

Hospital Community Benefit Service Areas Report on Healthy Montgomery Core Measures, 2009-2017

Montgomery County, Maryland

Department of Health and Human Services
Public Health Services
Office of Planning and Epidemiology

Hospital Community Benefit Service Areas Report on Healthy Montgomery Core Measures, 2009-2017

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EXECUTIVE SUMMARY

Overall, there is an increasing trend of Hispanics, Asian/PI, and NH-Blacks in the County and across all hospital CBSAs. This creates another layer of complexity and challenge on issues such as access to health care, health inequities, and unhealthy behaviors, as the increase of these minority population subgroups in the communities. The main findings of this report are summarized below.

Demographics

- (1) Johns Hopkins Suburban Hospital CBSA has the highest percentage of residents age 65+, while Holy Cross Germantown has the lowest percentage
- (2) Washington Adventist Hospital CBSA has the highest percentage of NH-Blacks and Hispanics, Holy Cross Germantown Hospital CBSA has the highest percentage of Asians/Pis, and Johns Hopkins Hospital CBSA has the highest percentage of NH-Whites.

Maternal and Infant Health

- (1) Johns Hopkins Suburban Hospital CBSA has the lowest percent late/no prenatal care, while Washington Adventist Hospital CBSA has the highest.
- (2) Medstar Montgomery Hospital CBSA has the lowest percent preterm births, while Washington Adventist Hospital CBSA has the highest.
- (3) Johns Hopkins Suburban Hospital CBSA has the lowest infant mortality rates, while Washington Adventist Hospital CBSA has the highest.

Behavioral Health

- (1) Holy Cross Germantown Hospital CBSA has the highest mental health ER visit rates among all hospital CBSAs, while Johns Hopkins Suburban Hospital CBSA has the lowest rates.
- (2) Holy Cross Germantown Hospital CBSA has the highest suicide mortality rates among all hospital CBSAs, while Johns Hopkins Suburban Hospital CBSA has the lowest rates.
- (3) Holy Cross Germantown Hospital CBSA has the highest substance abuse ER visit and drug-induced mortality rates among all hospital CBSAs, while Johns Hopkins Suburban Hospital CBSA has the lowest rates.

Chronic Disease

- (1) Johns Hopkins Suburban Hospital CBSA has the lowest diabetes ER visit and mortality rates, while Washington Adventist Hospital CBSA has the highest rates.
- (2) Johns Hopkins Suburban Hospital CBSA has the lowest heart disease mortality and ER visit rates; while Washington Adventist Hospital CBSA has the highest mortality and ER visit rates 2011-2013, and Holy Cross Germantown Hospital CBSA has the highest ER visit rates 2015-2017.
- (3) Johns Hopkins Suburban Hospital CBSA has the lowest CLRD mortality and ER visit rates; while Washington Adventist Hospital CBSA has the highest mortality

and ER visit rates 2011-2013, and Holy Cross Germantown Hospital CBSA has the highest mortality and ER visit rates 2015-2017.

Infectious Disease

- (1) Johns Hopkins Suburban Hospital CBSA has the lowest chlamydia and gonorrhea incidence rates, while Washington Adventist Hospital CBSA has the highest rates.
- (2) Medstar Montgomery Hospital CBSA has the lowest syphilis incidence rate, while Washington Adventist Hospital CBSA has the highest rate.

Injury

- (1) Johns Hopkins Suburban Hospital CBSA has the lowest firearm hospitalization rates over time, while Holy Cross Silver Spring Hospital CBSA has the highest rate 2011-2013 and Medstar Montgomery Hospital CBSA has the highest rate 2015-2017.
- (2) Johns Hopkins Suburban Hospital CBSA has the lowest fall mortality rates over time, while Shady Grove Adventist Hospital CBSA has the highest rate 2011-2013 and Medstar Montgomery Hospital CBSA has the highest rate 2015-2017.
- (3) Shady Grove Adventist Hospital CBSA has the lowest fall ER rates over time, while Washington Adventist Hospital CBSA has the highest rate 2011-2013 and Holy Cross Silver Spring Hospital CBSA has the highest rate 2015-2017.
- (4) Johns Hopkins Suburban Hospital CBSA has the lowest motor vehicle ER visit rates, while Washington Adventist Hospital CBSA has the highest rates.

INTRODUCTION

Montgomery County is the most populous county in Maryland with a population estimate of over 1.06 million in 2017 from the U.S. Census; it also has the highest percentage (29.2%) of residents over 25 years of age who hold post-graduate degrees. In 2016, it was ranked by the American Community Survey as the 17th richest in the country, with a median household income of \$99,763¹. Montgomery County has a very diverse population and there is an increasing trend toward becoming more diverse over time. In 2017, there were 43.8% Non-Hispanic White, 18.3% Non-Hispanic Black, 15.4% Asian/Pacific Islander, and 19.6% Hispanic or Latino based on the estimate from the U.S. Census. Of the County's population, 32.6% were born outside the U.S. Montgomery County has had the highest overall health outcomes ranking in Maryland since 2014, based on the County Health Rankings by the Robert Wood Johnson Foundation². However, ongoing efforts are needed to make improvements in the areas of access to health care, health inequities, and unhealthy behaviors.

During the 2001 Legislative Session, the Maryland General Assembly passed House Bill 15 that created a new responsibility under the Health Services Cost Review Commission (HSCRC). Under the law (Health General §19-303, Maryland Annotated Code), HSCRC is responsible for collecting hospital community benefit information from individual hospitals to compile into a publicly available statewide Community Benefit Report (CBR). Individual hospitals are required to provide narrative reports to HSCRC on the annual basis to supplement the information on statewide CBR. Such information is helpful to understand the various health status and disease burden across communities each hospital serves, and where and how intervention should be designed and targeted.

Healthy Montgomery (HM) is Montgomery County's community health improvement process. It is an ongoing effort that brings together County government agencies, County hospital systems, minority health programs/initiatives, advocacy groups, academic institutions, community-based service providers and other stakeholders to achieve optimal health and well-being for all Montgomery County residents. This report examines the 25 core measures across 5 topic areas from the Healthy Montgomery (Table 1) based on the areas of zip codes defined as community benefit service areas (CBSA) each of the 6 hospitals in Montgomery County defined and reported to HSCRC. Those measures without data in zip code level are not included, including obesity, high blood pressure, tuberculosis, and HIV. In addition to the comparisons between each hospital and the County overall, comparisons are made across hospitals. The evaluation of these core measures is further stratified by demographics such as gender,

age, and race/ethnicity to better understand the disparity of health status and disease burden across population subgroups in the communities served by hospitals.

One important update on methodology in this report is to take into consideration of hospitalization discharge volumes for each zip code included in the respective hospital CBSA. Discharge volumes are translated into weights with the sum of 100%, which are applied to corresponding zip codes to be included in the calculation of disease rates of population for the hospital CBSA. The weights for corresponding zip codes included in each of the hospital CBSA are illustrated in the maps following Table 2. Due to the implementation of updated methodology, cautions should be exercised when comparing the results in this report with those from the past report as they may not be comparable.

Department of Health and Human Services

The Department of Health and Human Services is responsible for public health and human services that help address the needs of our community's most vulnerable children, adults and seniors. DHHS has more than 130 programs and delivers services to more than 20 locations, where the majority of these sites are located in schools. DHHS's core services protect the community's health, protect the health and safety of at-risk children and vulnerable adults, and address basic human needs including food, shelter and clothing. The five main service areas of DHHS include Aging and Disability Services, Behavioral Health and Crisis Services, Children, Youth and Family Services, Public Health Services, and Special Needs Housing. Additionally, the Office of Community Affairs provides direct services through several programs. DHHS has more than 1,700 employees and provides services to more than 120,000 clients annually (1 in every 8 residents).

Office of Planning and Epidemiology

DHHS Public Health Services entail Cancer Screening Programs, Communicable Diseases and Emergency Preparedness, Community Health Services, Health Care for the Uninsured, Planning and Epidemiology, Licensure and Regulatory Services, and School Health Services.

The Office of Planning and Epidemiology serves as the expert in planning and analytic epidemiology within DHHS and is responsible for the community health needs assessment, program evaluations, disease surveillance and outbreak investigations, health statistics and data management, epidemiology and biostatistics, ongoing development and maintenance of a population data warehouse, and special research projects in collaboration with internal and external partners and academic institutions.

Table 1. Healthy Montgomery Core Measures by Topic Area

Maternal and Infant Health	Late/No Prenatal Care Infant Mortality Preterm Births
Behavioral health	Mental Health Related ER Visit Suicide Mortality Drug-Induced Mortality Substance Abuse ER Visit
Chronic Disease	Obesity: Adults who are Overweight or Obese Diabetes: Diabetes Mortality Diabetes ER Visit Cardiovascular health: Heart Disease Mortality Heart disease ER Visit High Blood Pressure Prevalence Chronic Lower Respiratory Disease Mortality Chronic Lower Respiratory Disease ER Visit
Infectious Disease	Incidence of TB Incidence of Chlamydia Incidence of Gonorrhea Incidence of Syphilis Incidence of HIV
Injury	Firearm Hospitalization Fall Mortality Fall Hospitalization Fall ER Visit Motor Vehicle ER Visit

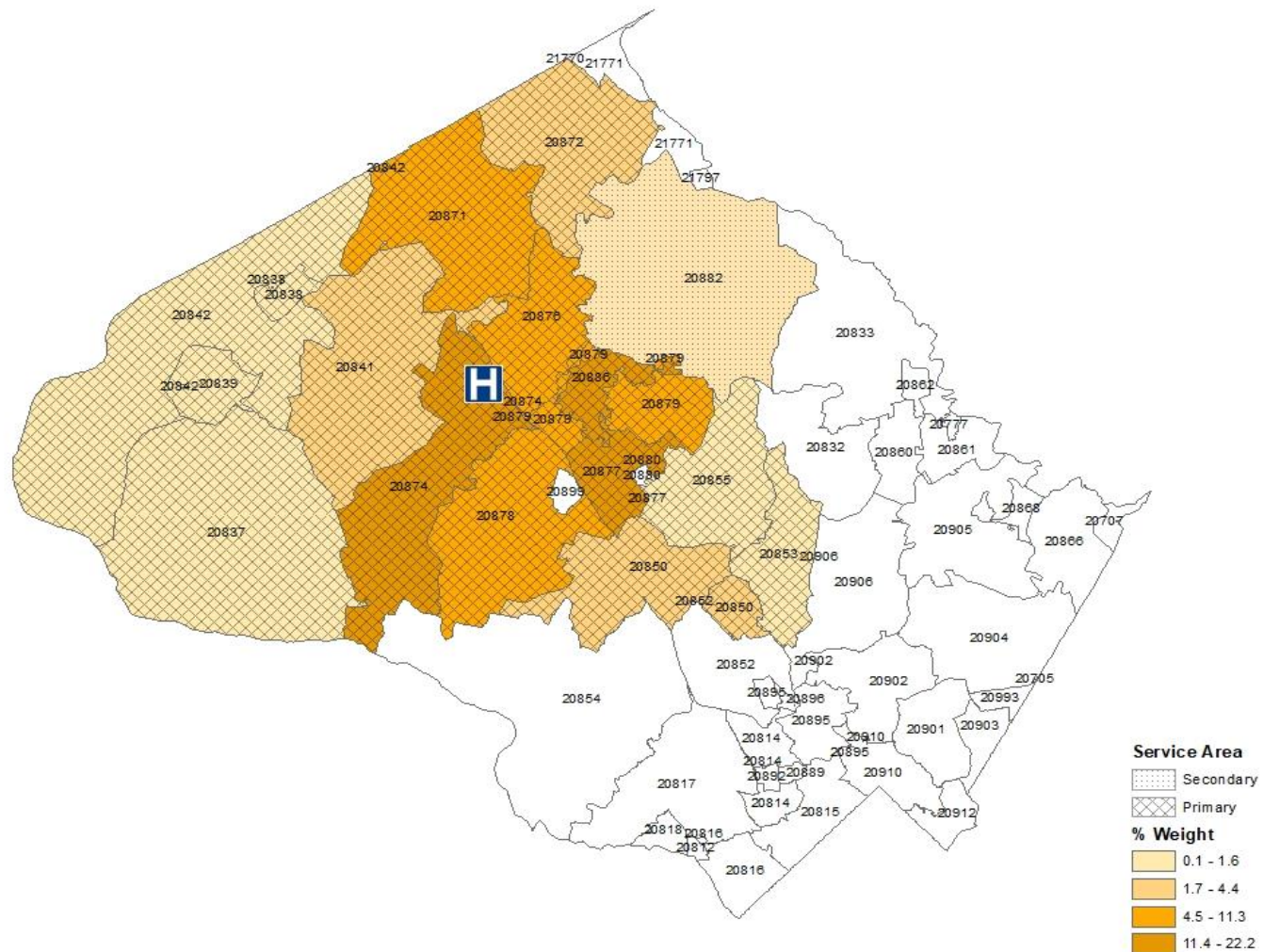
Table 2. List of Zip Codes for Community Benefit Service Areas by Hospital, 2017

