illness later in life. By decreasing the number of adolescents who report regular feelings of sadness or hopelessness, we ensure brighter futures for our children.

A. Decrease percent of adults with unmet mental health care needs by 25%

PERCENT OF RESIDENTS WHO REPORT HAVING UNMET MENTAL HEALTH CARE NEEDS IN THE PAST 12 MONTHS BY RACE AND BY EDUCATIONAL ATTAINMENT
BALTIMORE CITY, 2009

	Incidence Rate per 100,000 population
All	23%
Black	33.4 %
White	8.5 %
Less than Bachelor's	28.6 %
Bachelor's or more	7.8 %

Source: 2009 Baltimore City Community Health survey

B. Decrease percent of adolescents expressing feelings of sadness or hopelessness by 20%

PERCENT OF HIGH SCHOOL STUDENTS FEELING SAD OR HOPELESS, NEARLY DAILY FOR 2 OR MORE CONSECUTIVE WEEKS BY GENDER
BALTIMORE CITY, 2007

	Sad or Hopeless (%)		
	All	Male	Female
High School youth	27.7%	19.5%	35.3%

Source: CDC, YRBS, 2007, Baltimore, MD

7. REDUCE DRUG USE AND ALCOHOL ABUSE

Drug and alcohol abuse represent significant health problems for Baltimore City, carrying tremendous costs in lost productivity, family and community disruption, crime, homelessness, and expensive health care utilization. Two of the leading indicators for this priority area — alcohol and drug-related hospital admissions and emergency department visits — illustrate these are preventable consequences. Comprehensive, continuous interventions that include prevention, treatment, and recovery support services allow individuals, families, and communities to address drug and alcohol abuse. Intervening early, particularly with youth, provides people with the best chance for healthy and productive futures.

A. Decrease rate of alcohol and drug-related hospital admissions by 10%

RATE OF HOSPITAL DISCHARGE FOR PRINCIPAL AND SECONDARY DIAGNOSES OF ALCOHOL-RELATED AND DRUG-RELATED DISORDERS, BY RACE
BALTIMORE CITY 2010

	Age-adjusted rate (per 100,000 population)		
	All	Black	White
Alcohol and/ Drug related	1141.1	1233.1	1014.0
Alcohol-related (w/o drug)	497.7	503.1	501.5
Drug-related (w/o alcohol)	702.7	795.2	565.0

Source: HSCRC, CDC Wonder 2009 population estimate. Excludes all cases where tobacco was the only substance.

B. Decrease rate of alcohol and drug-related emergency department visits by 15%

EMERGENCY DEPARTMENT DISCHARGE RATE FOR ALCOHOL OR DRUGS, BY RACE
BALTIMORE CITY 2010

	Age-adjusted rate (per 100,000 population)		
	All	Black	White
Alcohol and/or Drug related	1928.0	2001.3	1759.8
Alcohol-related (w/o drug)	1291.8	1312.4	1195.6
Drug-related (w/o alcohol)	694.5	754.9	610.1

Source: HSCRC CDC Wonder 2009 population estimate.

C. Decrease percent of high school students reporting alcohol and/or drug use in the last 30 days by 20%

PERCENT OF HIGH SCHOOL STUDENTS REPORTING ALCOHOL OR DRUG USE IN LAST 30 DAYS BY GENDER
BALTIMORE CITY 2007

	Age-adjusted rate (per 100,000 population)		
	All	Male	Female
Five or more consecutive drinks within a couple of hours at least 1 day	10.8	13.4	8.7
Used marijuana one or more times	21.4	25.7	17.6

Source: CDC, YRBS, 2007, Baltimore, MD

8. ENCOURAGE EARLY DETECTION OF CANCER

Cancer is the second leading cause of death in Maryland, with Baltimore City having the second highest mortality rate for all cancers. Technical advances and improved resources have resulted in more effective screening and treatment for breast and colon cancers, the leading indicators in this priority area. As with many other illnesses, but especially with cancer, early detection is essential for a more positive prognosis and for decreasing health disparities.

