BALTIMORE CITY

2017 NEIGHBORHOOD HEALTH PROFILE

Madison/East End

BALTIMORE CITY HEALTH DEPARTMENT

March 2017
health.baltimorecity.gov

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A. Letter from the Health Commissioner

Dear Friends, Colleagues, and Partners,

For more than 200 years, the Baltimore City Health Department (BCHD) has worked tirelessly to ensure the health of our city's residents.

With this latest edition of the Neighborhood Health Profiles (Profiles), we gain a better understanding of health and wellness across Baltimore. The Profiles bring together data about major health outcomes for each of the 55 clusters of neighborhoods in Baltimore City, known as Community Statistical Areas.

We envision an equitable, just, and well Baltimore where everyone has the opportunity to be healthy and to thrive. We aim to improve health, but we recognize that this is not enough. Our mission is to protect health, eliminate disparities, and ensure the well-being of every Baltimorean through education, advocacy, and direct service delivery.

Through Healthy Baltimore 2020, the strategic framework for health and wellness in Baltimore City, we aim to cut health disparities in half over the next decade. While it may seem ambitious, this aspiration is grounded in the work that BCHD tackles each day, from comprehensive wellness services for our most vulnerable children to ensuring that seniors are able to age with dignity and respect.

The Profiles provide a clear snapshot of the current state of health in Baltimore. With an understanding of our baseline, we can chart a course for achieving these goals together with countless partners across the city.

To that end, I encourage all of our residents to use these Profiles as a resource to advocate for health and wellness in their communities. We see the Neighborhood Health Profiles as tools that can be leveraged as we fight for health equity and social justice citywide.

Thank you for your support. I look forward to continuing to partner with you to ensure the health and well-being of every Baltimorean.

Sincerely,

Leana S. Wen, MD, MSc
Commissioner of Health, Baltimore City

B. Acknowledgements

The Baltimore City Health Department would like to thank its staff members for contributions to this report. We also thank the following agencies, whose contributions appear throughout: the Baltimore Neighborhood Indicators Alliance (BNIA), Maryland Department of Health and Mental Hygiene (Vital Statistics Administration), Baltimore City Mayor's Office of Information Technology, Baltimore City Liquor Board, Maryland Office of the Comptroller, and the Johns Hopkins Bloomberg School of Public Health (Office of Public Health Practice and Training, Department of Epidemiology, Center for a Livable Future). This report builds upon prior Neighborhood Health Profile reports released by the Baltimore City Health Department in 2008 and 2011.

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Access
This report can be accessed online at: http://health.baltimorecity.gov/. The raw electronic data will be made available to the public via Baltimore City's data portal, Open Baltimore at https://data.baltimorecity.gov/.

C. Introduction

The Baltimore City Health Department's mission is to protect health, eliminate disparities, and ensure the well-being of every Baltimorean through education, advocacy and direct service delivery. The goal of the *2017 Neighborhood Health Profiles* - building on earlier reports published in 2008 and 2011 - is to provide information about the health of your specific neighborhood to facilitate collaboration that will benefit the health of all residents in Baltimore City.

What can you do with this information about health in your community?

1. Learn how the health of your neighborhood compares to others and the city as a whole.
2. Talk with your neighbors to identify common priorities for improving health in your area.
3. Share with your community association, senior center, church, local businesses, etc. to generate awareness and call for collaboration.
4. Talk with local health clinics about their work to address unmet health needs in your community.
5. Work with groups in your neighborhood to apply for funding to make health-related improvements in your community.
   - Visit this website to learn about tools for community health improvement: https://www.cdc.gov/stltpublichealth/cha/assessment.html
6. Suggest partnerships between organizations in your community to develop, implement, and evaluate programs to address unmet health needs.
7. Share with local, state, and federal leaders to advocate for resources and changes to improve health in your area.
   - Use this website to identify your City Council district and representative: http://cityservices.baltimorecity.gov/citycouncil/
   - Visit this website to identify your elected officials at the state and federal levels: http://mdelect.net/
8. Join an advocacy group to promote policies that improve health at the community level.
9. Learn about resources and services in your community to advance local health.
   - Call 2-1-1 or visit the 211 Maryland website: http://www.211md.org/
   - Visit the website of the Maryland Community Services Locator: http://www.mdcsl.org/search.html
   - Call Baltimore City Maryland Access Point at 410-396-2273 to request a copy of the most recent Community Resources Directory.

D. Demographics

Neighborhood: **Madison/East End**

This section includes information on age, sex, race, health insurance coverage, etc., which can help you understand the characteristics of your neighborhood as a whole.

1. Total Population

The total population (all ages) of Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Total population	7,204	622,454

Source: American Community Survey (2011-2015 5-year estimates).

2. Age

The age distribution of Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
0-17 years	29.5%	21.2%
18-24 years	14.6%	11.3%
25-44 years	25.0%	30.1%
45-64 years	24.4%	25.3%
65+ years	6.5%	12.1%

Source: American Community Survey (2011-2015 5-year estimates).

3. Sex

The percentage of males and females in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Male	48.4%	47.1%
Female	51.6%	52.9%

Source: American Community Survey (2011-2015 5-year estimates).

4. Race/Ethnicity

The race and ethnicity distribution of Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Black or African American	89.9%	62.8%
White	5.2%	30.3%
Asian	0.1%	2.6%
Some other race[1]	4.1%	2.0%
Two or more races	0.6%	2.3%
Hispanic or Latino (ethnicity)[2]	7.0%	4.6%

Source: American Community Survey (2011-2015 5-year estimates).

[1] Some other race includes American Indian or Alaska Native, Native Hawaiian or Other Pacific Islander, and choosing other races as an option on the census.
[2] Hispanic or Latino ethnicity overlaps with race categories.

5. Percentage of Children in Single-Parent Households

The percentage of children (aged less than 18 years) living in single-parent households among all children living in family households in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage of children in single-parent households	76.8%	64.8%

Source: American Community Survey (2011-2015 5-year estimates).

6. Percentage of Residents with No Health Insurance

The percentage of adults (aged 18 years and older) and children (aged less than 18 years) who lack health insurance in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage of adults 18 years and older with no healthcare insurance	15.5%	11.7%
Percentage of children under 18 years with no healthcare insurance	6.0%	4.4%

Source: American Community Survey (2011-2015 5-year estimates).

7. Percentage of Limited English Speaking Proficiency

The percentage of population (aged 5 years and older) who report speaking English less than "very well" in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage of population who report speaking English less than "very well"	3.5%	3.4%

Source: American Community Survey (2011-2015 5-year estimates).

E. Socioeconomic Environment

Neighborhood: **Madison/East End**

A person's or family's socioeconomic status, in relation to others, is determined by a combination of education, income, and occupation. These conditions impact the health of community residents. (A separate section in this Profile describes this neighborhood's educational environment.)