CBSA Zip Codes	Holy Cross Silver Spring	Holy Cross Germantown	Medstar Montgomery	Shady Grove Adventist	Suburban Johns Hopkins Medicine	Washington Adventist
Montgomery County	20814 Bethesda	20837 Poolesville	20832 Olney	20814 Bethesda	20814 Bethesda	20850 Rockville
	20815 Chevy Chase	20838 Barnesville	20833 Brookeville	20817 Bethesda	20815 Chevy Chase	20853 Rockville
	20816 Bethesda	20839 Beallsville	20850 Rockville	20832 Olney	20817 Bethesda	20866 Burtonsville
	20817 Bethesda	20841 Boyds	20851 Rockville	20837 Poolesville	20850 Rockville	20874 Germantown
	20832 Olney	20842 Dickerson	20853 Rockville	20841 Boyds	20851 Rockville	20877 Gaithersburg
	20850 Rockville	20850 Rockville	20855 Derwood	20850 Rockville	20852 Rockville	20901 Silver Spring
	20851 Rockville	20851 Rockville	20860 Sandy Spring	20851 Rockville	20853 Rockville	20902 Silver Spring
	20852 Rockville	20853 Rockville	20861 Ashton	20852 Rockville	20854 Potomac	20903 Silver Spring
	20853 Rockville	20855 Derwood	20862 Brinklow	20853 Rockville	20874 Germantown	20904 Silver Spring
	20866 Burtonsville	20871 Clarksburg	20866 Burtonsville	20854 Potomac	20877 Gaithersburg	20905 Silver Spring
	20874 Germantown	20872 Damascus	20868 Spencerville	20855 Derwood	20878 Gaithersburg	20906 Silver Spring
	20876 Germantown	20874 Germantown	20872 Damascus	20871 Clarksburg	20895 Kensington	20910 Silver Spring
	20877 Gaithersburg	20876 Germantown	20874 Germantown	20872 Damascus	20902 Silver Spring	20912 Takoma Park
	20878 Gaithersburg	20877 Gaithersburg	20876 Germantown	20874 Germantown	20904 Silver Spring	
	20879 Gaithersburg	20878 Gaithersburg	20877 Gaithersburg	20876 Germantown	20906 Silver Spring	
	20886 Mont. Village	20879 Gaithersburg	20878 Gaithersburg	20877 Gaithersburg	20910 Silver Spring	
	20895 Kensington	20882 Gaithersburg	20879 Gaithersburg	20878 Gaithersburg		
	20901 Silver Spring	20886 Mont. Village	20882 Gaithersburg	20879 Gaithersburg		
	20902 Silver Spring		20902 Silver Spring	20882 Gaithersburg		
	20903 Silver Spring		20904 Silver Spring	20886 Mont. Village		
	20904 Silver Spring		20905 Silver Spring	20895 Kensington		
	20905 Silver Spring		20906 Silver Spring	20902 Silver Spring		
	20906 Silver Spring			20904 Silver Spring		
	20910 Silver Spring			20906 Silver Spring		
	20912 Takoma Park					

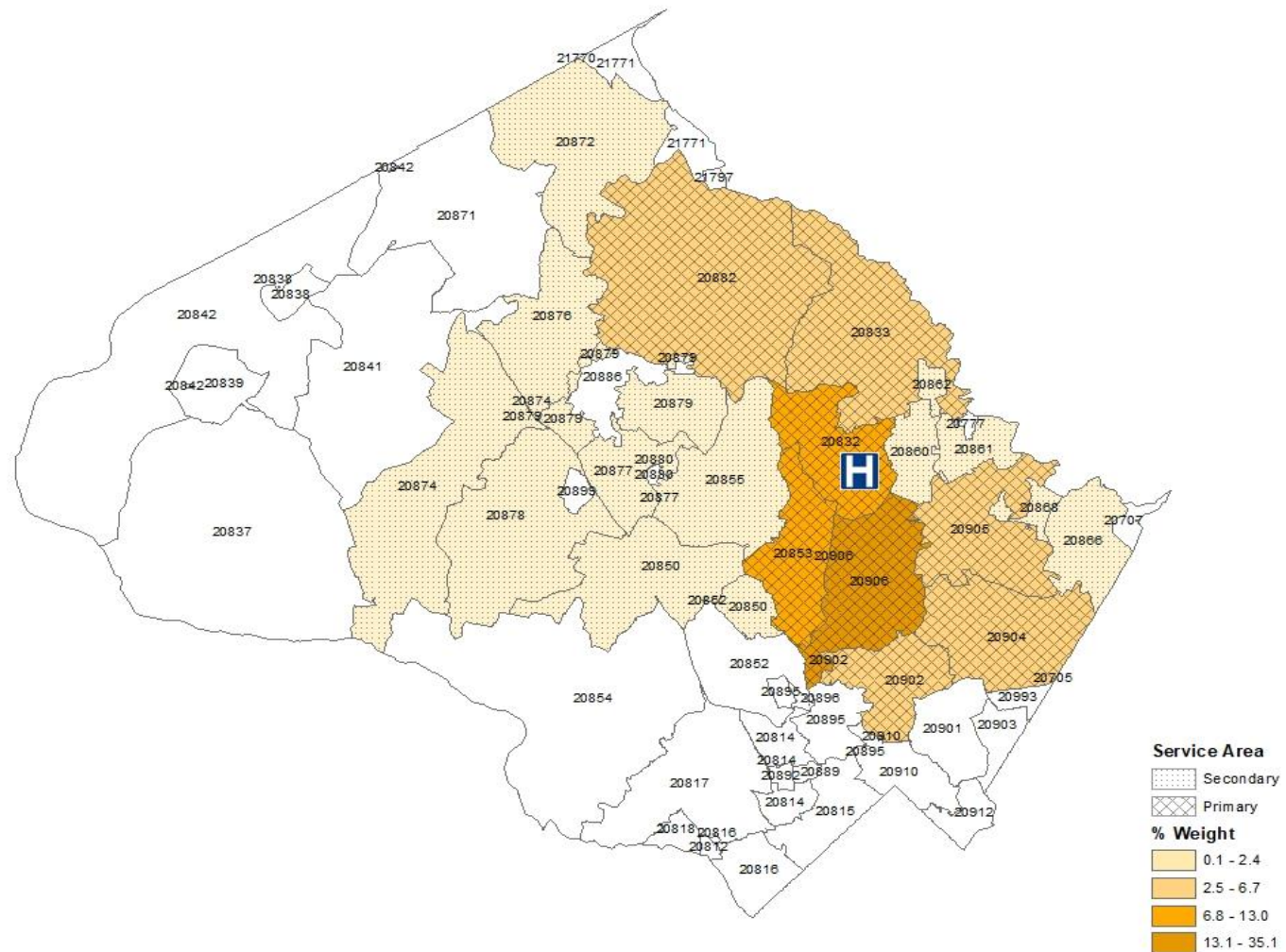
Hospital CBSA Report on Healthy Montgomery
Core Measures, 2009-2017



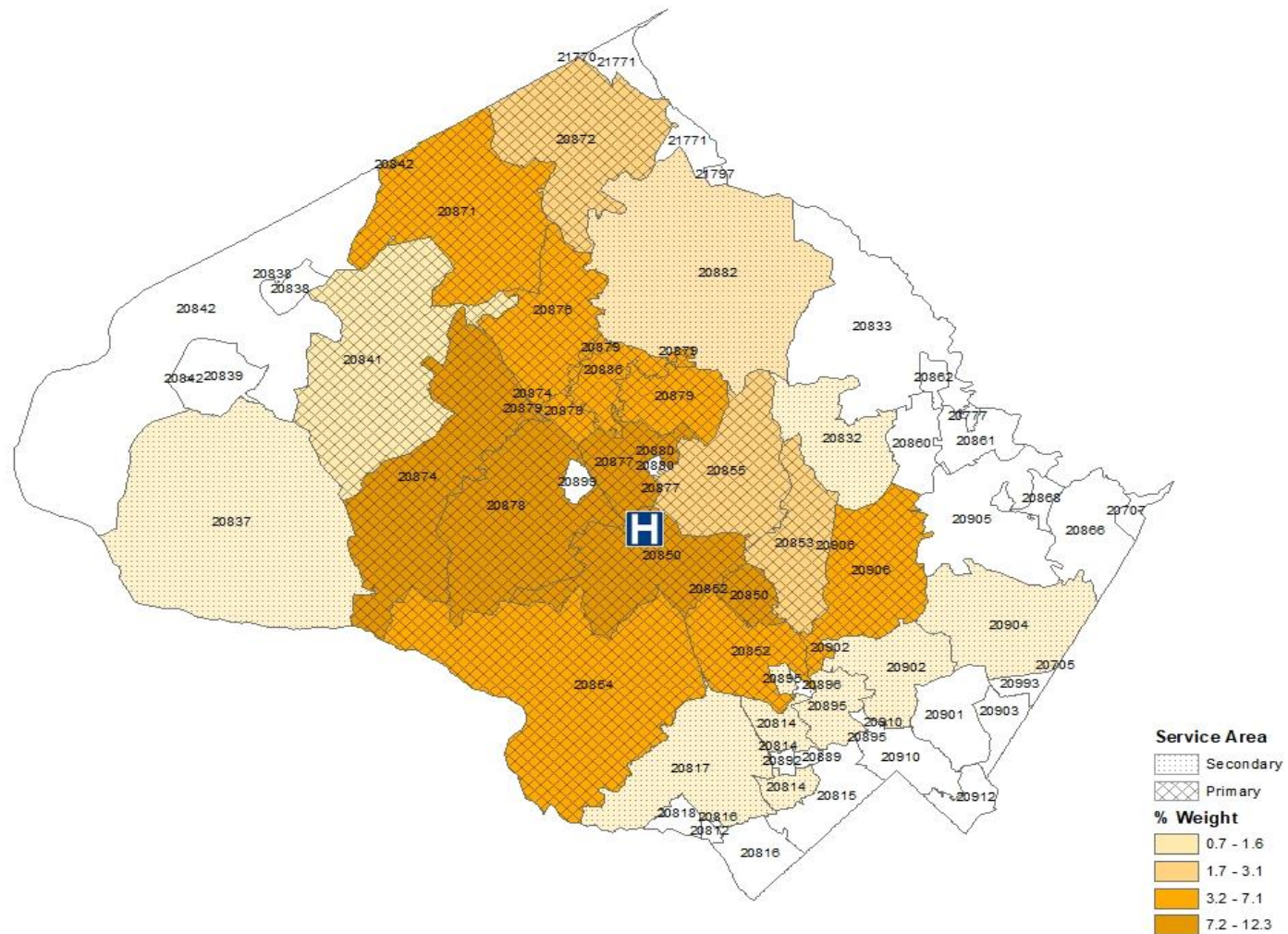
Map 2. Community Benefit Service Areas, Holy Cross Germantown Hospital, 2017