A. Increase percent of adults 50 and older who have had a colon cancer screening in the last 10 years by 15%

PERCENT OF ADULTS ≥50 WHO REPORTED TO HAVE HAD A SIGMOIDOSCOPY OR COLONOSCOPY BY EDUCATIONAL ATTAINMENT AND BY INCOME, *BALTIMORE CITY, 2007*

	Colon Cancer Screening (%)
	All
Adults ≥ 50	62%
HS graduate or GED	59%
Some College (1-3 years)	60%
College graduate	75%
Lowest income (<15K)	47%
Highest income (75K+)	81%

Source: Baltimore City Cancer Survey, 2007

B. Increase percent of women who receive breast cancer screening based on the most recent guidelines by 10%

PERCENT OF WOMEN , 40+ REPORTED TO HAVE RECEIVED A MAMMOGRAM WITHIN THE LAST 2 YEARS BY EDUCATIONAL ATTAINMENT BY INCOME, *BALTIMORE CITY, 2007*

	Mammography (%)
	All
Women 40+	81%
HS graduate or GED	79%
Some College (1-3 years)	86%
College graduate	85%
Lowest income (<15K)	66%
Highest income (75K+)	87%

Source: Baltimore City Cancer Survey, 2007

9. PROMOTE HEALTHY CHILDREN AND ADOLESCENTS

Healthy children learn better. Individuals with higher levels of educational attainment have better health outcomes and greater earning potential than those with lower levels of educational attainment. These differences are demonstrated vividly in all of the indicators within Healthy Baltimore 2015. The leading indicators in this priority area illustrate the continuum of pivotal stages of development for children in Baltimore City. They represent stages at which children die before their time, either in infancy or through the leading cause of death among City residents aged 15-24 years — homicide. While sobering, these indicators also represent areas where enhanced collaboration with the various sectors of our City can save lives now, as well as improve the quality of life for our children in the future.

A. Decrease teen birth rate by 20%

TEEN BIRTH RATE (15-19) BY RACE
BALTIMORE CITY 2009

	Age-specific Teen Birth Rate (per 1,000)		
	All	Black	White
All (15-19)	64.4	79.3	28.4
15-17	42.4	49.0	19.5
18-19	87.2	116.5	34.7

Source: Maryland Vital Statistics, Baltimore City, MD, 2009

B. Decrease rate of infant mortality by 10%

INFANT MORTALITY RATE (PER 1,000 LIVE BIRTHS) BY RACE AND BY MATERNAL EDUCATIONAL ATTAINMENT
BALTIMORE CITY 2009

	Mortality Rate (per 1,000 live births)
All	13.4
Black	18.3
White	3.85
Less than HS	11.7
High School (HS)	17.9
More than HS	9.7

Source: BCHD analysis of Maryland Vital state data, 2009

C. Decrease rate of juvenile homicide and non-fatal shooting victims by 30%

RATE OF JUVENILE (0-18 YEARS) HOMICIDE AND NON-FATAL SHOOTING VICTIMS
BALTIMORE CITY 2009

	RATES PER 100,000
Homicide	11.19
Non-fatal shooting victims	39.16

Source: Baltimore City Police Department, CDC Wonder, 2009 for Population estimates

D. Increase rate of school readiness by 15%

PERCENT OF KINDERGARTNERS DOCUMENTED AS "FULLY" SCHOOL READY, BALTIMORE CITY PUBLIC SCHOOLS, *2010-11 SCHOOL YEAR*

	Fully ready (%)
Kindergartners	67

Source: Maryland State Dept of Education

10. CREATE HEALTH PROMOTING NEIGHBORHOODS

Healthy neighborhoods are created when we are intentional about the ways in which we create public policy to correct injustices. Where we live, and by extension what is present in our physical surroundings, is a critical factor in determining our health. The resources and opportunities for solidifying social connections with our neighbors that are afforded or restricted by neighborhoods are significantly linked to our chances at living long and healthy lives. Indeed, life expectancy can be predetermined by where one lives at birth. The leading indicators in this priority area explore how neighborhood-level factors such as vacant building density and liquor outlet density influence community health. These indicators are proxy measures for the stability and cohesion of the built and social environment that constitute health risks and barriers in communities.

A. Decrease density of vacant buildings by 20%

VACANT BUILDING DENSITY *BALTIMORE CITY 2009*	
	Vacants per 10,000 households
Vacant building density	716.5

Source: BCHD analysis of 2009 MOIT vacant building data; 2009 American Community Survey (ACS)

B. Decrease liquor outlets density by 15%

LIQUOR OUTLET DENSITY *BALTIMORE CITY 2009*	
	Outlets per 10,000 residents
Liquor outlet density	12.5

Source: BCHD analysis of 2009 Baltimore City Liquor Board license data (Class A and Class BD-7 licenses only); 2009 CDC Wonder population estimates