8. Household Income Distribution

The household income distribution of Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Median Household[1] Income	$27,454	$41,819
Percentage of all households in Madison/East End whose annual household income is in the following range:[2]		
Up to $24,999	48.3%	32.2%
$25,000-$39,999	16.0%	15.4%
$40,000-$59,999	17.1%	16.5%
$60,000-$74,999	5.7%	8.9%
$75,000 and over	12.8%	27.0%

[1] Source: Baltimore Neighborhood Indicators Alliance calculation of American Community Survey (2014 1-year estimates) data.
[2] Source: American Community Survey (2011-2015 5-year estimates).

9. Unemployment Rate

The percentage of the Madison/East End population 16 years of age and older that are unemployed in the civilian labor force.

	Madison/East End	Baltimore City
Percentage unemployed	26.4%	13.1%

Source: American Community Survey (2011-2015 5-year estimates).

10. Family Poverty Rate

The percentage of families with children under 18 years in Madison/East End that have an income below the poverty level compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage of families in poverty	45.2%	28.8%

Source: American Community Survey (2011-2015 5-year estimates).

11. Hardship Index

The Hardship Index combines information from six socioeconomic indicators - housing, poverty, unemployment, education, income, and dependency. Please see Technical Notes for details on the Index and how it was calculated. Estimates are presented for Madison/East End compared to Baltimore City overall. (The Index ranges from 100 = most hardship to 1= least hardship)

	Madison/East End	Baltimore City
Hardship Index	90	51

Source: American Community Survey (2011-2015 5-year estimates); see Technical Notes for details.

F. Built Environment

Neighborhood: **Madison/East End**

A community's built environment includes physical attributes and structures, such as buildings and lots, parks and green space, streets and sidewalks, hazardous waste sites, and businesses and retail shops. The built environment affects how people use space and interact with one another, and it has impacts on neighborhood health.

12. Liquor Store Density

The number of liquor stores per 10,000 residents (all ages) of Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Number of liquor stores per 10,000 residents	3.9	3.8

Source: Baltimore City Liquor Board via OpenBaltimore Data Portal (2015).

13. Tobacco Store Density

The number of tobacco stores per 10,000 residents (all ages) of Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Number of tobacco stores per 10,000 residents	46.3	20.9

Source: Maryland Office of the Comptroller (2016).

Spotlight On: Tobacco Prevention

The Baltimore City Health Department's (BCHD) Tobacco Free Baltimore program envisions a smoke-free city that is free of addiction to tobacco products and the diseases that tobacco use causes, like heart disease, lung disease, lung cancer, and asthma. Tobacco Free Baltimore provides outreach and education including smoking cessation, community and school-based projects, and enforcement of local tobacco control ordinances.

BCHD has advocated for several policy initiatives to address the harmful effects of tobacco, such as regulating hookah establishments, promoting smoke-free housing, banning indoor smoking, including e-cigarettes, creating buffer zones around schools, and increasing retail enforcement funding and capacity.

BCHD successfully implemented its strategy to reduce the sales of tobacco to youth under the age of 18. By providing store education, increasing enforcement, and engaging stakeholders, BCHD decreased the rate of non-compliance by 56 percent from 2015 to 2016.

14. Percentage of Land Covered by Green Space

The percentage of land area that is covered by "green space" (tree canopy, vegetation, and parkland) for Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage land covered by green space	13.7%	33.1%

Sources: Baltimore City Department of Planning (2007 canopy map file, 2008 vegetation map file), Baltimore City Department of Recreation and Parks (2016 park area map file).

15. Percentage of Land Covered by Pavement

The percentage of land area that is covered by pavement (paved streets, paved medians, intersections, paved driveways, paved parking lots, paved alleys) for Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage land covered by pavement	28.4%	25.5%

Source: Baltimore City Department of Planning (2009 street area map file).

16. Percentage of Land Zoned Industrial

The percentage of land area that is zoned for industrial use in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage land zoned industrial	6.1%	23.4%

Source: Baltimore City Department of Planning (2008).

17. Rate of Rat Service Requests to 311

The number of citizen-generated service requests to 311 regarding rats per 10,000 households for Madison/East End compared to Baltimore City overall. Includes requests submitted by any method (e.g., phone, internet, mobile app).

	Madison/East End	Baltimore City
Rate of rat complaints	915.4	408.8

Source: Mayor's Office of Information Technology, via OpenBaltimore data portal (2016).

G. Educational Environment

Neighborhood: **Madison/East End**

Educational attainment is one of the most critical determinants of health overall. Ensuring that all residents can achieve their full education potential is essential to efforts to improve community health and eliminate health inequities. This section includes information on school readiness, reading, educational attainment, and absenteeism.

18. School Readiness, 3rd and 8th Grade Reading Proficiency

The percentage of kindergartners rated as demonstrating readiness to learn in composite scoring in Madison/East End compared to Baltimore City overall (in school year 2012-2013). The percentage of 3rd and 8th graders who are reading at "Proficient" or "Advanced" level in Madison/East End compared to Baltimore City overall (school year 2013-2014).

	Madison/East End	Baltimore City
Percentage of kindergartners "fully ready" to learn[1]	61.0%	77.6%
3rd graders at "proficient or advanced" reading level[2]	47.5%	55.6%
8th graders at "proficient or advanced" reading level[2]	49.0%	54.9%

[1] Source: Baltimore Neighborhood Indicators Alliance via the Baltimore City Public School System (2012-2013).
[2] Source: Baltimore Neighborhood Indicators Alliance via the Baltimore City Public School System (2013-2014).

Spotlight On: Youth Health and Wellness

The Baltimore City Health Department (BCHD) is implementing a comprehensive Youth Health and Wellness Strategy, a five-year plan to improve the health and wellness of young people across Baltimore City. This plan will focus on three categories of long-term outcomes:

- Healthy Minds, including improved social and emotional development as well as improved behavioral health;
- Healthy Bodies, including continuation of reduced teen births and improved physical health outcomes including immunizations and oral health; and
- Healthy Communities, including improved peer relationships, community connectedness, and connections with trusted adults.

As a part of the overall strategy, BCHD launched Vision for Baltimore in partnership with Baltimore City Public Schools, Johns Hopkins University, nonprofit provider Vision To Learn, and Warby Parker to ensure that students across Baltimore City elementary and middle schools have universal access to glasses, regardless of a family's ability to pay.

BCHD is also working with City Schools to provide additional trauma and mental health services in schools in Central West Baltimore so that, from school to community, students and families have the supports and services they need to be successful.

19. School Absenteeism

The percentage of elementary, middle, and high school students who missed 20 or more days of school in Madison/East End compared to Baltimore City overall (school year 2013-2014).