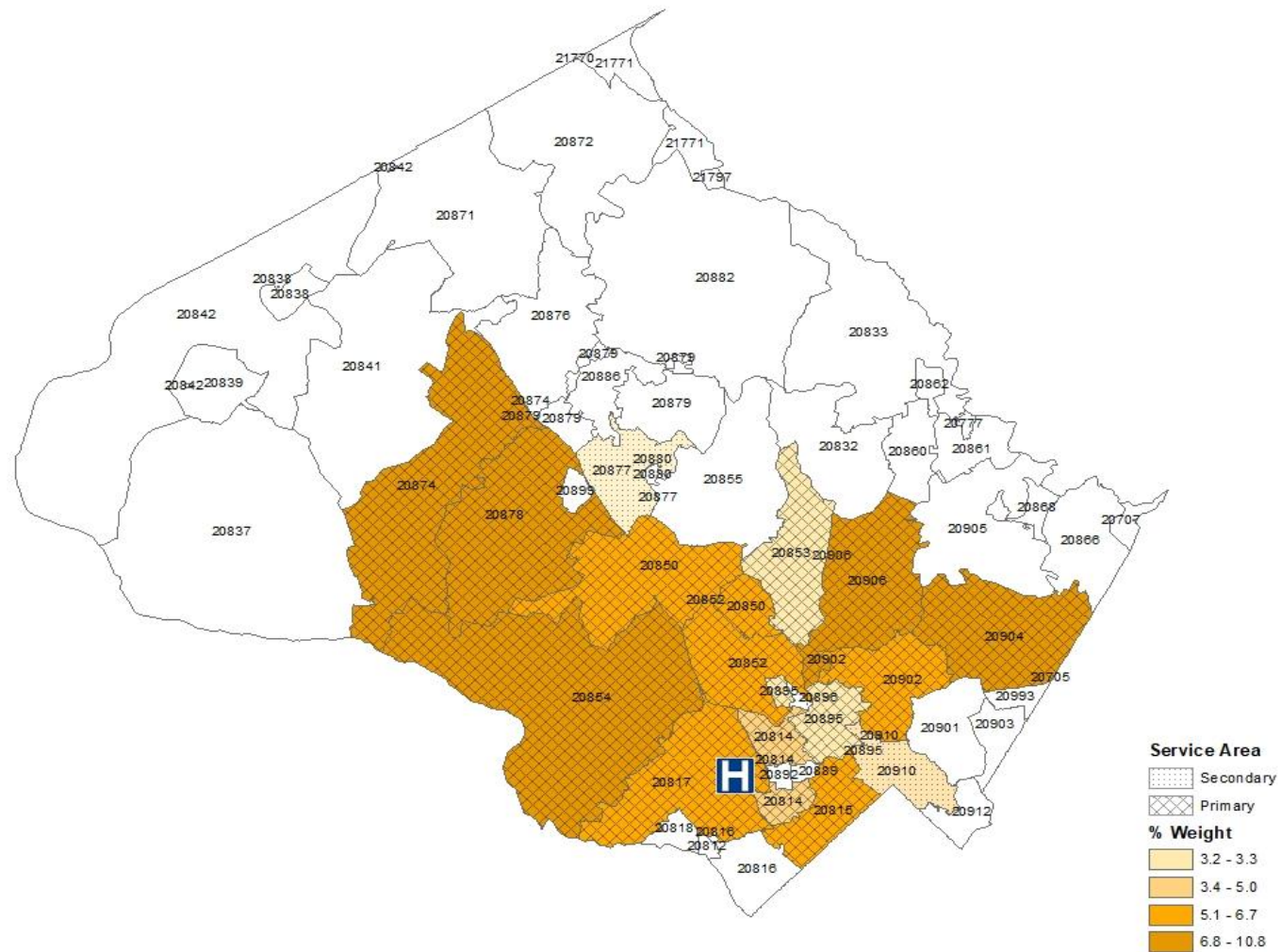
Map 3. Community Benefit Service Areas, MedStar Montgomery Hospital, 2017



Map 4. Community Benefit Service Areas, Shady Grove Adventist Hospital, 2017



Map 5. Community Benefit Service Areas, Johns Hopkins Suburban Hospital, 2017



Hospital CBSA Report on Healthy Montgomery Core Measures, 2009-2017



DEMOGRAPHICS

Gender

- There are more females than males in County overall population, the same pattern is consistent across all hospital CBSAs (Table 3).
- There is an increasing trend of male population from 2011-13 to 2015-17, which is consistent in County overall and across all hospital CBSAs (Table 3).

Table 3. Percent Population by Gender by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Male	Female	Male	Female
County Overall	48.1	51.9	48.2	51.8
Holy Cross Germantown	48.6	51.4	48.8	51.2
Holy Cross Silver Spring	48.0	52.0	48.1	51.9
Johns Hopkins Suburban	47.8	52.2	48.1	51.9
Medstar Montgomery	48.2	51.8	48.4	51.6
Shady Grove Adventist	48.2	51.8	48.4	51.6
Washington Adventist	48.2	51.8	48.4	51.6

Age

- Population is getting older over time for County overall, the same pattern is consistent across all hospitals (Table 4).
- Washington Adventist Hospital CBSA has the highest percentage of population age <5 years, while Johns Hopkins Suburban Hospital CBSA has the highest percentage of population age 65+ years (Table 4).
- Holy Cross Germantown Hospital CBSA has the lowest percentage of population age 65+ years consistently, while Johns Hopkins Suburban Hospital CBSA has the lowest percentage of population age <5 years consistently (Table 4).

Table 4. Percent Population by Age by Hospital CBSA, 2011-2017

	2011-2013					2015-2017				
	<5	5-17	18-34	35-64	65+	<5	5-17	18-34	35-64	65+
County Overall	6.4	16.9	21.2	42.8	12.6	6.2	16.5	21.3	42.0	13.9
Holy Cross Germantown	6.6	17.9	22.1	44.0	9.5	6.6	17.3	22.1	42.9	11.0
Holy Cross Silver Spring	6.7	16.3	22.4	42.1	12.5	6.5	15.9	22.4	41.5	13.6
Johns Hopkins Suburban	6.4	16.2	21.3	42.2	14.0	6.1	15.9	21.5	41.4	15.2
Medstar Montgomery	6.6	17.4	21.5	42.8	11.7	6.3	16.5	22.1	41.9	13.2
Shady Grove Adventist	6.4	17.3	20.8	42.8	12.6	6.2	16.8	21.1	42.0	13.9
Washington Adventist	7.0	15.7	24.2	40.9	12.2	6.7	15.5	23.8	40.8	13.2

Race/Ethnicity

- There is an increasing trend of Hispanics, Asians/PIs, and NH-Blacks and a decreasing trend for NH-Whites over time for County overall population, the same pattern is consistent across all hospital CBSAs (Table 5).
- Washington Adventist Hospital CBSA has the highest percentage of Hispanics, while Johns Hopkins Suburban Hospital CBSA has the lowest percentage of Hispanics (Table 5).
- Holy Cross Germantown Hospital CBSA has the highest percentage of Asians/PIs, while Washington Adventist Hospital CBSA has the lowest percentage of Asians/PIs (Table 5).
- Washington Adventist Hospital CBSA has the highest percentage of NH-Blacks, while Holy Cross Germantown Hospital CBSA has the lowest percentage of NH-Blacks (Table 5).

Table 5. Percent Population by Race/Ethnicity by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	NH-White	NH-Black	Asian/PI	Hispanic	NH-White	NH-Black	Asian/PI	Hispanic
County Overall	50.5	17.7	14.3	17.5	47.3	18.4	15.1	19.2
Holy Cross Germantown	47.8	15.7	18.2	18.4	44.0	16.8	18.8	20.4
Holy Cross Silver Spring	47.5	19.5	13.7	19.3	44.4	20.2	14.3	21.1
Johns Hopkins Suburban	51.3	16.7	14.9	17.2	48.0	17.3	15.5	19.2
Medstar Montgomery	44.1	20.7	15.8	19.4	40.8	21.5	16.3	21.4
Shady Grove Adventist	49.9	16.6	15.9	17.7	46.4	17.1	16.8	19.7
Washington Adventist	38.2	25.7	13.1	22.9	35.5	26.7	13.3	24.5

MATERNAL AND INFANT HEALTH

Prenatal Care

- Percentage of late/no prenatal care fluctuates over time for County overall population, the same pattern is consistent across all hospital CBSAs (Table 6)
- Washington Adventist Hospital CBSA has the highest percent late/no prenatal care, followed by Holy Cross Silver Spring Hospital CBSA, while Johns Hopkins Suburban Hospital CBSA has the lowest percent late/no prenatal care (Table 6).

Fig. 1. Percent Late/No Prenatal Care by Hospital CBSA, 2009-2017

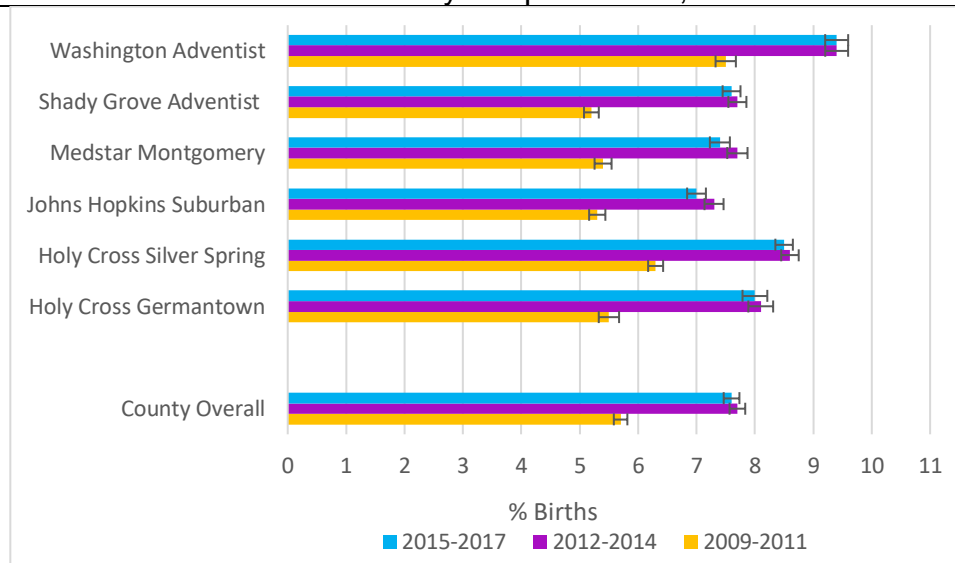


Table 6. Percent Late/No Prenatal Care by Hospital CBSA, 2009-2017

	2009-2011		2012-2014		2015-2017	
	%	95% CI	%	95% CI	%	95% CI
County Overall	5.7	5.5-5.9	7.7	7.4-7.9	7.6	7.4-7.9
Holy Cross Germantown	5.5	5.1-5.8	8.1	7.7-8.5	8.0	7.6-8.5
Holy Cross Silver Spring	6.3	6.0-6.5	8.6	8.3-8.9	8.5	8.2-8.8
Johns Hopkins Suburban	5.3	5.0-5.6	7.3	7.0-7.6	7.0	6.7-7.3
Medstar Montgomery	5.4	5.1-5.7	7.7	7.3-8.0	7.4	7.1-7.7
Shady Grove Adventist	5.2	4.9-5.4	7.7	7.4-8.0	7.6	7.3-7.9
Washington Adventist	7.5	7.1-7.8	9.4	9.0-9.7	9.4	9.0-9.8

- Percentage of late/no prenatal care fluctuates over time for County overall across all race/ethnicity population subgroups except for Hispanics where there is an increasing trend (Table 7.1-7.3). Among Hispanics, Washington Adventist Hospital CBSA has the increasing trend on percentage of late/no prenatal care (Table 7.1-7.3).
- NH-Blacks have the highest percentage of late/no prenatal care for County overall and all hospital CBSAs, followed by Hispanics, NH-Whites has the lowest percentage (Table 7.1-7.3).