INDICATORS

INDICATOR		BASELINE	2015 TARGET
1. Promote Access to Quality Health Care for All			
A. Decrease hospitalization rate for ambulatory care sensitive indicators by 15%	Asthma	419.2 per 100,000 population	356.3 per 100,000 population
	Diabetes, Type I	87.1 per 100,000 population	74.3 per 100,000 population
	Diabetes, Type II	213.6 per 100,000 population	181.6 per 100,000 population
	Hypertension	95.5 per 100,000 population	81.2 per 100,000 population
B. Decrease rate of emergency department visits for ambulatory care sensitive indicators by 10%	Asthma	1866.0 per 100,000 population	1679.4 per 100,000 population
	Diabetes, Type I	23.4 per 100,000 population	21.1 per 100,000 population
	Diabetes, Type II	324.5 per 100,000 population	292.1 per 100,000 population
	Hypertension	404.2 per 100,000 population	363.8 per 100,000 population
C. Decrease percent of insured individuals who report having unmet medical needs in the last 12 months by 20%.		15.2 %	12.2 %
2. Be Tobacco Free			
A. Decrease percent of adults who currently smoke by 20%		28.3 %	22.6 %
B. Decrease percent of teens who currently smoke by 20%		11.7 %	9.4 %
C. Decrease rate of births to women who report smoking during pregnancy by 15%		92.1 per 1,000 live births	78.3 per 1,000 live births
3. Redesign Communities to Prevent Obesity			
A. Decrease inequities in supermarket access by 15%		16.0	13.6
B. Increase percent of adults getting recommended levels of physical activity by 20%		53.0%	63.6%
C. Decrease percent of adults who are obese by 15%		33.8%	28.7%
4. Promote Heart Health			
A. Decrease rate of premature deaths from major cardiovascular disease by 10%		325.3 per 100,000 population	292.8 per 100,000 population
B. Increase percent of adults with high blood pressure on medication by 10%		82.5%	99.0%

INDICATOR		BASELINE	2015 TARGET
5. Stop the Spread of HIV and Other Sexually Transmitted Infections			
A. Decrease the number of Syphilis cases by 25%		22.3 per 100,000 population	16.4 per 100,000 population
B. Decrease number of new HIV infections by 25%		932	699
C. Decrease rates of Gonorrhea and Chlamydia in adolescents by 25%	Gonorrhea	1234.3 per 100,000 population	925.7 per 100,000 population
	Chlamydia	4778.9 per 100,000 population	3584.2 per 100,000 population
6. Recognize and Treat Mental Health Needs			
A. Decrease percent of adults with unmet mental health care needs by 25%		23%	17.3%
B. Decrease percent of adolescents expressing feelings of sadness or hopelessness by 20%		27.7%	22.2%
7. Reduce Drug Use and Alcohol Abuse			
A. Decrease rate of alcohol and drug-related hospital admissions by 10%		1141.1 per 100,000 population	1027.0 per 100,000 population
B. Decrease rate of alcohol and drug-related emergency department visits by 15%		1928.0 per 100,000 population	1638.8 per 100,000 population
C. Decrease percent of high school students reporting alcohol and/or drug use in the last 30 days by 20%	Alcohol	10.8%	8.6 %
	Marijuana	21.4 %	17.1%
8. Encourage Early Detection of Cancer			
A. Increase percent of adults 50 and older who have had a colonoscopy in the last 10 years by 15%		62%	71.3%
B. Increase percent of women who receive breast cancer screening based on the most recent guidelines by 10%		81%	89.1%
9. Promote Healthy Children and Adolescents			
A. Decrease teen birth rate by 20%		64.4 per 1,000 teenage girls	51.5 per 1,000 teenage girls
B. Decrease rate of infant mortality by 10%		13.4 per 1,000 live births	12.1 per 1,000 live births
C. Decrease rate of juvenile homicide and non-fatal shooting victims by 30%	Homicide	11.2 per 100,000 population	7.8 per 100,000 population
	Nonfatal shootings	39.2 per 100,000 population	27.4 per 100,000 population
D. Increase rate of school readiness by 15%		67%	77.1%
10. Create Health Promoting Neighborhoods			
A. Decrease density of vacant buildings by 20%		716.5 per 10,000 households	573.2 per 10,000 households
B. Decrease liquor outlet density by 15%		12.5 per 10,000 residents	10.6 per 10,000 residents

HEALTHY BALTIMORE 2015:

TECHNICAL NOTES

1. Promote Access to Quality Health Care for All

(A) and (B) — Data in this section are from the Maryland Health Services Cost Review Commission (HSCRC) for 2010, and reflect all visits made by Baltimore City residents to any Maryland hospital. The conditions tracked here are those commonly defined as Ambulatory Care Sensitive conditions (ACS). Hospitalization and emergency treatment for these ACS conditions is generally believed to be preventable, provided that all residents have equitable access to quality primary care, and the necessary resources and supports to properly manage their health. All rates given are based on 2010 HSCRC data and 2009 population estimates from CDC Wonder, with 2000 Census standard age weights used for age-adjusting. The following ACS conditions and related ICD9 codes are included in Healthy Baltimore 2015:

1) Asthma (All Primary Diagnoses): 493, 493.0, 493.00, 493.01, 493.02, 493.1, 493.10, 493.11, 493.12, 493.2, 493.20, 493.21, 493.22, 493.80, 493.82, 493.90, 493.91, 493.92.

2) Diabetes (All Primary Diagnoses):

a. TYPE1: 250.01, 250.03, 250.11, 250.13, 250.21, 250.23, 250.71, 250.73, 250.81, 250.83

b. TYPE2: 250.00, 250.02, 250.10, 250.12, 250.20, 250.22, 250.70, 250.72, 250.80, 250.82

c. Excluding cases in inpatient data where codes are MDC 14 .

3) Hypertension (All Primary Diagnoses): 401.0, 401.9, 402.0, 402.00, 402.01, 402.1, 402.10, 402.11, 402.9, 402.90, 402.91. Excluding cases with the following procedural codes: 36^^ (and all subsequent codes), 373^ (and all subsequent codes), 375^ (and all subsequent codes), 377^ (and all subsequent codes), 378^ (and all subsequent codes), 3794-3798.

(C) — Baltimore City Health Department's 2009 Baltimore City Community Health Survey (CHS). The 2009 CHS is a representative survey of over 1,100 Baltimore City adult residents conducted via telephone (both landline and cellular). This indicator captures respondents who: 1) reported having medical care needs in the past 12 months, AND 2) responded "yes" to the question: *In the past 12 months, was there any time when you were not able to get medical care that you needed?* All percentages given by race and income are statically different.

2. Be Tobacco Free

(A) — Adult current smoking percentages are from the Baltimore City Health Department's 2009 Baltimore City Community Health Survey (CHS). The 2009 CHS was a representative survey of over 1,100 Baltimore City adult residents conducted via telephone (both landline and cellular). Current smoking was defined as having *smoked at least 100 cigarettes in a lifetime and still smoking some days or every day*. All percentages given by gender and income are statistically different.

(B) — Percent of teen smoking is derived from U.S. CDC Youth Risk Behavioral Surveillance Survey (YRBS) conducted in Baltimore City in 2007. YRBS data reflects a representative sample of students in grades 9-12 in the specified jurisdiction. Current smokers was defined as having responded "1 time, 2 or 3 times, 4 or 5 times, or 6 or more times" to questions: *During the past 30 days, on how many days did you smoke cigarettes?, During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?, During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?*

(C) — Rate of women who reported smoking during pregnancy at delivery; as recorded on the official birth record. MD Vital Statistics, 2009.

3. Redesign Communities to Prevent Obesity

(A) — This measure is intended to serve as proxy to capture the impact of food deserts in Baltimore City. "Food Desert" is a relatively new concept in US public health, commonly defined and indentified using a combination of factors, such as income/poverty, vehicle access, public transportation networks, and distance to healthy food options (most commonly, supermarkets). This proxy measure is based on 2000 Census vehicle ownership rates at the census tract level, and city supermarket locations (provided by Johns Hopkins Center for a Livable Future in 2009, and updated to reflect subsequent closings through 2010). Estimated travel times to the nearest supermarket from the most populated census tract in each of Baltimore's 55 major community statistical areas (CSA) were obtained using Google Maps. Car travel times were used for all CSAs with vehicle ownership rates of 40% and higher. Bus travel times were used for all other CSAs (based on catching the first bus after 12PM on a weekday). CSAs were divided into quintiles based on estimated supermarket travel times. The disparity ratio in this measure reflects the average estimated travel time difference between the top quintile (highest access communities) and the bottom quintile (lowest access communities).

(B) — Adult physical activity levels are from the Baltimore City Health Department's 2009 Baltimore City Community Health Survey (CHS). The 2009 CHS was a representative survey of over 1,100 Baltimore City adult residents conducted via telephone (both landline and cellular). Respondents who reported fully meeting physical activity recommendations responded "every week" to the following: *Thinking about the past month, how many weeks did you get as much physical activity as is recommended?, defining federal recommendations as 30 minutes of physical activity per day at least 5 days per week. Physical activity can occur through work or school, through walking or biking to work or school, as well as through exercising on purpose.* Percentages given by gender are statistically different.