	Madison/East End	Baltimore City
Percentage of elementary school students missing 20+ days	18.4%	15.0%
Percentage of middle school students missing 20+ days	18.9%	15.2%
Percentage of high school students missing 20+ days	53.2%	38.7%

Source: Baltimore Neighborhood Indicators Alliance via the Baltimore City Public School System (2013-2014).

20. Adult Educational Attainment

Educational attainment among residents 25 years and older in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Percentage of residents 25 years and older with a high school degree or less	72.0%	47.2%
Percentage of residents 25 years and older with a bachelor's degree or more	6.3%	28.7%

Source: American Community Survey (2011-2015 5-year estimates).

H. Safety Environment

Neighborhood: **Madison/East End**

This section includes information on non-fatal shootings, homicides (in all ages and in youth specifically), and service requests to Baltimore City 311 regarding potential animal abuse. Research has identified a critical overlap among those who abuse animals and those who abuse people.

21. Rate of Animal Abuse Service Requests to 311

The number of service requests to 311 regarding animal abuse per 10,000 households for Madison/East End compared to Baltimore City overall. Includes requests submitted by any method (e.g., phone, internet, mobile app).

	Madison/East End	Baltimore City
Rate of animal abuse complaints	425.2	177.4

Source: Mayor's Office of Information Technology via OpenBaltimore Data Portal (2016).

22. Non-Fatal Shooting Rate

The number of non-fatal shootings per 10,000 residents (all ages) per year in Madison/East End compared to Baltimore City overall. Data are based on the location of the incident, not the residence of the victim(s).

	Madison/East End	Baltimore City
Non-fatal shooting rate	20.6	6.9

Source: Baltimore Police Department via OpenBaltimore Data Portal (2015).

Spotlight On: Safe Streets

In 2007, the Baltimore City Health Department launched Safe Streets. Based on the national Cure Violence Model, Safe Streets relies on community members who are trained as outreach workers to de-escalate and mediate conflicts that might otherwise result in violence. The program operates in four sites throughout the city: Cherry Hill, McElderry Park, Park Heights, and Sandtown-Winchester.

In 2016, Safe Streets mediated 888 conflicts within those sites, 73 percent of which were deemed very "likely" or "very likely" to result in violence. The Safe Streets model is being expanded to emergency departments, where hospital-based responders will work to reduce violence-related injury re-admissions by resolving conflicts immediately after an altercation occurs, preventing retaliation.

23. Homicide Rate

The number of homicides that occurred per 10,000 residents (all ages) per year in Madison/East End compared to Baltimore City overall. Data are based on the location of the incident, not the residence of the victim(s).

	Madison/East End	Baltimore City
Homicide rate	7.7	3.9

Source: Baltimore Police Department via OpenBaltimore Data Portal (2015).

24. Youth Homicide Mortality Rate

The rate of death due to homicide that occurred per 100,000 youth under 25 years old in Madison/East End compared to Baltimore City overall. Data are based on the residence of the victim(s), not the location of the incident.

	Madison/East End	Baltimore City
Youth homicide mortality rate	33.6	31.3

Source: BCHD calculations of data provided by Maryland Department of Health and Mental Hygiene Vital Statistics Administration (2010-2014).

I. Housing Environment

Neighborhood: **Madison/East End**

This section describes the community's housing environment. Housing affects health in many ways; exposure to lead paint, for example, can cause lead poisoning in children. Housing can also affect the quality of the air we breathe and thus health outcomes like asthma. High housing costs can constrain a family's ability to pay for other important needs like food and medicine. As elements of the built environment, high numbers of vacant buildings and lots are strongly associated with crime and violence in a community.

25. Average Annual Lead Paint Violation Rate

The number of lead paint violations per 10,000 households per year in Madison/East End compared Baltimore City overall.

	Madison/East End	Baltimore City
Average annual lead paint violation rate	81.6	9.8

Source: Baltimore City Health Department Lead Program (2006-2015).

Spotlight On: Lead Poisoning Prevention

The Baltimore City Health Department seeks to reduce lead poisoning in the city through prevention and aggressive enforcement of the city's lead regulations. BCHD educates families and providers about laws requiring tests for elevated blood lead levels in children ages one and two, performs outreach to pregnant women to evaluate potential lead hazards, and, with numerous partners, including Baltimore Housing, conducts home visits and develops strategies to reduce lead paint hazards in homes. Through these and other efforts, there has been a 98 percent decrease in the number of children with elevated lead blood levels between 2002 and 2015.

26. Vacant Lot Density

The number of vacant lots per 10,000 housing units in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Vacant lot density	684.3	677.3

Source: Mayor's Office of Information Technology via Baltimore Department of Housing and Maryland State Department of Assessments and Taxation (2016).

27. Vacant Building Density

The number of vacant buildings per 10,000 housing units in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Vacant building density	1,794.4	562.4

Source: Housing Authority of Baltimore City via OpenBaltimore Data Portal (2016).

J. Food Environment

Neighborhood: **Madison/East End**

A food environment includes all of the potential food sources in a community, which influence whether or not people can find and afford healthy choices. Improving the food environment is critical to improving health and eliminating health inequities in diet-related outcomes, such as obesity.

28. Percentage of Land Covered by Food Desert

The percentage of land area that is covered by a food desert in Madison/East End compared to Baltimore City overall. Please see Technical Notes for the definition of a food desert.

	Madison/East End	Baltimore City
Percentage of land covered by food desert	40.0%	12.5%

Source: Johns Hopkins Center for a Livable Future (2015).

Spotlight On: Virtual Supermarket

The Baltimore City Health Department operates a suite of community-based food access and food justice programs to ensure that communities that have equitable access to healthy, affordable, and culturally-specific foods every day. Virtual Supermarket is first-of-its-kind, an award-winning flagship program that uses online grocery ordering and delivery to bring food to community sites in food desert neighborhoods, serving 900 customers at ten sites across Baltimore.

The Virtual Supermarket Program enables residents to place grocery orders in senior, assisted living, or public housing, in local libraries, or from any computer and to pick up their order at their community site at no delivery cost. Residents pay for their groceries using cash, credit, debit and EBT/SNAP.

29. Carryout Density

The number of carry-out restaurants per 10,000 residents in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Number of carry-out restaurants per 10,000 residents	27.0	11.4

Source: BCHD Open Food Facilities Permit/License Database (2016).

30. Corner Store Density

The number of corner stores per 10,000 residents in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Number of corner stores per 10,000 residents	36.0	14.1

Source: Johns Hopkins University, Center for a Livable Future Food Stores list (2016).

Spotlight On: Healthy Corner Stores

As part of the Baltimore City Health Department's food access and food justice efforts, the Healthy Stores program aims to reduce childhood obesity through a multi-level, community-based program that transforms the retail food environment in Baltimore's food deserts, engaging corner stores, youth, grocery stores, and caregivers to increase the supply of and demand for healthy foods.