Table 7.1. Percent Late/No Prenatal Care by Race/Ethnicity by Hospital CBSA, 2009-2011

	2009-2011							
	NH-White		NH-Black		Asian/PI		Hispanic	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
County Overall	3.3	3.0-3.6	8.7	8.1-9.3	3.4	3.0-3.9	7.6	7.1-8.1
Holy Cross Germantown	3.7	3.2-4.2	8.7	7.8-9.7	3.2	2.6-3.8	6.8	6.0-7.5
Holy Cross Silver Spring	3.9	3.6-4.2	8.8	8.2-9.4	3.8	3.3-4.4	7.5	7.0-8.0
Johns Hopkins Suburban	3.5	3.2-3.9	9.1	8.3-9.9	3.6	3.0-4.1	7.1	6.5-7.7
Medstar Montgomery	3.3	2.9-3.7	7.7	7.0-8.4	3.8	3.2-4.4	6.1	5.5-6.6
Shady Grove Adventist	3.4	3.1-3.8	8.8	8.1-9.5	3.4	2.9-3.9	6.9	6.3-7.4
Washington Adventist	5.0	4.4-5.5	9.6	8.8-10.3	4.5	3.8-5.3	8.8	8.2-9.5

Table 7.2. Percent Late/No Prenatal Care by Race/Ethnicity by Hospital CBSA, 2012-2014

	2012-2014							
	NH-White		NH-Black		Asian/PI		Hispanic	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
County Overall	4.9	4.5-5.2	12.5	11.8-13.2	6.5	5.9-7.2	9.2	8.6-9.8
Holy Cross Germantown	5.3	4.7-5.8	12.5	11.3-13.6	6.5	5.7-7.4	8.5	7.7-9.3
Holy Cross Silver Spring	5.9	5.5-6.3	12.2	11.5-12.9	7.1	6.4-7.8	9.0	8.5-9.6
Johns Hopkins Suburban	7.0	6.3-7.8	9.2	8.5-9.9	7.0	6.3-7.8	9.2	8.5-9.9
Medstar Montgomery	5.5	5.0-6.0	11.1	10.3-12.0	7.4	6.5-8.2	7.9	7.3-8.5
Shady Grove Adventist	5.2	4.8-5.6	12.6	11.8-13.5	6.9	6.2-7.6	8.3	7.7-8.9
Washington Adventist	6.6	6.0-7.2	12.0	11.2-12.9	8.7	7.6-9.7	9.7	9.0-10.4

Table 7.3. Percent Late/No Prenatal Care by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
County Overall	4.3	3.9-4.6	11.8	11.2-12.5	5.9	5.3-6.5	9.4	8.9-10.0
Holy Cross Germantown	5.6	5.0-6.2	11.7	10.6-12.8	6.3	5.5-7.1	8.4	7.6-9.2
Holy Cross Silver Spring	4.9	4.5-5.3	11.6	10.9-12.3	6.3	5.6-6.9	9.4	8.9-10.0
Johns Hopkins Suburban	4.5	4.1-5.0	12.9	12.0-13.8	5.4	4.7-6.1	7.7	7.1-8.3
Medstar Montgomery	4.4	3.9-4.9	11.8	11.0-12.6	5.9	5.1-6.6	8.2	7.6-8.8
Shady Grove Adventist	5.2	4.8-5.6	12.8	11.9-13.6	6.1	5.5-6.8	7.8	7.2-8.4
Washington Adventist	5.2	4.7-5.8	11.2	10.4-12.0	8.8	7.7-9.9	10.7	10.0-11.4

Preterm Birth

- There is a decreasing trend of percent preterm birth over time for CBSAs of Holy Cross Germantown Hospital and Shady Grove Hospital, while an increasing trend is found for CBSAs of Holy Cross Silver Spring Hospital and Washington Adventist Hospital (Table 8)
- For 2015-2017, Washington Adventist Hospital CBSA has the highest percent preterm birth, and MedStar Montgomery Hospital CBSA has the lowest percentage (Table 8).

Fig. 2. Percent Preterm Birth by Hospital CBSA, 2009-2017

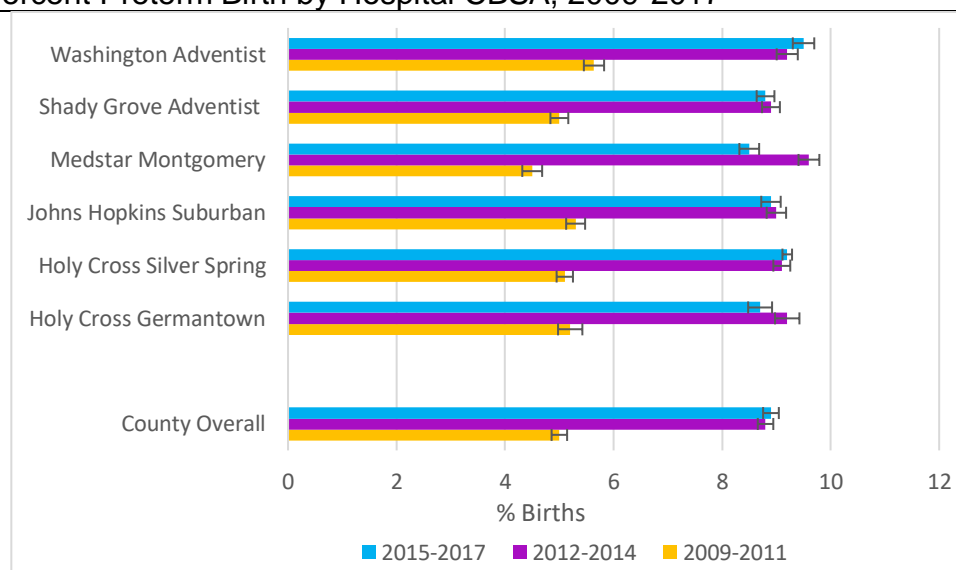


Table 8. Percent Preterm Birth by Hospital CBSA, 2009-2017

	2009-2011		2012-2014		2015-2017	
	%	95% CI	%	95% CI	%	95% CI
County Overall	9.0	8.7-9.3	8.8	8.5-9.1	8.9	8.6-9.2
Holy Cross Germantown	9.5	9.0-9.9	9.2	8.8-9.7	8.7	8.3-9.1
Holy Cross Silver Spring	8.9	8.6-9.2	9.1	8.8-9.4	9.2	8.9-9.5
Johns Hopkins Suburban	8.7	8.4-9.0	9.0	8.6-9.3	8.9	8.5-9.2
Medstar Montgomery	8.9	8.5-9.2	9.6	9.2-10.0	8.5	8.1-8.8
Shady Grove Adventist	9.1	8.8-9.4	8.9	8.6-9.2	8.8	8.5-9.1
Washington Adventist	8.7	8.3-9.1	9.2	8.8-9.6	9.5	9.1-9.9

- Percentages of preterm birth fluctuate over time for County overall across all race/ethnicity population subgroups except for Hispanics where there is an increasing trend (Table 9.1-9.3). Among Hispanics, Washington Adventist Hospital CBSA has the increasing trend on percentage of late/no prenatal care (Table 9.1-9.3).
- NH-Blacks have the highest percentage of late/no prenatal care for County overall and across all hospital CBSAs, followed by Hispanics (Table 9.1-9.3).

Table 9.1. Percent Preterm Birth by Race/Ethnicity by Hospital CBSA, 2009-2011

	2009-2011							
	NH-White		NH-Black		Asian/PI		Hispanic	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
County Overall	8.6	8.1-9.0	10.6	9.9-11.3	6.1	5.5-6.7	8.7	8.2-9.3
Holy Cross Germantown	9.7	8.9-10.5	11.3	10.2-12.3	5.9	5.1-6.8	8.7	7.9-9.5
Holy Cross Silver Spring	8.4	7.9-8.9	10.4	9.8-11.1	6.3	5.6-6.9	8.7	8.1-9.2
Johns Hopkins Suburban	8.5	7.9-9.1	11.1	10.3-12.0	6.0	5.3-6.7	9	8.3-9.7
Medstar Montgomery	8.2	7.6-8.9	10.8	9.9-11.6	6.6	5.8-7.4	8.6	8.0-9.2
Shady Grove Adventist	9.1	8.5-9.6	11.4	10.6-12.2	6.1	5.5-6.8	8.6	8.0-9.2
Washington Adventist	8.4	7.7-9.1	9.4	8.7-10.2	6.5	5.6-7.4	8.6	8.0-9.2

Table 9.2. Percent Preterm Birth by Race/Ethnicity by Hospital CBSA, 2012-2014

	2012-2014							
	NH-White		NH-Black		Asian/PI		Hispanic	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
County Overall	8.2	7.7-8.6	11	10.3-11.7	8.6	7.9-9.3	8.9	8.4-9.5
Holy Cross Germantown	8.1	7.4-8.8	12.1	10.9-13.2	8.4	7.4-9.4	8.6	7.8-9.4
Holy Cross Silver Spring	8.6	8.1-9.1	10.8	10.1-11.5	9.3	8.5-10.1	8.5	7.9-9.1
Johns Hopkins Suburban	8.6	8.0-9.1	9.9	9.1-10.7	8.9	8.0-9.8	9.0	8.3-9.7
Medstar Montgomery	9.2	8.6-9.9	12.3	11.4-13.2	8.4	7.5-9.3	8.7	8.0-9.3
Shady Grove Adventist	8.1	7.5-8.6	11.3	10.5-12.1	8.4	7.7-9.2	8.6	8.0-9.2
Washington Adventist	9.3	8.6-10.0	10.3	9.5-11.1	9.3	8.1-10.4	8.7	8.0-9.3

Table 9.3. Percent Preterm Birth by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI
County Overall	8.3	7.8-8.7	10	9.3-10.6	8.1	7.4-8.8	9.5	8.9-10.0
Holy Cross Germantown	8.2	7.5-8.9	10.0	9.0-11.1	8.0	7.0-8.9	8.7	7.9-9.5
Holy Cross Silver Spring	8.4	7.9-8.9	9.4	8.8-10.1	8.6	7.8-9.4	9.7	9.1-10.3
Johns Hopkins Suburban	8.8	8.2-9.3	9.7	9.0-10.5	8.4	7.6-9.3	9.0	8.3-9.6
Medstar Montgomery	8.1	7.5-8.8	9.6	8.8-10.3	8.2	7.3-9.1	8.6	8.0-9.2
Shady Grove Adventist	8.4	7.9-8.9	10.7	9.9-11.5	8.2	7.4-8.9	8.8	8.2-9.4
Washington Adventist	8.3	7.6-9.0	10.0	9.3-10.8	6.8	5.8-7.8	10.2	9.6-10.9

Infant Mortality

- Infant mortality rates fluctuate over time for County overall and CBSAs of all hospitals except for Holy Cross Silver Spring Hospital (Table 10).
- There is an increasing trend of infant mortality for Holy Cross Silver Spring Hospital CBSA (Table 10).
- For 2015-2017, Washington Adventist Hospital CBSA has the highest infant mortality rate, while Johns Hopkins Suburban Hospital CBSA has the lowest rate (Table 10).

Fig. 3. Infant Mortality Rates by Hospital CBSA, 2009-2017

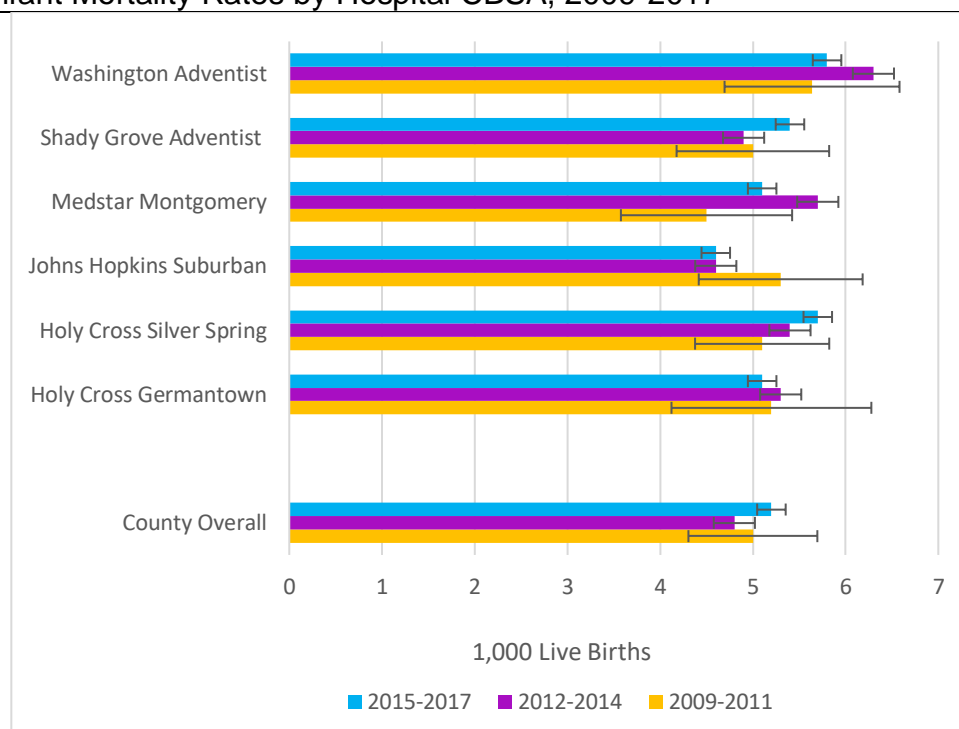


Table 10. Infant Mortality Rates by Hospital CBSA, 2009-2017

	2009-2011		2012-2014		2015-2017	
	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	5.0	4.3-5.7	4.8	4.1-5.5	5.2	4.5-5.9
Holy Cross Germantown	5.2	4.1-6.3	5.3	4.2-6.4	5.1	3.9-6.2
Holy Cross Silver Spring	5.1	4.3-5.8	5.4	4.6-6.1	5.7	4.9-6.5
Johns Hopkins Suburban	5.3	4.4-6.2	4.6	3.7-5.4	4.6	3.7-5.5
Medstar Montgomery	4.5	3.6-5.5	5.7	4.8-6.7	5.1	4.2-6.1
Shady Grove Adventist	5.0	4.2-5.8	4.9	4.1-5.7	5.4	4.6-6.2
Washington Adventist	5.6	4.6-6.5	6.3	5.2-7.3	5.8	4.8-6.9

* Rate is per 1000 live births

- Infant mortality rates decrease among NH-Whites and NH-Blacks for County overall over time, while there is an increasing trend for Hispanics (Table 11.1-11.3).
- Though some hospital CBSAs have higher or lower infant mortality rates than other hospital CBSAs for specific population subgroups, the rates fluctuate over time and there are no consistent patterns (Table 11.1-11.3).