TECHINICAL NOTES (CONTINUED):

(C) — Adult obesity rates are from the Baltimore City Health Department's 2009 Baltimore City Community Health Survey (CHS). The 2009 CHS is a representative survey of over 1,100 Baltimore City adult residents conducted via telephone (both landline and cellular). Respondent BMIs were calculated using their self-reported height and weight. Percentages given by income are statistically different.

4. Promote Heart Health

(A) — This measure captures the impact of premature death from major cardiovascular disease, including the following ICD10 codes: I1-I15, I20-I51, and I60-I69. Premature death was defined as death before age 75. The overall rate and rates by race are based on 2009 Maryland Vital Statistics data and 2009 CDC Wonder population estimates, age-adjusted using 2000 Census standard population weights. Rates by educational attainment are based on 2009 Maryland Vital Statistics data and 2009 ACS population estimates for those over age 25, age-adjusted using 2000 Census standard population weights (distribution #14).

(B) — Data for individuals with high blood pressure on medication is from the Maryland State 2009 Behavioral Risk Factor Surveillance Survey (BRFSS). BRFSS is an ongoing telephone surveillance program to collect information on the behavior and conditions that increase risk for chronic disease, injuries and preventable infectious disease. The 2009 BRFSS survey included sample size of 514 Baltimore City households. Respondents who reported to be taking medication for Hypertension responded "yes" to questions: *Ever been told by a health care professional that you have high blood pressure?*, and, *Are you currently taking medicine for your high blood pressure?*

5. Stop the Spread of HIV and Other Sexually Transmitted Infections

(A) — Primary and Secondary syphilis is reported by healthcare providers, laboratories, and the state to Baltimore City Health Department's Bureau of STD/HIV surveillance unit in the applicable year. The overall rate and rates by race are based on 2009 reported primary and secondary Syphilis case data and 2009 CDC Wonder population estimates.

(B) — Data reported through December 31, 2009 Center for HIV Surveillance and Epidemiology, Infectious Disease and Environmental Health Administration (IDEHA), Maryland State DHMH in accordance with Maryland HIV/AIDS Reporting Act of 2007.

(C) — Gonorrhea and Chlamydia cases are reported by healthcare providers, laboratories, and the state to Baltimore City Health Department's Bureau of STD/HIV surveillance unit in the applicable year. The overall age-specific rate and rates by race are based on 2009 reported Gonorrhea and Chlamydia case data and 2009 CDC Wonder population estimates for those ages 10-19.

6. Recognize and Treat Mental Health Care Needs

(A) — The percent of adults with unmet mental needs is from the Baltimore City Health Department's 2009 Baltimore City Community Health Survey (CHS). The 2009 CHS was a representative survey of over 1,100 Baltimore City adult residents conducted via telephone (both landline and cellular). This indicator captures respondents who: 1) reported having mental health care needs in the past 12 months, AND 2) responded "yes" to the question: *In the past 12 months, was there any time when you were not able to get mental health care or counseling that you needed?* Percentages given by race and educational attainment are statistically significant.

(B) — Percent of adolescents expressing feelings of sadness or hopelessness is derived from U.S. CDC Youth Risk Behavioral Surveillance Survey conducted in Baltimore City in 2007. YRBS data reflect a representative sample of students in grades 9-12 in the specified jurisdiction. Feelings of sadness and hopelessness was defined as having responded "yes" to the question: *During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?*

7. Reduce Drug Use and Alcohol Abuse

(A) and (B) — Data for this section are from the Maryland Health Services Cost Review Commission (HSCRC) for 2010, and reflect all visits made by Baltimore City residents to any Maryland hospital. All rates given are based on 2010 HSCRC data and 2009 population estimates from CDC Wonder, with 2000 Census standard age weights used for age-adjusting. The following ICD9 codes for substance-related hospitalizations and visits are included in Healthy Baltimore 2015:

1) **Alcohol and/or Drug** (All Primary and Secondary Diagnoses): 291, 291.0, 291.1, 291.2, 291.3, 291.4, 291.5, 291.8, 291.81, 291.82, 291.83, 291.9, 292, 292.0, 292.1, 292.11, 292.12, 292.2, 292.8, 292.81, 292.82, 292.83, 292.84, 292.85, 292.89, 292.9, 303 (and all subsequent codes), 304 (and all subsequent codes), 305 (and all subsequent codes). Excluding cases with tobacco alone (ICD9 code 305.1).