The program currently works with 15 stores—located in the Upton/Druid Heights, Harlem Park, Franklin Square, Washington Village/Pigtown, Park Heights, and Patterson Park communities—that engage in the promotion of healthy eating via community nutrition education, PSAs about healthy snacking, and more. The Healthy Stores program has shown a 73 percent increase in monthly sales of fruits, vegetables, healthy drinks, and healthy snacks at participating stores.

31. Fast Food Density

The number of fast food restaurants per 10,000 residents in Madison/East End compared to Baltimore City overall.

	Madison/East End	Baltimore City
Fast food density	0.0	2.5

Source: BCHD Open Food Facilities Permit/License Database (2016).

K. Health Outcomes

Neighborhood: **Madison/East End**

Mortality and Illnesses

Life expectancy is a measure that summarizes health over the entire lifespan. Life expectancy at birth is the *average* number of years a newborn can expect to live, assuming she or he experiences the patterns of mortality existing at birth throughout her or his lifespan. The mortality rate is the rate at which individuals in a population die, expressed in terms of deaths per 10,000 residents per year, and is age-adjusted. (An explanation of age-adjustment is provided in detail in Technical Notes.)

	Madison/East End	Baltimore City
32. Life Expectancy at Birth[1] (years)	68.9	73.6
33. Age-adjusted All-cause Mortality Rate[1] (deaths per 10,000 residents)	130.0	100.3
34. Rate of Reported Foodborne Illness[2] (number of cases per 10,000 residents per year, based on residence of case)	8.2	4.7
35. Rate of Hepatitis C[2] (number of cases per 10,000 residents per year, based on residence of case)	52.7	35.0

[1] Source: BCHD calculations of data provided by Maryland Department of Health and Mental Hygiene Vital Statistics Administration (2011-2015).
[2] Source: BCHD calculations of data obtained from Maryland National Electronic Disease Surveillance System (NEDSS) (2011-2015).

Top Causes of Death

Examining the top causes of death can help determine where efforts and resources could be directed to best prevent premature deaths. A mortality rate for a given cause provides an absolute measure of the impact on residents. A percentage of total deaths for a given cause indicates the impact of that particular cause relative to others.

Indicator (cause of death – not necessarily in order of magnitude)	Madison/East End		Baltimore City	
	Age-adjusted Mortality Rate (Deaths per 10,000)	% of Total Deaths	Age-adjusted Mortality Rate (Deaths per 10,000)	% of Total Deaths
36. Heart Disease	41.2	22.1%	24.4	24.4%
37. Cancer (all kinds)	44.7	23.9%	21.2	21.3%
38. Lung Cancer	13.3	7.2%	5.9	5.9%
39. Colorectal Cancer	5.9	2.9%	2.0	2.0%
40. Breast Cancer (females only)	6.7	1.7%	2.6	1.5%
41. Prostate Cancer (males only)	1.8	0.3%	3.0	1.1%
42. Stroke	12.7	4.6%	5.0	4.9%
43. Drug- and/or Alcohol-Induced	6.9	4.6%	4.4	4.5%
44. Chronic Lower Respiratory Disease[1]	6.0	3.2%	3.6	3.5%
45. Accident/Injury	9.3	4.6%	3.5	3.5%
46. Homicide	6.4	6.0%	3.3	3.5%
47. Diabetes	4.7	1.7%	3.0	3.0%
48. Septicemia (blood poisoning)	8.5	4.9%	2.7	2.7%
49. HIV/AIDS	3.7	2.9%	1.8	1.8%
50. Falls-related	3.5	1.1%	1.0	1.0%

Source: BCHD calculations of data provided by the Maryland Department of Health and Mental Hygiene Vital Statistics Administration (2011-2015).

[1] Includes Chronic Obstructive Pulmonary Disease (COPD), emphysema, chronic bronchitis, and asthma.

51. Mortality by Age

Examining mortality rates in different age groups allows the identification of the age groups with the highest rates of death.

Age group	Madison/East End	Baltimore City
Less than 1 year old[1]	12.1	10.4
1-14 years old	0.8	0.4
15-24 years old	1.5	1.5
25-44 years old	8.9	7.2
45-64 years old	38.4	26.5
65-84 years old	53.6	42.1
85 and up	25.3	20.4

Sources: BCHD calculations of data provided by the Maryland Department of Health and Mental Hygiene Vital Statistics Administration (2011-2015).

All rates are crude (i.e., not age-adjusted) for deaths per 10,000 residents in that age group. Rates are annual averages for 2011-2015.

[1] This measure is the Infant Mortality Rate (IMR), considered the most universally measured and stable mortality indicator. Infant Mortality Rates are measured by calculating the number of infant deaths (babies <1 year of age) per 1,000 live births in a given time period.

Maternal and Child Health

The health of mothers and their babies is one of the most sensitive measures of a community's health. Women who receive early prenatal care have greater access to important medical and social services that support healthy pregnancies and deliveries. Women who report smoking during pregnancy have a greater risk of delivering babies who are preterm and low birth weight. Babies who are born full term and at a healthy weight are more likely to reach their first birthday.

Indicator	Madison/East End	Baltimore City
52. Birth Rate (live births per 1,000 females)	19.0	14.3
53. Teen Birth Rate (live births to females ages 15-19 years per 1,000 females 15-19 years)	66.8	42.3
54. Percentage of Women Receiving Prenatal Care in the 1st Trimester	50.6%	54.7%
55. Percentage of Women Who Reported Smoking While Pregnant	17.2%	10.7%
56. Percentage of Live Births Occurring Preterm (less than 37 weeks gestation)	15.6%	12.4%
57. Percentage of Births Classified as Low Birthweight (LBW, <5lbs, 8oz.)	14.2%	11.5%
58. Infant Mortality Rate (IMR) per 1,000 live births (2011-2015)	12.1	10.4

Source: BCHD calculations of data provided by Maryland Department of Health and Mental Hygiene Vital Statistics Administration (2010-2014, unless otherwise noted).

Indicator	Madison/East End	Baltimore City
59. Percentage of Mothers with a Body Mass Index => 30 at Child's Birth	38.2%	30.5%

Source: BCHD calculations of data provided by Maryland Department of Health and Mental Hygiene Vital Statistics Administration (2010-2014).

Spotlight On: Maternal & Child Health

In 2009, Baltimore City had one of the worst rates of infant mortality in the country — 128 babies died before their first birthdays in that year alone. Black babies were five times more likely to die than white babies. The city struggled to address the two leading causes of infant mortality: babies born too soon and too small, and babies dying in their sleep.