Table 11.1. Infant Mortality Rate by Race/Ethnicity by Hospital CBSA, 2009-2011

	2009-2011							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	3.9	2.9-4.9	9.6	7.4-11.7	5.2	3.4-7.0	2.5	1.6-3.5
Holy Cross Germantown	4.8	3.0-6.5	12.7	9.0-16.4	6.2	4.4-8.0	2.8	1.4-4.2
Holy Cross Silver Spring	6.1	5.0-7.3	8.3	6.2-10.4	8.5	6.5-10.5	2.9	1.9-3.8
Johns Hopkins Suburban	5.2	3.9-6.5	9.6	7.0-12.2	7.1	4.8-9.4	3.4	2.1-4.7
Medstar Montgomery	4.4	3.0-5.9	6.8	4.3-9.3	8.3	6.0-10.7	3.0	2.2-3.9
Shady Grove Adventist	4.8	3.6-6.1	11.4	8.9-13.9	5.1	3.2-7.1	3.1	1.9-4.3
Washington Adventist	9.0	7.4-10.6	9.3	6.9-11.6	7.6	4.4-10.8	2.2	1.2-3.3

* Rate is per 1,000 live births

Table 11.2. Infant Mortality Rate by Race/Ethnicity by Hospital CBSA, 2012-2014

	2012-2014							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	3.7	2.7-4.7	8.6	6.6-10.5	3.7	2.1-5.2	3.7	2.6-4.9
Holy Cross Germantown	4.5	2.8-6.3	7.7	4.6-10.8	3.7	1.3-6.1	3.9	2.1-5.7
Holy Cross Silver Spring	3.9	2.8-5.0	9.1	7.0-11.2	4.4	2.9-6.0	3.8	2.6-5.0
Johns Hopkins Suburban	4.1	2.9-5.3	6.9	4.3-9.5	3.1	1.4-4.8	3.9	2.4-5.4
Medstar Montgomery	4.6	3.0-6.1	6.5	4.1-9.0	5.7	3.7-7.7	3.8	2.3-5.4
Shady Grove Adventist	4.7	3.5-5.9	7.4	5.1-9.7	3.7	2.1-5.2	2.8	1.4-4.2
Washington Adventist	3.6	1.8-5.3	11.3	8.8-13.9	6.3	3.7-9.0	3.9	2.4-5.4

* Rate is per 1,000 live births

Table 11.3. Infant Mortality Rate by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	2.8	1.9-3.7	7.9	6.0-9.8	4.2	2.5-5.8	5.9	4.5-7.3
Holy Cross Germantown	2.6	0.8-4.3	8.5	5.2-11.7	2.3	0.4-4.2	6.9	4.7-9.1
Holy Cross Silver Spring	3.0	1.9-4.0	8.1	6.1-10.0	7.2	5.3-9.0	6.6	5.1-8.0
Johns Hopkins Suburban	2.8	1.7-4.0	7.1	4.8-9.5	6.0	3.8-8.2	4.5	2.7-6.3
Medstar Montgomery	4.7	3.1-6.2	4.6	2.3-7.0	4.3	2.3-6.3	4.4	2.6-6.1
Shady Grove Adventist	3.7	2.6-4.8	9.1	6.8-11.4	3.5	1.8-5.3	6.4	4.8-7.9
Washington Adventist	2.2	0.7-3.7	9.1	6.8-11.3	6.1	3.0-9.2	6.0	4.3-7.8

* Rate is per 1,000 live births

BEHAVIORAL HEALTH

Mental Health ER Visit

- Mental health ER visit rates increase over time for County overall and across all hospital CBSAs. (Table 12)
- Holy Cross Germantown Hospital CBSA has the highest mental health ER visit rate, while Johns Hopkins Suburban Hospital CBSA has the lowest rate (Table 12).

Fig. 4. Mental Health ER Visit Rate by Hospital CBSA, 2011-2017

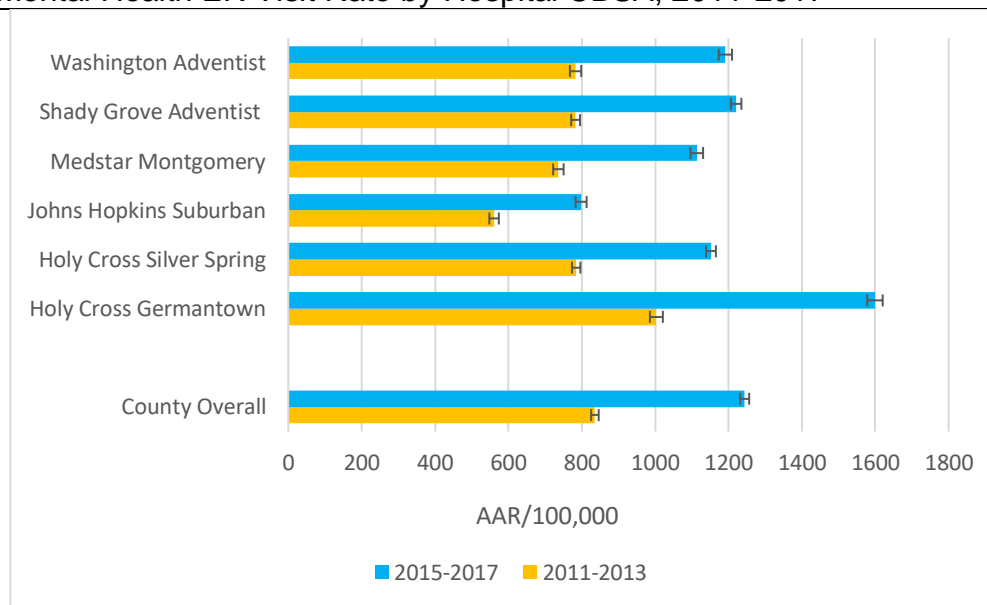


Table 12. Mental Health ER Visit Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	835.8	825.5-846.0	1244	1231.7-1256.2
Holy Cross Germantown	1003.3	985.7-1020.9	1599.0	1577.9-1620.1
Holy Cross Silver Spring	784.7	773.3-796.1	1152.0	1138.6-1165.4
Johns Hopkins Suburban	560.9	547.9-573.9	798.1	783.1-813.1
Medstar Montgomery	736.2	721.9-750.5	1113.4	1096.2-1130.6
Shady Grove Adventist	783.1	771.0-795.2	1220.6	1206.3-1234.9
Washington Adventist	783.0	767.5-798.5	1191.3	1173.2-1209.4

* Rate is per 100,000 population

- There is an increasing trend of mental health ER visit for both males and females over time, females have higher rates than males (Table 13).
- Johns Hopkins Suburban Hospital CBSA has the lowest diabetes ER visit rates for both males and females across all hospital CBSAs (Table 13).
- Holy Cross Germantown Hospital CBSA has the highest mental health ER visit rates for both males and females consistently (Table 13).

Table 13. Mental Health ER Visit Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	742.7	728.7-756.8	920.8	905.9-935.8	987.7	971.9-1003.5	1220.9	1204.2-1237.6
Holy Cross Germantown	852.3	828.4-876.2	1146.3	1120.5-1172.1	1344.6	1316.4-1372.8	1854.0	1822.8-1885.2
Holy Cross Silver Spring	765.6	750.0-781.2	935.5	919.0-952.0	1097.0	1078.7-1115.3	1396.8	1377.2-1416.4
Johns Hopkins Suburban	517.1	499.2-535.0	600.2	581.6-618.8	718.8	698.3-739.3	878.2	856.4-900.0
Medstar Montgomery	790.0	770.6-809.4	1015.3	994.5-1036.1	1221.9	1199.0-1244.8	1547.5	1522.1-1572.9
Shady Grove Adventist	864.6	848.1-881.1	1063.6	1045.9-1081.3	1254.1	1234.8-1273.4	1632.8	1611.8-1653.8
Washington Adventist	669.8	678.4-721.2	865	842.6-887.4	1043.5	1018.9-1068.1	1348.1	1321.6-1374.6

* Rate is per 100,000 population

- There is an increasing trend of mental health ER visit for all population subgroups on race/ethnicity for County overall and across all hospital CBSAs (Table 14.1-14.2).
- NH-Blacks have the highest mental health ER visit rates, followed by NH-Whites, and Asians/PIs have the lowest rates (Table 14.1-14.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest mental health ER visit rates among all population subgroups on race/ethnicity across all hospital CBSAs (Table 14.1-14.2).
- Holy Cross Germantown Hospital CBSA has the highest mental health ER visit rates for NH-Whites, NH-Blacks, and Hispanics; Holy Cross Germantown Hospital CBSA and Washington Adventist Hospital CBSA have the similar high rates for Asians/PIs (Table 14.1-14.2).

Table 14.1. Mental Health ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	620	607.4-632.5	849.3	823.6-875.0	174.4	161.6-187.1	407.6	389.7-425.6
Holy Cross Germantown	960.9	937.3-984.5	1126.4	1076.2-1176.6	223.7	204.7-242.7	365.5	339.1-391.9
Holy Cross Silver Spring	671.3	657.5-685.1	741.6	715.8-767.4	180	165.7-194.3	469.8	451.5-488.1
Johns Hopkins Suburban	413.8	399.1-428.5	663.5	631.1-695.9	106.5	91.6-121.4	252.6	230.6-274.6
Medstar Montgomery	895.9	876.2-915.6	821.6	790.7-852.5	209.4	193.0-225.8	315.4	293.5-337.3
Shady Grove Adventist	1434.6	1415.2-1454.0	2468.1	2421.5-2514.7	443.8	424.2-463.4	1260.6	1225.7-1295.5
Washington Adventist	585.7	563.6-607.8	620.5	592.4-648.6	248.4	228.8-268.0	560.5	537.3-583.7

* Rate is per 100,000 population

Table 14.2. Mental Health ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	1107.3	1090.5-1124.2	1583.1	1549.4-1616.8	292.4	276.7-308.1	907.4	882.3-932.5
Holy Cross Germantown	1919.6	1886.6-1952.6	2265.7	2200.6-2330.8	502.4	476.6-528.2	1122.0	1080.0-1164.0
Holy Cross Silver Spring	1392.7	1372.6-1412.8	1660.0	1624.0-1696.0	363.8	345.3-382.3	1021.5	994.5-1048.5
Johns Hopkins Suburban	898.0	876.4-919.6	1287.3	1242.4-1332.2	175.3	156.7-193.9	625.0	592.8-657.2
Medstar Montgomery	1672.6	1644.7-1700.5	1760.2	1717.4-1803.0	341.0	319.3-362.7	1008.8	975.1-1042.5
Shady Grove Adventist	1502.8	1482.9-1522.7	2165.0	2122.2-2207.8	407.3	389.6-425.0	1068.7	1039.0-1098.4
Washington Adventist	1282.4	1251.3-1313.5	1381.4	1342.0-1420.8	506.5	479.4-533.6	977.0	943.9-1010.1

* Rate is per 100,000 population

- There is an increasing trend of mental health ER visit age-specific rates across all age groups for County overall and across all hospital CBSAs (Table 15).
- Ages 18-34 years old has the highest mental health ER visit rates; ages 35-64 years old has the second highest rates 2011-2013 while ages 5-17 years old has the second highest rates 2015-2017 (Table 15).