2) **Drug w/o Alcohol** (All Primary and Secondary Diagnoses): 292.0, 292.1, 292.11, 292.12, 292.2, 292.8, 292.81, 292.82, 292.83, 292.84, 292.85, 292.89, 292.9, 304 (and all subsequent codes), 305 (305.2 and above)

3) **Alcohol w/o other Drugs** (All Primary and Secondary Diagnoses): 291, 291.0, 291.1, 291.2, 291.3, 291.4, 291.5, 291.8, 291.81, 291.82, 291.83, 291.9, 303 (and all subsequent codes), 305 (the 305.0 series)

(C) — Alcohol and/or drug use among high school students is derived from U.S. CDC Youth Risk Behavioral Surveillance Survey conducted in Baltimore City in 2007. YRBS data reflects a representative sample of students in grades 9-12 in the specified jurisdiction. Current alcohol and drug use was defined as having responded "1 day, 2 days, 3 to 5 days 6 to 9 days, 10 to 19 days, or 20 or more days" to the question: *During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?* ; and, "1 or 2, 3 to 9, 10-19, 20-39, or 40 or more times" to the question: *During the past 30 days, how many times did you use marijuana?*

TECHINICAL NOTES (CONTINUED):

8. Encourage Early Detection of Cancer

The data in this section is from the Baltimore City Cancer Survey (BCCS). The BCCS is a population-based land-line telephone survey designed to obtain information about cancer screening practices, knowledge of cancer and cancer screening, and lifestyle factors related to cancer among Baltimore City residents age 40 years and older. The BCCS also supplements data obtained from previous Maryland Cancer Surveys (MCS). Data is based on BCCS interviews of 1,203 Baltimore City residents.

(A) — Respondents who reported colon cancer screening replied "yes" to the question: *Have you ever had a sigmoidoscopy or colonoscopy?*

(B) — Breast cancer screening reflects women age 40 years and older who responded "yes" to the question: *Have you ever had a mammogram?*

Of note: In 2009, national breast cancer screening guidelines changed from recommendation for women 40 + to receive mammography every 1-2 years with clinical breast exam (CBE) to recommendation for women, 50-74 at average risk, to undergo routine screening mammography every 2 years.

9. Promote Healthy Children and Adolescents

(A) — Rate of births to females aged 15-19; as recorded on official birth record. Rates based upon 2009 Maryland Vital Statistics data and 2009 CDC Wonder population estimates.

(B) — Rate of infant deaths per 1,000 live births; demographics derived from official birth and death records. Rates based upon 2009 Maryland Vital Statistics data and 2009 CDC Wonder population estimates.

(C) — Juvenile homicide and non-fatal shooting data is provided courtesy of the Baltimore City Police Department. The overall rates are based upon 2009 CDC Wonder population estimates for juveniles, 0-17, residing in Baltimore City.

(D) — This measure reflects the percentage of Baltimore City public school students that were assessed as "fully ready" (to learn) for kindergarten, based on 2010 data from the Maryland State Department of Education. As defined by the Maryland State Department of Education using the Maryland Model for School Readiness (MMSR), being "fully ready" means the student "consistently demonstrates the skills, behaviors, and abilities needed to meet kindergarten expectations." The MMSR Kindergarten Assessment is administered by kindergarten teachers every year in seven essential domains of learning: Language and Literacy, Mathematical Thinking, Physical Development, Scientific Thinking, Social and Personal Development, Social Studies, and The Arts.

10. Create Health Promoting Neighborhoods

(A) — Vacant building data is from the Mayor's Office of Information Technology database, updated in December of 2009. Density in this measure is given as the number of vacant buildings per 10,000 households, based on 2009 American Communities Survey household estimates.

(B) — Liquor outlet data is from the Baltimore City Liquor Board, updated in May of 2009. Data presented here include only establishments with the following license classifications: LA, LA-2, WA, and BD-7 (generally, off-premise beer, wine, and liquor locations, as well as taverns with off-premise sales). Density in this measure is given as the number of liquor stores per 10,000 city residents, based on 2009 CDC Wonder population estimates.

1001 E. Fayette Street
Baltimore, MD 21202
(410) 396-4398
http://www.baltimorehealth.org

Visit us on Facebook: http://www.facebook.com/BaltimoreHealth
Follow us on Twitter: http://twitter.com/BMore_Healthy