In response, leaders from the government, nonprofit, academic, community, and corporate sectors came together to launch B'more for Healthy Babies. This initiative, led by the Baltimore City Health Department with Family League of Baltimore and HealthCare Access Maryland, works to improve policies and services and mobilizes community members in comprehensive approaches that support mothers, babies, and families. Today the gap between black and white infant deaths has closed by 50 percent, the infant mortality rate has declined by 38 percent, and teen births have declined by 36 percent.

60. Lead Poisoning

Childhood lead poisoning can substantially impact the intellectual and emotional development of children, placing them at risk for poor school performance and difficulties throughout adulthood. This lead poisoning indicator is the percentage of children ages 0-6 years with elevated blood lead levels among all children tested in the neighborhood.[1] An elevated blood lead level is a level exceeding 10 micrograms (µg) of lead per deciliter (dL) of blood.

	Madison/East End	Baltimore City
Percentage of children with elevated blood lead levels (> 10µg/dL) among those tested[1]	4.0%	1.1%

Source: Baltimore Neighborhood Indicators Alliance via Maryland Department of Environment Lead Poisoning Prevention Program (2014).

[1]There were 173 children ages 0-6 tested in Madison/East End in 2014.

L. Neighborhood Summary: Demographics and Socioeconomics

The summary table below shows how **Madison/East End** compares to the other 54 Baltimore neighborhood clusters in terms of demographics and socioeconomic factors. These indicators do not represent all factors that affect health. Rather, they comprise a snapshot of the characteristics of a population expressed statistically.

Indicator for Madison/East End	Rank of 55 (1=Highest)
Demographics	
Total Population	46
% of Population Under 18 Years Old	3
% of Population 65 Years or Older	50
% of Population Male	19
% of Population Female	37
% of Population Black/African-American	17
% of Population White	41
% of Population Latino or Hispanic (of any race)	9
% of Children Living in Single-Parent Households	17
% of Adults with No Health Insurance	11
% of Children with No Health Insurance	13
% of Limited English Speaking Proficiency	17
Socioeconomic Environment	
Median Household Income	46
Unemployment Rate	1
Family Poverty Rate	9
Hardship Index	1

M. Neighborhood Summary: Environments

The summary table below shows how **Madison/East End** compares to the other 54 Baltimore neighborhood clusters in terms of environments that affect health and health opportunities (also known as the social determinants of health). These indicators do not represent all factors that affect health. Rather, they comprise a snapshot of the conditions that determine whether residents will have a fair chance at living long, healthy lives.

Indicator for Madison/East End	Rank of 55 (1=Highest)	Health Score
Built Environment		
Liquor Store Density	24	→
Tobacco Store Density	4	↓
% of Land Covered by Green Space	45	↓
% of Land Covered by Pavement	22	→
% of Land Zoned Industrial	24	→
Rate of Rat Service Requests to 311	4	↓
Educational Environment		
Kindergarten Readiness	53	↓
% of 3rd Graders "Proficient" or "Advanced" at Reading	43	↓
% of 8th Graders "Proficient" or "Advanced" at Reading	41	↓
% of Elementary School Students with 20+ Absences	10	↓
% of Middle School Students with 20+ Absences	11	↓
% of High School Students with 20+ Absences	1	↓
% of Adults 25+ w/ Less Than a High School Diploma	1	↓
% of Adults 25+ with a Bachelor's Degree or Higher	54	↓
Safety Environment		
Rate of Animal Abuse Service Requests to 311	1	↓
Non-Fatal Shooting Rate	2	↓
Homicide Rate	8	↓
Youth Homicide Mortality Rate	21	→
Housing Environment		
Average Annual Lead Paint Violation Rate	1	↓
Vacant Lot Density	23	→
Vacant Building Density	6	↓
Food Environment		
% of Land Covered by Food Desert	13	↓
Carryout Density	4	↓
Corner Store Density	3	↓
Fast Food Density	42	↑

Health Score Key

Above Average (Healthiest Third) ↑	Average (Middle Third) →	Below Average (Least Healthy Third) ↓

N. Neighborhood Summary: Health Outcomes

The summary table below shows how **Madison/East End** compares to the other 54 Baltimore neighborhood clusters in terms of key health outcomes. These outcomes are not representative of all meaningful health outcomes; rather, they are a snapshot of overall health and longevity in Madison/East End that will help identify potential priority areas for action.

Indicator for Madison/East End	Rank of 55 (1=Highest)	Health Score
Life Expectancy	48	↓
Age-Adjusted All-Cause Mortality Rate	6	↓
Rate of Reported Foodborne Illness	3	↓
Rate of Hepatitis C	13	↓
Selected Causes of Death		
Cardiovascular Disease	2	↓
Cancer (all kinds)	1	↓
Lung Cancer	1	↓
Colorectal Cancer	1	↓
Breast Cancer	2	↓
Prostate Cancer	44	↑
Stroke	1	↓
Drug- and/or Alcohol-Induced	15	↓
Chronic Lower Respiratory Disease	14	↓
Accident/Injury	1	↓
Homicide	9	↓
Diabetes	13	↓
Septicemia (Blood Poisoning)	1	↓
HIV/AIDS	10	↓
Fall-related	2	↓
Maternal and Child Health		
Birth Rate	6	↓
Teen Birth Rate	7	↓
% of Women Receiving Prenatal Care in 1st Trimester	46	↓
% of Women Reporting Smoking While Pregnant	6	↓
% of Live Births Occurring Preterm (before 37 weeks)	5	↓
% of Births Classified as Low Birth Weight (<2500 g)	11	↓
Infant Mortality Rate (IMR)	16	↓
% of Mothers w/BMI=>30 at Child's Birth	12	↓
% of Children with Elevated Blood Lead Levels	7	↓

Health Score Key

Above Average (Healthiest Third) ↑	Average (Middle Third) →	Below Average (Least Healthy Third) ↓

O. Technical Notes

Explanation of the Community Statistical Area (CSA) Geography

Baltimore is a city of neighborhoods, with over 270 currently recognized by the City. Over time, the nature of numerous neighborhoods – boundaries, personalities, even names – have changed. In order to analyze data at a community level, we use a geography known as the Community Statistical Area (CSA). There are 55 CSAs in Baltimore City, each representing areas of the city with similar social and economic characteristics, and defined as groupings of census tracts. These groupings allow for the collection, aggregation, and presentation of a wide range of data for a stable geography over time. From the Baltimore Neighborhood Indicators Alliance's Vital Signs report:

"CSAs were initially designed by the Baltimore Data Collaborative with the Baltimore City Department of Planning. Four guidelines were established for constructing the CSAs:

- CSA boundaries had to align with Census Tracts;
- CSAs would consist of 1-8 tracts, preferably with total populations in the rage of 5,000 to 20,000;
- CSAs would define relatively demographically homogenous areas;
- CSAs should reflect the City planners' understanding of residents' and institutions' perceptions of the boundaries of the community."[1]

Geospatial Analysis

Esri's ArcGIS 10.1 was used to carry out all geocoding, geoprocessing, and geospatial analysis.