Table 15. Mental Health ER Visit Age-specific Rates by Hospital CBSA, 2011-2017

	2011-2013					2015-2017				
	<5	5-17	18-34	35-64	65+	<5	5-17	18-34	35-64	65+
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
County Overall	5.6	755.0	1406.8	795.7	486.7	285.6	1263.8	2111.7	1077.7	719.3
Holy Cross Germantown	1.1	187.4	676.7	207.1	123.8	315.7	1609.6	2680.3	1394.6	921.6
Holy Cross Silver Spring	1.2	145.6	273.1	158.9	103.6	53.5	246.3	387.6	214.5	158.8
Johns Hopkins Suburban	2.5	362.0	683.1	418.4	260.7	131.4	585.3	966.3	524.2	383.9
Medstar Montgomery	15.7	2260.5	4920.4	2251.0	1638.2	2385.9	4338.4	6714.3	3168.3	2163.7
Shady Grove Adventist	0.7	148.9	293.8	147.0	95.4	53.4	242.3	429.4	205.1	147.7
Washington Adventist	1.2	135.8	252.8	154.0	97.0	54.7	230.3	352.5	200.9	151.1

* Rate is per 100,000 population

Suicide

Suicide Mortality

- Suicide mortality rates decrease for County overall and some hospital CBSAs, however these differences are not statistically significant. (Table 16)
- Holy Cross Germantown Hospital CBSA has the highest suicide mortality rates, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 16).

Fig. 5. Suicide Mortality Rate by Hospital CBSA, 2011-2017

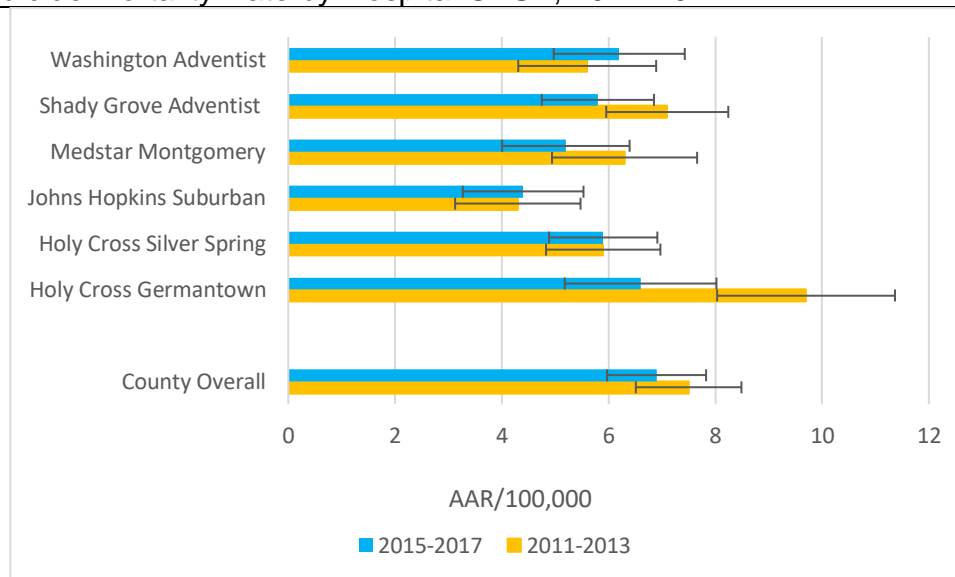


Table 16. Suicide Mortality Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	7.5	6.5-8.5	6.9	6.0-7.8
Holy Cross Germantown	9.7	8.0-11.4	6.6	5.2-8.0
Holy Cross Silver Spring	5.9	4.8-7.0	5.9	4.9-6.9
Johns Hopkins Suburban	4.3	3.1-5.5	4.4	3.3-5.5
Medstar Montgomery	6.3	4.9-7.7	5.2	4.0-6.4
Shady Grove Adventist	7.1	6.0-8.2	5.8	4.7-6.9
Washington Adventist	5.6	4.3-6.9	6.2	5.0-7.4

* Rate is per 100,000 population

- There is a decreasing trend of suicide mortality for males and increasing trend of females for County overall, however these differences are not statistically significant; Holy Cross Germantown Hospital CBSA has a significantly decreasing trend for males (Table 17).
- Johns Hopkins Suburban Hospital CBSA has the lowest suicide mortality rates for both males and females among all hospital CBSAs (Table 17).

Table 17. Suicide Mortality Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	12.4	10.5-14.2	3.1	2.2-4.0	10.8	9.1-12.5	3.3	2.4-4.2
Holy Cross Germantown	16.1	13.0-19.2	3.9	2.6-5.2	10.4	7.9-12.9	3.1	1.8-4.4
Holy Cross Silver Spring	10.9	9.0-12.8	2.9	1.9-3.9	10.7	8.9-12.5	3.1	2.1-4.1
Johns Hopkins Suburban	7.2	5.1-9.3	1.9	0.8-3.0	6.8	4.8-8.8	2.3	1.1-3.5
Medstar Montgomery	13.4	10.9-15.9	3.5	2.3-4.7	13.5	11.3-15.7	2.7	1.6-3.8
Shady Grove Adventist	13.6	11.5-15.7	3	2.0-4.0	10.8	8.9-12.7	3.1	2.1-4.1
Washington Adventist	10.0	7.7-12.3	2	0.8-3.2	10.2	8.0-12.4	2.9	1.6-4.2

* Rate is per 100,000 population

- There is a decreasing trend of suicide mortality rates for NH-Whites and Asians/PIs, while NH-Blacks and Hispanics have an increasing trend for County overall (Table 18.1-18.2).
- NH-Whites have the highest diabetes suicide mortality rates, and Hispanics have the lowest rates (Table 18.1-18.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest suicide mortality rates for NH-Whites, Holy Cross Germantown Hospital CBSA for NH-Blacks, Medstar Montgomery Hospital CBSA for Hispanics, and Washington Adventist Hospital CBSA for Asians/PIs (Table 18.1-18.2).
- Medstar Montgomery Hospital CBSA has the highest suicide mortality rates for NH-Whites and NH-Blacks, while Holy Cross Germantown Hospital has the highest rates for Asians/PIs and Hispanics (Table 18.1-18.2).

Table 18.1. Suicide Mortality Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	11.2	9.4-13.0	4.3	2.5-6.1	5.3	3.0-7.6	2.3	1.1-3.6
Holy Cross Germantown	14.8	11.8-17.8	7.2	3.2-11.2	10.1	6.6-13.6	1.4	0-3.0
Holy Cross Silver Spring	11.7	9.7-13.7	3.0	1.2-4.8	5.4	2.8-8.0	6.1	4.8-7.4
Johns Hopkins Suburban	6.2	4.2-8.2	3.9	1.7-6.1	2.7	0.0-5.4	1.8	0.2-3.4
Medstar Montgomery	14.1	11.5-16.7	3.7	1.4-6.0	3.8	0.7-6.9	9.7	8.1-11.3
Shady Grove Adventist	11.7	9.7-13.7	7.6	5.3-9.9	7	4.5-9.5	1.1	0-2.5
Washington Adventist	12.2	9.3-15.1	2.0	0.2-3.8	8.9	5.5-12.3	4.9	3.6-6.2

* Rate is per 100,000 population

Table 18.2. Suicide Mortality Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	10.4	8.7-12.1	4.9	3.0-6.7	4.5	2.5-6.5	3.1	1.6-4.5
Holy Cross Germantown	10.6	7.7-13.5	1.6	0-3.2	7.5	4.6-10.4	3.9	1.8-6.0
Holy Cross Silver Spring	11.5	9.5-13.5	5.9	4.0-7.8	4.0	1.6-6.4	2.6	1.3-3.9
Johns Hopkins Suburban	6.5	4.5-8.5	6.9	4.4-9.4	2.7	0.4-5.0	2.1	0.5-3.7
Medstar Montgomery	13.4	10.9-15.9	7.1	5.1-9.1	3.8	1.5-6.1	1.8	0.3-3.3
Shady Grove Adventist	10.7	8.8-12.6	4.4	2.2-6.6	6.0	3.8-8.2	3.6	2.1-5.1
Washington Adventist	13.1	10.2-16.0	3.7	1.6-5.8	2.0	0-4.6	3.4	1.8-5.0

* Rate is per 100,000 population

- There is a decreasing trend of suicide mortality rates across all age groups for County overall and across all hospital CBSAs (Table 19).
- Age 65+ has the highest suicide mortality rates, followed by ages 18-34 years old, and ages 35-64 years old (Table 19).

Table 19. Suicide Mortality Age-specific Rates by Hospital CBSA, 2011-2017

	2011-2013					2015-2017				
	<5	5-17	18-34	35-64	65+	<5	5-17	18-34	35-64	65+
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
County Overall	0.0	1.0	9.4	9.7	14.2	0.0	2.6	8.8	8.8	10.1
Holy Cross Germantown	0.0	0.8	11.7	13.1	15.9	0.0	0.9	8.7	7.7	12.8
Holy Cross Silver Spring	0.0	0.9	7.0	7.6	15.0	0.0	3.3	6.2	8.0	12.8
Johns Hopkins Suburban	0.0	0.9	8.1	7.9	13.8	0.0	3.1	7.7	9.2	8.1
Medstar Montgomery	0.0	0.0	10.8	10.3	12.9	0.0	4.2	13.6	8.2	7.3
Shady Grove Adventist	0.0	0.9	9.9	10.5	13.7	0.0	1.5	10.3	8.1	9.7
Washington Adventist	0.0	0.4	7.4	6.0	12.9	0.0	2.4	6.1	7.6	12.4

* Rate is per 100,000 population

Substance Abuse

Drug-induced Mortality

- Drug-induced mortality rates increase over time for County overall and across all hospital CBSAs (Table 20).
- Holy Cross Germantown Hospital CBSA has the highest drug-induced mortality rates, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 20).

Fig. 6. Drug-induced Mortality Rate by Hospital CBSA, 2011-2017

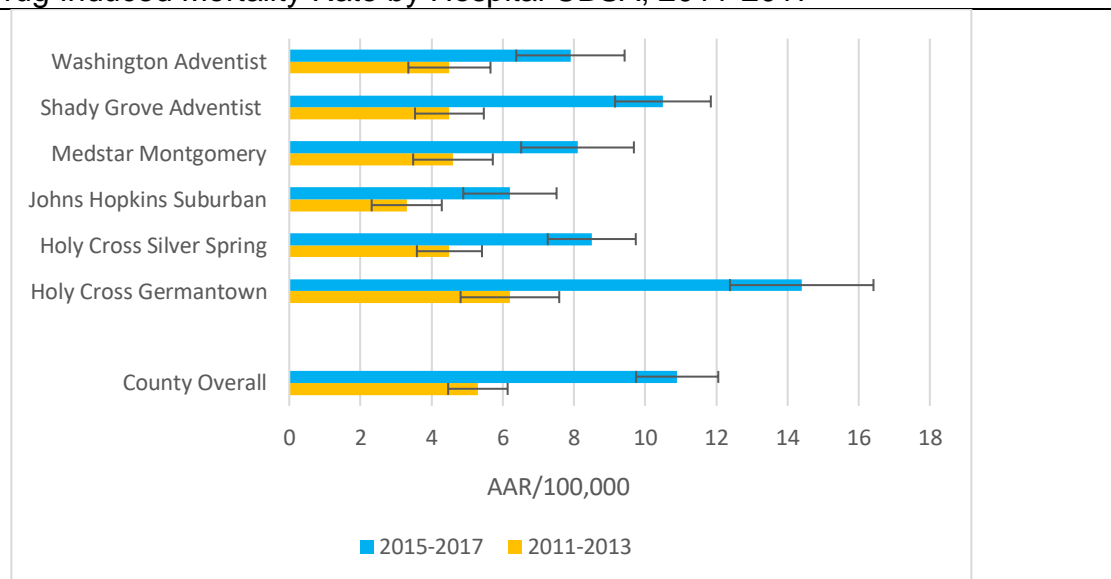


Table 20. Drug-induced Mortality Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	5.3	4.5-6.1	10.9	9.7-12.1
Holy Cross Germantown	6.2	4.8-7.6	14.4	12.4-16.4
Holy Cross Silver Spring	4.5	3.6-5.4	8.5	7.3-9.7
Johns Hopkins Suburban	3.3	2.3-4.3	6.2	4.9-7.5
Medstar Montgomery	4.6	3.5-5.7	8.1	6.5-9.7
Shady Grove Adventist	4.5	3.5-5.5	10.5	9.2-11.8
Washington Adventist	4.5	3.3-5.7	7.9	6.4-9.4

* Rate is per 100,000 population

- There is an increasing trend of drug-induced mortality rates for both males and females for County overall and across all hospital CBSAs (Table 21).
- Johns Hopkins Suburban Hospital CBSA has the lowest drug-induced mortality rates for both males and females across all hospital CBSAs, while Holy Cross Germantown Hospital CBSA has the highest rates (Table 21).
- Holy Cross Germantown Hospital CBSA has the most increasing drug-induced mortality rates for both males and females (Table 21).