Aggregation of Data to the Community Statistical Area (CSA) Level

Data were aggregated to the CSA level in one of two manners. For indicators based on American Community Survey data, numerator and denominator data were downloaded at the census tract level. These data were then aggregated by CSA, and the indicator calculated based on the aggregate data. Mortality data, made available on a census tract level by the Vital Statistics Administration, were similarly aggregated.

For indicators based on location data, such as incident, built environment, or available resource indicators, data were first geocoded, then joined based on spatial location with the Community Statistical Area shapefile to give a count of points within each CSA.

Denominators

Denominators for indicators based on rates per demographic unit - i.e. residents, households, or housing units - were provided by the United States Census; for the purposes of these profiles, we are using data from the 2010 decennial census. Denominators for indicators based on density per square mile or percent of land coverage were calculated using land area only.

[1] Frequently Asked Questions (FAQs); Baltimore Neighborhoods Indicators Alliance - Jacob France Institute. Accessed July 2016. http://bniajfi.org/faqs/

Demographics and Socioeconomic Environment

Demographic and socioeconomic data at the CSA and City level were provided by the U.S. Census' American Community Survey; for the purposes of these profiles, we are using 2011-2015 5-year estimate data.

Percentage of Children in Single-Parent Households

Data come from American Community Survey table B09005: HOUSEHOLD TYPE FOR CHILDREN UNDER 18 YEARS IN HOUSEHOLDS (EXCLUDING HOUSEHOLDERS, SPOUSES, AND UNMARRIED PARTNERS), 2011-2015 American Community Survey 5-Year Estimates.

Percentage of Adults and Percentage of Children with No Health Insurance

Data come from American Community Survey table B27001: HEALTH INSURANCE COVERAGE STATUS BY SEX BY AGE, 2011-2015 American Community Survey 5-Year Estimates.

Percentage of Limited English Speaking Proficiency

Data come from American Community Survey table DP02: SELECTED SOCIAL CHARACTERISTICS IN THE UNITED STATES, 2011-2015 American Community Survey 5-Year Estimates.

Household Income Distribution

Data come from American Community Survey table B19001: HOUSEHOLD INCOME IN THE PAST 12 MONTHS, IN 2014 INFLATION-ADJUSTED DOLLARS, 2011-2015 American Community Survey 5-Year Estimates.

Unemployment Rate

Data come from American Community Survey table B23025: EMPLOYMENT STATUS FOR THE POPULATION 16 YEARS AND OLDER, 2011-2015 American Community Survey 5-Year Estimates.

Family Poverty Rate

Data come from American Community Survey table B17010: POVERTY STATUS IN THE PAST 12 MONTHS OF FAMILIES BY FAMILY TYPE BY PRESENCE OF RELATED CHILDREN UNDER 18 YEARS BY AGE OF CHILDREN, 2011-2015 American Community Survey 5-Year Estimates.

Hardship Index

The Hardship Index is a composite score of socioeconomic hardship within a CSA, relative to other CSAs and to the City. The Hardship Index combines six indicators of public health significance: percentage of occupied housing units with more than one person per room (i.e. crowded housing); percentage of households living below the federal poverty level; percentage of persons aged 16 years or older in the labor force that are unemployed; percentage of persons aged 25 years or older without a high school diploma; percentage of the population under 18 or over 64 years of age (i.e., dependency); and per capita income. Scores can range from 1 to 100, with higher

scores representing higher relative hardship. This index is based on work done by the City of Chicago, which first calculated its Hardship Index scores in November 2011.[2]

Built Environment

Liquor Store Density

Liquor stores are defined as establishments that sell beer, wine, and/or liquor under a Class A or A-2 license issued by the Baltimore City Liquor License Board. These licenses cover establishments that provide "Off Sale package goods - no on-premises consumption"[3] six days a week. Data were pulled from the OpenBaltimore data portal June 2016.

Tobacco Store Density

Tobacco stores are defined as establishments that sell cigarettes or other tobacco products such as cigars, pipe tobacco, chewing tobacco, roll-your-own tobacco, snuff, snus, or other smokeless tobacco products. Data were provided June 2016.

Percentage of Land Covered by Green Space

A "green space" shapefile was created from separate shapefiles for tree canopy, vegetated area, and park land, using the union geoprocessing tool. This shapefile was split along CSA boundaries, and an amount of green space area was calculated per CSA; this was then divided by land area to provide a percentage of coverage. The tree canopy shapefile was created through analysis of satellite imagery by the University of Vermont Spatial Analysis Lab in 2007. The vegetated area shapefile represents photogrammetrically captured vegetation features such as wooded/brush areas and tree rows of 50 feet or greater in length, and was last updated in 2008. The park land shapefile is based on a 2016 inventory of parks by the Baltimore City Department of Recreation and Parks. This coverage is not mutually exclusive of coverage of pavement and coverage of industrial zoning; therefore, percentages may add up to more than 100%.

Percentage of Land Covered by Pavement

In order to obtain an amount of area covered by pavement, the dissolve geoprocessing tool was applied to the street area shapefile, thereby creating a simplified shapefile containing eight features: paved alleys, paved driveways, paved medians, unpaved medians, parking lots, paved roads, unpaved roads, and intersections. This shapefile was split along CSA boundaries, and an amount of pavement area was calculated per CSA by summing the amount of area of paved alleys, paved driveways, paved medians, parking lots, paved roads, and intersections. This sum was then divided by land area to provide a percentage of coverage. This coverage is not mutually exclusive of coverage of green space and coverage of industrial zoning; therefore, percentages may add up to more than 100%.

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[2] Selected socioeconomic indicators in Chicago, 2006-2010; Chicago Department of Public Health. November 2011. https://data.cityofchicago.org/api/assets/A02C1C5F-8D89-466C-8492-B1FED3DA4C87.

[3] License Types; Baltimore City Liquor License Board. Accessed July 2016. http://llb.baltimorecity.gov/license-types.

Percentage of Land Zoned Industrial

In order to obtain an amount of area zoned for industrial purposes, features from the Baltimore Department of Planning's zoning polygon shapefile were selected by attribute, using the query "CATEGORY" = "M". The results were exported to a separate shapefile, and split along CSA boundaries. An amount of area zoned industrial was calculated per CSA; this was then divided by land area to provide a percentage of coverage. This coverage is not mutually exclusive of coverage of pavement and coverage of green space; therefore, percentages may add up to more than 100%.

Rate of Rat Service Requests to 311

Rat Service Requests to 311 are defined as those citizen-generated requests categorized as service request type "HCD-Rodents", "SW-Rat Rubout", and "SW-Rat Rubout Follow-up"; this definition does not include those categorized as "SW-Rat Rubout (Proactive)", as those are generated by the Bureau of Solid Waste directly. Service requests are geocoded to address or street intersection when available; where specific location data are not available, requests are assigned to CSA by neighborhood. Rates may include multiple requests to the same location. Data were pulled from OpenBaltimore January 2017.

Educational Environment

School Readiness and 3rd and 8th Grade Reading Proficiency

Data were provided by the Baltimore Neighborhood Indicators Alliance via the Baltimore City Public School System. School readiness represents the percentage of children whose composite score indicates full school readiness out of all kindergarten school children tested within an area in a school year. The Maryland Model for School Readiness (MMSR) is an assessment and instructional system that was designed to provide parents, teachers, and early childhood providers with a common understanding of what children know and are able to do upon entering school. Under the MMSR system, all children entering kindergarten are assessed for level of mastery across several learning domains. These domains include: social and personal development; language and literacy; mathematical thinking; scientific thinking; social studies; the arts; and physical development and health. Kindergarten teachers must evaluate students during the first few months of the kindergarten year using selected Work Sampling System (WSS) indicators and report their ratings by the end of November of each year to the state. Maryland's Kindergarten Readiness Assessment (KRA) is part of Maryland's new Ready 4 Kindergarten (R4K): Early Childhood Comprehensive Assessment System, and was first administered in the 2014-15 school year to measure the skills and behaviors that children should learn prior to entering kindergarten. Future profiles will reference this assessment.

Reading proficiency represents the percentages of students passing Maryland School Assessment (MSA) exams in reading in 3rd and 8th grades. MSA scores measure the number of students scoring in one of three classifications out of all students enrolled in that grade. Students can either be rated as advanced, proficient, or having basic knowledge of a subject. This indicator includes only those students who have tested as advanced or proficient. Future versions of the Neighborhood Health Profiles will present PARCC data on ELA for 3rd and 8th grades.

School Absenteeism

Data were provided by the Baltimore Neighborhood Indicators Alliance via the Baltimore City Public School System. School absenteeism data represents the percentages of students in elementary (1st – 5th grades), middle (6th – 8th grades), and high (9th – 12th grades) school that missed at least 20 school days in the previous school year.

Adult Educational Attainment

Data come from American Community Survey table B15003: EDUCATIONAL ATTAINMENT FOR THE POPULATION 25 YEARS AND OVER, 2011-2015 American Community Survey 5-year estimates.

Safety Environment

Rate of Animal Abuse Service Requests to 311

Animal Abuse Service Requests to 311 are defined as those categorized as service request type "HLTH-Animal in Danger/Injured/Abused/Neglected". Service requests are geocoded to address or street intersection when available; where specific location data are not available, requests are assigned to CSA by neighborhood. Rates may include multiple calls to the same location. Data were pulled from OpenBaltimore January 2017.

Non-Fatal Shooting Rate

Non-fatal shooting data represent a subset of the Baltimore Police Department's Part 1 Victim Based Crime Data set, available publicly at Baltimore City's OpenBaltimore data portal. Data were filtered by crime date and description; those crimes that occurred between January 1, 2011 and December 31, 2015 and matched "shooting" in the description column were pulled. All data are geocoded to the approximate latitude/longitude location of the incident; those records for which an address could not be geocoded are excluded. Data were pulled July 2016. Due to a change in methodology, data are not comparable to previous versions of the Neighborhood Health Profiles.

Homicide Rate

Homicide data represent a subset of the Baltimore Police Department's Part 1 Victim Based Crime Data set, available publicly at Baltimore City's OpenBaltimore data portal. Data were filtered by crime date and description; those crimes that occurred between January 1, 2011 and December 31, 2015 and matched "homicide" in the description column were pulled. All data are geocoded to the approximate latitude/longitude location of the incident (not victim's home address); those records for which an address could not be geocoded are excluded. Data were pulled July 2016. Due to a change in methodology, data are not comparable to previous versions of the Neighborhood Health Profiles.

Youth Homicide Mortality Rate

This represents the number of deaths due to homicide per 100,000 youths under 25 years old. Death data are provided by the Maryland Department of Health and Mental Hygiene's Vital Statistic Administration, filtered by ICD-10 code to categorize cause of death; for assault/homicide, these codes are X85-Y09 and Y87.1. Mortality rates are based on the home addresses of the deceased; this differentiates this rate from the other rates in this category, which are based on the location of the incident. This should not be considered a subset of Homicide Rate.

Housing Environment

Average Annual Lead Paint Violation Rate

Lead paint violations in Baltimore City are tracked by address by the Baltimore City Health Department's Lead Program. Violations were assigned to CSAs by geolocation of their physical address in ArcGIS 10.1. Some addresses have received multiple violations during the time period examined (2006-2015). For the purposes of this indicator, all violations were included in the numerator. This indicator is calculated differently than in previous versions of the Neighborhood Health Profiles; data are not comparable.

Vacant Lot Density

Vacant lot data are maintained in a shapefile by the Mayor's Office of Information Technology, Enterprise Geographic Information Services office. The data are automatically updated via the real property database managed by the Maryland State Department of Assessments and Taxation. Raw data on real property is collected by the Baltimore Department of Housing. This document includes data from the July 2016 shapefile update.

Vacant Building Density

The Housing Authority of Baltimore City provides vacant building data by address on the OpenBaltimore Data Portal; data were accessed July 2016.

Food Environment

Percent of Land Covered by Food Desert

The 2015 Baltimore City Food Desert shapefile, available for download on the Maryland Food System Map website at http://mdfoodsystemmap.org/glossary/baltimore-city-food-deserts-2/, was split along CSA boundaries, and an amount of food desert area was calculated per CSA; this was then divided by land area to provide a percentage of coverage. A food desert in Baltimore City is defined as "an area where the distance to a supermarket or supermarket alternative is more than 1/4 mile, the median household income is at or below 185% of the Federal Poverty Level, over 30% of households have no vehicle available, and the average Healthy Food Availability Index score for all food stores is low."[4]

Carryout Density

Carryout data are from the BCHD open food facilities permit/license database, updated November 2016. These data were geocoded and used to calculate CSA-level densities. Carryout data in this report reflect establishments coded as a "carryout" in the establishment type and/or business code fields in the database, as well as establishments that were not coded as a carryout but had "carryout" in their restaurant name. Fast food restaurants are excluded from this count, as they have their own indicator. Please see Limitations below for information on data scrubbing.

[4] Mapping Baltimore City's Food Environment: 2015 Report; Johns Hopkins Center for a Livable Future. June 2015. http://mdfoodsystemmap.org/2015-baltimore-city-food-access-map/.