Table 21. Drug-induced Mortality Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	7	5.6-8.4	3.7	2.7-4.7	15.5	13.5-17.5	6.5	5.2-7.8
Holy Cross Germantown	8.4	6.0-10.8	4.3	2.8-5.8	19.3	15.9-22.7	9.4	7.1-11.7
Holy Cross Silver Spring	5.9	4.4-7.4	4.1	3.0-5.2	14.2	12.1-16.3	5.3	3.9-6.7
Johns Hopkins Suburban	4.3	2.7-5.9	2.4	1.2-3.6	8.7	6.5-10.9	3.8	2.3-5.3
Medstar Montgomery	7.0	5.2-8.8	4.8	3.5-6.1	18.6	15.9-21.3	6.1	4.4-7.8
Shady Grove Adventist	7.8	6.2-9.4	3.5	2.4-4.6	17.1	14.8-19.4	7.9	6.4-9.4
Washington Adventist	4.9	3.1-6.7	4	2.5-5.5	12.4	9.8-15.0	3.7	2.0-5.4

* Rate is per 100,000 population

- There is an increasing trend of drug-induced mortality rates for all population subgroups on race/ethnicity for County overall and across all hospital CBSAs (Table 22.1-22.2).
- NH-Whites have the highest drug-induced mortality rates, followed by NH-Blacks, and Asians/PIs have the lowest rates (Table 22.1-22.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest drug-induced mortality rates across all population subgroups on race/ethnicity among all hospital CBSAs (Table 22.1-22.2).
- Holy Cross Germantown Hospital CBSA has the highest drug-induced mortality rates for NH-Whites, NH-Blacks, and Asians/PIs; Medstar Montgomery Hospital CBSA has the highest rates for Hispanics (Table 22.2-22.2).

Table 22.1. Drug-induced Mortality Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	8	6.6-9.5	4.6	2.7-6.4	2.7	1.1-4.3	2.9	1.4-4.4
Holy Cross Germantown	10.6	8.0-13.2	4.6	1.4-7.8	3.1	1.0-5.2	0.8	0-2.4
Holy Cross Silver Spring	7.9	6.3-9.5	3.7	1.8-5.6	1.7	0.1-3.3	6.3	4.9-7.7
Johns Hopkins Suburban	4.3	2.7-5.9	2.7	0.5-4.9	3	0.9-5.1	1.8	0.1-3.5
Medstar Montgomery	9.4	7.2-11.6	3.7	1.6-5.8	3.1	1.3-4.9	10.5	8.9-12.1
Shady Grove Adventist	8.8	7.1-10.5	3.9	1.8-6.0	3.2	2.6-3.8	1.4	0-2.8
Washington Adventist	5.5	3.1-7.9	5.0	2.8-7.2	0.7	0-2.5	6.5	4.8-8.2

* Rate is per 100,000 population

Table 22.2. Drug-induced Mortality Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	17.7	15.6-19.9	9.1	6.5-11.6	4.1	2.2-6.0	4.5	2.7-6.3
Holy Cross Germantown	25.7	21.7-29.7	13.2	8.4-18.0	5.2	2.5-7.9	5.5	2.6-8.4
Holy Cross Silver Spring	17.7	15.3-20.1	8.0	5.4-10.6	4.7	2.5-6.9	3.7	1.9-5.5
Johns Hopkins Suburban	11.0	8.6-13.4	3.7	0.8-6.6	2.5	0.3-4.7	2.0	0.1-3.9
Medstar Montgomery	22.7	19.4-26.0	6.6	3.6-9.6	5.2	2.6-7.8	9.3	7.0-11.6
Shady Grove Adventist	22.2	19.6-24.8	11.0	8.0-14.0	4.5	2.5-6.5	5.1	3.2-7.0
Washington Adventist	12.5	9.1-15.9	7.8	5.0-10.6	2.8	0-6.0	3.0	0.9-5.1

* Rate is per 100,000 population

- There is an increasing trend of drug-induced mortality rates across all age groups for County overall and across all hospital CBSAs (Table 23).
- Ages 18-34 years old has the highest drug-induced mortality rates, followed by ages 35-64 years old, and age 65+ (Table 23).

Table 23. Drug-induced Mortality Age-specific Rates by Hospital CBSA, 2011-2017

	2011-2013					2015-2017				
	<5	5-17	18-34	35-64	65+	<5	5-17	18-34	35-64	65+
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
County Overall	0.0	0.0	8.8	8.2	3.3	0.0	0.8	20.8	14.6	5.5
Holy Cross Germantown	0.0	0.0	9.7	10.0	1.5	0.0	0.7	26.0	19.0	9.7
Holy Cross Silver Spring	0.0	0.0	6.3	8.2	3.3	0.0	0.8	16.0	14.1	4.4
Johns Hopkins Suburban	0.0	0.0	8.0	7.5	3.3	0.0	1.0	19.0	12.2	4.3
Medstar Montgomery	0.0	0.0	8.3	9.4	4.0	0.0	0.1	26.0	14.8	5.6
Shady Grove Adventist	0.0	0.0	9.2	8.7	1.8	0.0	0.8	23.9	16.2	7.3
Washington Adventist	0.0	0.0	5.1	7.8	2.8	0.0	0.8	11.1	12.1	5.0

* Rate is per 100,000 population

Substance Abuse ER Visit

- Substance abuse ER visit rates increase over time for County overall and CBSAs of Holy Cross Germantown Hospital, Shady Grove Adventist Hospital; however, the rates decrease for CBSAs of Holy Cross Silver Spring Hospital, Medstar Montgomery Hospital, and Washington Adventist Hospital (Table 24)
- Holy Cross Germantown Hospital CBSA has the highest substance abuse ER visit rates, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 24).

Fig. 7. Substance Abuse ER Visit Rate by Hospital CBSA, 2011-2017

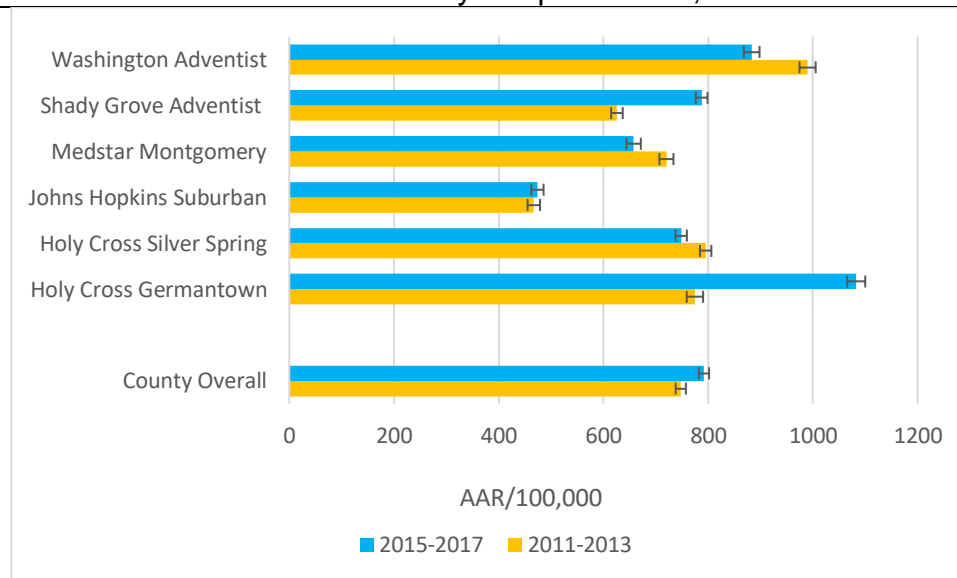


Table 24. Substance Abuse ER Visit Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	747.6	737.8-757.4	791.9	782.1-801.7
Holy Cross Germantown	774.6	758.9-790.3	1082.6	1065.3-1099.9
Holy Cross Silver Spring	795.1	784.2-806.0	748.4	737.6-759.2
Johns Hopkins Suburban	466.9	455.0-478.8	473.8	462.0-485.6
Medstar Montgomery	720.2	706.8-733.6	657.6	643.8-671.4
Shady Grove Adventist	625.7	614.7-636.7	787.4	776.1-798.7
Washington Adventist	989.7	974.2-1005.2	883.0	868.0-898.0

* Rate is per 100,000 population

- There is an increasing trend of substance abuse ER visit rates for males for County overall, males have higher rates than females (Table 25).
- Johns Hopkins Suburban Hospital CBSA has the lowest substance abuse ER visit rates for both males and females across all hospital CBSAs, while Holy Cross Germantown Hospital CBSA has the lowest rates (Table 25).
- Holy Cross Germantown Hospital CBSA has the most increasing substance abuse ER visit rates for both males and females (Table 25).

Table 25. Substance Abuse ER Visit Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	912.1	896.4-927.7	595.8	583.8-607.8	984.5	968.7-1000.3	612.2	600.4-624.0
Holy Cross Germantown	876.7	852.5-900.9	684.2	664.0-704.4	1235.1	1208.2-1262.0	940.0	917.9-962.1
Holy Cross Silver Spring	1095.6	1078.0-1113.2	633.1	619.9-646.3	1058.2	1040.7-1075.7	562.0	549.0-575.0
Johns Hopkins Suburban	568.5	549.3-587.7	376.7	362.1-391.3	592.9	573.7-612.1	365.8	351.6-380.0
Medstar Montgomery	1092.1	1071.1-1113.1	778.2	761.3-795.1	1000.8	978.9-1022.7	621.9	604.9-638.9
Shady Grove Adventist	881.0	863.7-898.3	658.1	644.1-672.1	1095.7	1077.8-1113.6	773.5	759.6-787.4
Washington Adventist	1398.3	1372.9-1423.7	619.2	601.0-637.4	1209.2	1184.4-1234.0	574.4	556.9-591.9

* Rate is per 100,000 population

- There is an increasing trend of substance abuse ER visit rates for all population subgroups on race/ethnicity for County overall and across all hospital CBSAs (Table 26.1-26.2).
- NH-Blacks have the highest substance abuse ER visit rates, followed by Hispanics, and Asians/PIs have the lowest rates (Table 26.1-26.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest substance abuse ER visit rates among all population subgroups on race/ethnicity across all hospital CBSAs (Table 26.1-26.2).
- Holy Cross Germantown Hospital CBSA has the highest substance abuse ER visit rates for NH-Whites, NH-Blacks, and Asians/PIs; Washington Adventist Hospital CBSA has the highest rates for Hispanics (Table 26.1-26.2).