Corner Store Density

Corner store data are from the Center for a Livable Future and include stores identified as corner stores, convenience stores, discount stores, and gas stations with minimarts in the Type field. These data were updated 2016 and used as provided.

Fast Food Density

Fast food data are from the BCHD open food facilities permit/license database, updated November 2016. These data were geocoded and used to calculate CSA-level densities. Fast food restaurants were categorized as the following: Baja Fresh*, Blimpie, Burger King, California Tortilla, Checkers*, Chik-Fil-A*, Chipotle, Dunkin' Donuts, Five Guys, Jimmy Johns*, KFC, Long John Silver, McDonalds, Popeyes, Potbelly, Qdoba, Quiznos, Subway, Taco Bell, and Wendy's.

* Fast food restaurants added since the 2011 Neighborhood Health Profiles. There are 11 locations of these restaurants city-wide; without these restaurants, the city-wide fast food density is 2.3 outlets per 10,000 residents.

Health Outcomes

Life Expectancy at Birth

Estimated life expectancy at birth is defined as the average number of years a person born today would live if he/she experienced the mortality rates observed in this report over the course of his/her life. The life expectancy estimate in this report reflects the mortality rates among people living in Madison/East End from 2011 to 2015. Babies born today in Madison/East End would experience this life expectancy only if the current age-specific mortality rates remained constant over the course of their lives. Life expectancy was calculated using a life table calculator for small area estimates developed by the South East Public Health Observatory in England.[5]

Age-adjusted All-cause Mortality Rate

Age-adjusted mortality represents the number of deaths per 10,000 people per year assuming that each neighborhood had the same age structure (similar numbers of people in each age group). Age adjustment is done so that a neighborhood with a proportionally large number of elderly people (who are more likely to die because of their age) does not show a higher mortality rate simply because of the older age of its inhabitants. Direct age-adjustment was conducted using the 2000 US standard population and the following age groups, consistent with the Baltimore Neighborhood Indicators Alliance: < 1 year, 1-14 years, 15-24 years, 25-44 years, 45-64 years, 65-84 years, 85+ years.[6]

Rate of Reported Foodborne Illness

The CDC describes more than 250 types of foodborne illness; for the purposes of this report, foodborne illnesses include campylobacteriosis, salmonella, and shigellosis. These represent the three most commonly reported foodborne illnesses in Baltimore

[5] Life expectancy calculator: LA and ward level; Public Health England. September 2004. http://www.sepho.org.uk/viewResource.aspx?id=8943.

[6] Klein RJ, Schoenborn CA. Age-adjustment using the 2000 projected U.S. population. Healthy People Statistical Notes, no. 20, Hyattsville, Maryland: National Center for Health Statistics. January 2001.

City. Data represent the incidence rate per year of said illnesses within Madison/East End for the years 2011-2015.

Rate of Hepatitis C

Laboratories and medical providers report confirmed cases of Hepatitis C to the Maryland National Electronic Disease Surveillance System. Where available, address data were geocoded and used to calculate CSA-level incidence rates. Addresses that could not be geocoded are not included in CSA-level calculations, but are included in the City-wide rate. Data represent the incidence rate per year within Madison/East End for the years 2011-2015.

Selected Causes of Death

Selected causes of death are those that either accounted for the largest number of deaths in Baltimore in 2011-2015, as determined by the Maryland Vital Statistics Administration, or are of particular relevance to the Health Department's priorities, such as deaths that are drug- and/or alcohol-induced. Specific ICD-10 codes for each cause of death can be found in the Maryland Department of Health and Mental Hygiene's Maryland Vital Statistics Annual Report. Direct age-adjustment was conducted using the 2000 US standard population and 10-year age groups.

Maternal and Child Health

Birth rate is defined as the number of live births per 1,000 females. Teen birth rate is defined as the number of live births to females between 15-19 years of age per 1,000 females in the population in that age range.

Prenatal care, smoking during pregnancy, and maternal body mass index (BMI) are reported on the birth certificate. Preterm births are live births occurring before 37 weeks gestation. Low birth weight is defined as live births weighing less than 2500 grams (5 pounds 8 ounces) at delivery.

Infant mortality rate (IMR) is defined as the number of infant deaths (babies less than 1 year of age) per 1,000 live births in a given year. IMR is considered one of the most sensitive, accurate measures of mortality in the population, as it relies on vital statistics reporting, not census estimates or sampling. Birth outcomes were computed from vital records provided by the Vital Statistics Administration of the Maryland Department of Health and Mental Hygiene.

Lead Poisoning

Lead poisoning data are calculated by the Baltimore Neighborhood Indicators Alliance from data from the Lead Poisoning Prevention Program at the Maryland Department of the Environment, and represent the percentage of children tested with elevated blood lead levels of 10 micrograms/deciliter or higher. Not all children ages 0 to 6 years of age are tested annually, so this measure should not be used to indicate prevalence of lead poisoning in Madison/East End.

Limitations

Small Numbers

Because neighborhoods can have small population sizes in certain age groups, there is the possibility that small differences could produce large differences in rates. We

addressed this potential issue by grouping years together and thereby estimating rates using larger numbers. Despite this, there is some uncertainty associated with these estimates due to the small population sizes involved.

Data Scrubbing

Some datasets, particularly those pertaining to licenses and permits, were provided "as-is". Data were scrubbed of duplicate, invalid, and inaccurate entries to the best of our ability prior to analysis; however, some such entries may have inadvertently been included in the calculation of density rates.

Citizen Service Requests (CSRs) to 311

CSRs are citizen-generated contacts to Baltimore City's 311 service requesting City services; as such, they are reliant on a citizen's level of trust with City services. Rates may be over-representative of the burden in CSAs with residents more willing to engage with City services, and under-representative of the burden in CSAs with residents less willing to engage with City services – for example, CSAs with residents who opt for private extermination firms may have a lower rate of calls to 311 for rodents than expected.

Data Availability

These reports only contain data on a select set of indicators of health and the social determinants of health that are available at the neighborhood level. Data were not included for smoking and healthcare-seeking behaviors, diet, exercise, the prevalence of chronic diseases, disability, drug addiction, mental illness, air quality measures, stress, and a range of other individual- and community-level social determinants such as health literacy, social support, social capital, and social cohesion.

For further neighborhood information not included in this profile, visit the Baltimore Neighborhood Indicators Alliance (BNIA) website (http://bniajfi.org/). BNIA curates more than 100 indicators at the neighborhood-level on an annual basis for Baltimore City. We encourage you to visit BNIA's website and contact them at Baltimore Neighborhood Indicators Alliance, The Jacob France Institute, University of Baltimore, 1420 N. Charles Street, Baltimore, MD 21201, phone 410-837-4377, and email bnia-jfi@ubalt.edu.