Table 26.1. Substance Abuse ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	495.9	484.8-507.1	699.1	675.6-722.6	105.8	95.8-115.8	710	686.3-733.7
Holy Cross Germantown	692.3	671.9-712.7	875.6	832.1-919.1	132	117.8-146.2	373.5	345.2-401.8
Holy Cross Silver Spring	536.4	524.2-548.6	610.8	587.1-634.5	113.5	102.6-124.4	929.2	904.7-953.7
Johns Hopkins Suburban	310.2	297.7-322.7	430.1	401.4-458.8	61.3	50.2-72.4	399.6	371.4-427.8
Medstar Montgomery	801.3	783.6-819.0	720.0	692.1-747.9	155.2	142.5-167.9	494.3	468.1-520.5
Shady Grove Adventist	625.1	612.2-638.0	848.7	821.4-876.0	123.6	113.1-134.1	451.5	428.5-474.5
Washington Adventist	516.1	496.3-535.9	605.8	579.4-632.2	176.6	161.7-191.5	1555.6	1523.1-1588.1

* Rate is per 100,000 population

Table 26.2. Substance Abuse ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	717.8	704.2-731.4	1152.8	1123.9-1181.7	133.5	122.8-144.2	871.4	847.0-895.8
Holy Cross Germantown	1203.7	1177.1-1230.3	1700.7	1644.3-1757.1	176.6	160.6-192.6	784.8	749.1-820.5
Holy Cross Silver Spring	746.7	731.7-761.7	961.2	932.0-990.4	150.1	138.0-162.2	920.1	895.0-945.2
Johns Hopkins Suburban	485.3	469.4-501.2	738.3	702.2-774.4	89.5	76.7-102.3	459.1	430.1-488.1
Medstar Montgomery	857.5	835.8-879.2	966.6	932.0-1001.2	125.4	111.4-139.4	703.5	673.6-733.4
Shady Grove Adventist	998.3	982.1-1014.5	1497.9	1463.2-1532.6	157.7	146.2-169.2	778.8	753.0-804.6
Washington Adventist	737.3	713.6-761.0	846.9	814.9-878.9	157.7	140.7-174.7	1168.4	1135.9-1200.9

* Rate is per 100,000 population

- The increasing trend of substance abuse ER visit rates were only found for ages 18-34 and 35-64 years old for County overall and across all hospital CBSAs, except for Washington Adventist Hospital CBSA (Table 27).
- Ages 18-34 years old has the highest substance abuse ER visit rates, followed by ages 35-64 years old, and ages 5-17 years old (Table 27).

Table 27. Substance Abuse ER Visit Age-specific Rates by Hospital CBSA, 2011-2017

	2011-2013					2015-2017				
	<5	5-17	18-34	35-64	65+	<5	5-17	18-34	35-64	65+
	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
County Overall	128.1	325.8	1411.3	833.1	243.9	40.7	263.8	1637.2	859.1	243
Holy Cross Germantown	32.8	67.8	476.7	189.6	55.2	9.4	53.2	635.4	439.3	65.1
Holy Cross Silver Spring	24.0	65.6	282.0	173.8	56.5	7.3	51.4	291.9	171.7	53.9
Johns Hopkins Suburban	54.9	159.0	641.6	403.9	129.8	15.8	128.7	679.4	395.2	131.5
Medstar Montgomery	398.8	905.5	5753.0	2496.2	763.8	136.8	1067.0	5358.3	2508.6	726.3
Shady Grove Adventist	25.7	61.1	278.7	141.1	47.5	8.6	46.8	328.0	152.9	51.4
Washington Adventist	25.6	62.5	281.3	194.3	60.1	5.5	49.3	276.4	181.5	61.3

* Rate is per 100,000 population

Chronic Disease

Diabetes

Diabetes ER Visit

- Diabetes ER visit rates increase over time for County overall and across all hospital CBSAs. (Table 28)
- Washington Adventist Hospital CBSA has the highest diabetes ER visit rates, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 28).

Fig. 8. Diabetes ER Visit Rate by Hospital CBSA, 2011-2017

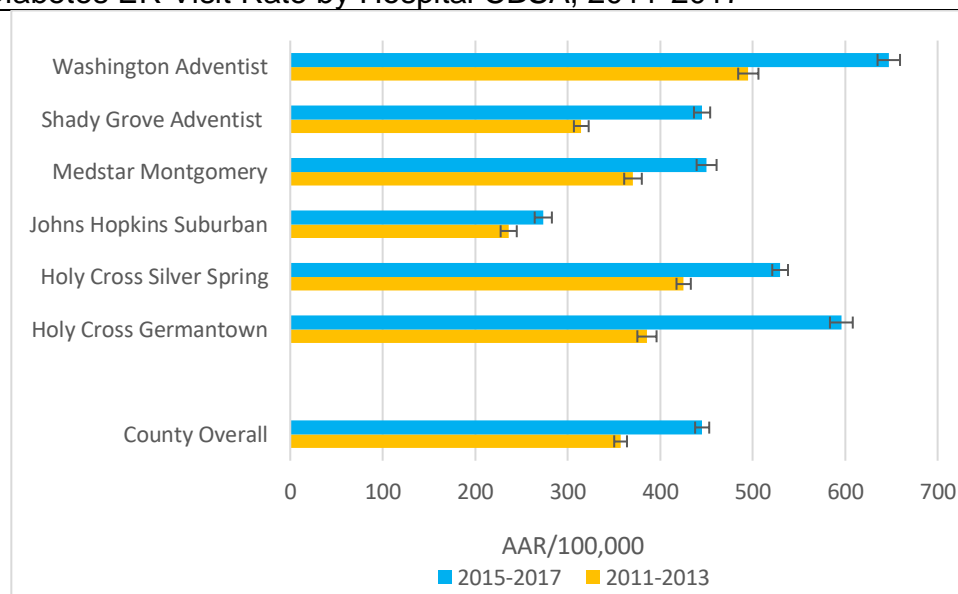


Table 28. Diabetes ER Visit Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	357.2	350.3-364.1	445.4	437.7-453.0
Holy Cross Germantown	385.7	375.3-396.1	595.9	583.5-608.3
Holy Cross Silver Spring	425.4	417.7-433.1	529.7	521.2-538.2
Johns Hopkins Suburban	236.2	227.5-244.9	273.6	264.3-282.9
Medstar Montgomery	370.6	361.1-380.1	450.2	439.4-461.0
Shady Grove Adventist	314.7	306.7-322.7	445.3	436.5-454.1
Washington Adventist	495.3	484.4-506.2	647.2	635.1-659.3

* Rate is per 100,000 population

- There is an increasing trend of diabetes ER visit rates for both males and females over time (Table 29).
- Johns Hopkins Suburban Hospital CBSA has the lowest diabetes ER visit rates for both males and females across all hospital CBSAs (Table 29).
- Washington Adventist Hospital CBSA has the highest diabetes ER visit rates for both males and females consistently (Table 29).

Table 29. Diabetes ER Visit Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	357.8	348.0-367.5	358	348.3-367.8	445.2	434.4-456.0	447.4	436.6-458.2
Holy Cross Germantown	384.2	369.7-398.7	389.7	374.9-404.5	569.5	552.4-586.6	622.4	604.6-640.2
Holy Cross Silver Spring	450.0	439.1-460.9	448	437.1-458.9	559.2	547.2-571.2	552.4	540.4-564.4
Johns Hopkins Suburban	242.0	229.6-254.4	232.8	220.5-245.1	280.6	267.4-293.8	268.8	255.7-281.9
Medstar Montgomery	439.2	425.8-452.6	445.3	431.7-458.9	517.2	502.3-532.1	525.8	510.2-541.4
Shady Grove Adventist	363.2	352.0-374.4	364.8	353.5-376.1	494.6	482.3-506.9	509.7	497.2-522.2
Washington Adventist	483.2	467.8-498.6	509.3	493.7-524.9	653.1	636.1-670.1	646.9	629.7-664.1

* Rate is per 100,000 population

- There is an increasing trend of diabetes ER visit rates for all population subgroups on race/ethnicity for County overall and across all hospital CBSAs (Table 30.1-30.2).
- NH-Blacks have the highest diabetes ER visit rates, followed by Hispanics, and Asians/PIs have the lowest rates (Table 30.1-30.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest diabetes ER visit rates among all population subgroups on race/ethnicity across all hospital CBSAs (Table 30.1-30.2).
- Holy Cross Germantown Hospital CBSA has the highest diabetes ER visit rates for NH-Whites and NH-Blacks, Washington Adventist Hospital CBSA has the highest rates for Hispanics and Asians/PIs (Table 30.1-30.2).

Table 30.1. Diabetes ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	170.1	162.8-177.4	529.5	510.3-548.8	109	98.9-119.1	322.6	309.0-336.2
Holy Cross Germantown	246.2	233.8-258.6	620.9	587.7-654.1	133.3	119.3-147.3	207.7	190.9-224.5
Holy Cross Silver Spring	178.1	169.9-186.3	464.9	445.6-484.2	108.7	97.6-119.8	421.6	407.6-435.6
Johns Hopkins Suburban	117.2	108.3-126.1	355.4	331.9-378.9	62.8	51.1-74.5	175.3	158.8-191.8
Medstar Montgomery	266.4	254.9-277.9	551.6	528.8-574.4	140.1	127.1-153.1	316.5	300.3-332.7
Shady Grove Adventist	215	206.2-223.8	618.1	595.8-640.4	122.6	111.9-133.3	220.8	206.7-234.9
Washington Adventist	142.8	129.8-155.8	470.1	448.6-491.6	130.8	115.9-145.7	525.2	506.9-543.5

* Rate is per 100,000 population

Table 30.2. Diabetes ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	271	261.6-280.4	1021.6	995.7-1047.5	162.4	150.1-174.7	640.2	622.2-658.2
Holy Cross Germantown	460.5	443.8-477.2	1164.0	1120.9-1207.1	275.8	256.8-294.8	628.2	601.9-654.5
Holy Cross Silver Spring	330.0	319.4-340.6	970.2	943.9-996.5	205.9	192.0-219.8	687.6	669.1-706.1
Johns Hopkins Suburban	193.8	182.3-205.3	642.9	610.6-675.2	95.9	81.7-110.1	310.6	289.5-331.7
Medstar Montgomery	365.2	350.2-380.2	917.9	887.3-948.5	137.8	121.4-154.2	620.0	597.5-642.5
Shady Grove Adventist	380.6	369.3-391.9	1064.0	1033.8-1094.2	214.7	201.5-227.9	583.3	563.9-602.7
Washington Adventist	284.3	267.0-301.6	964.9	935.0-994.8	284.4	263.9-304.9	838.1	814.3-861.9

* Rate is per 100,000 population

Diabetes Mortality

- Diabetes mortality rates decrease over time for County overall and across all hospital CBSAs (Table 31).
- Washington Adventist Hospital CBSA has the highest diabetes mortality rates, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 31).

Fig. 9. Diabetes Mortality Rate by Hospital CBSA, 2011-2017

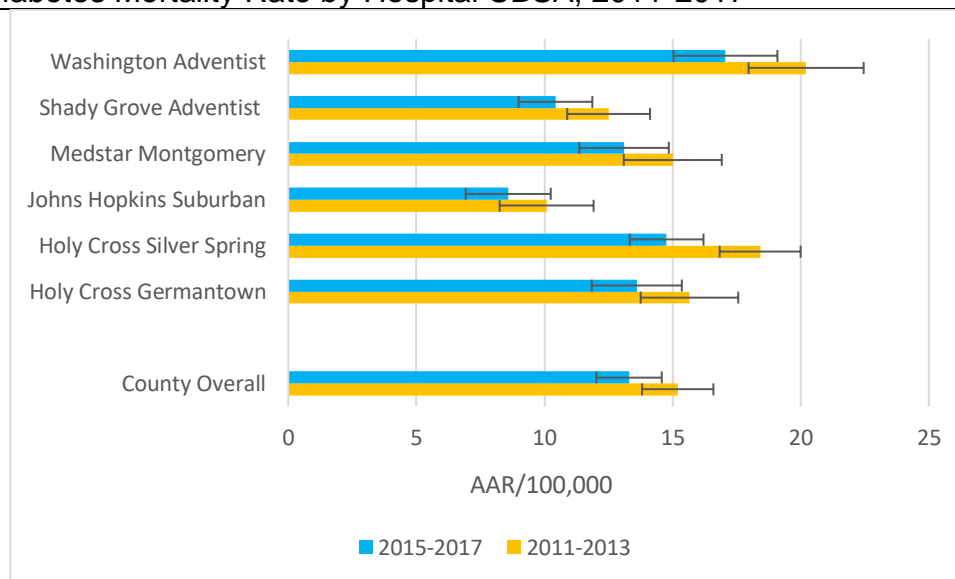


Table 31. Diabetes Mortality Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	15.2	13.8-16.6	13.3	12.1-14.6
Holy Cross Germantown	15.7	13.8-17.6	13.6	11.8-15.4
Holy Cross Silver Spring	18.4	16.8-20.0	14.8	13.3-16.2
Johns Hopkins Suburban	10.1	8.2-11.9	8.6	6.9-10.2
Medstar Montgomery	15.0	13.1-16.9	13.1	11.4-14.9
Shady Grove Adventist	12.5	10.9-14.1	10.4	9.0-11.9
Washington Adventist	20.2	18.0-22.5	17.1	15.0-19.1

* Rate is per 100,000 population

- There is a decreasing trend of diabetes mortality rates for both males and females over time (Table 32).
- Johns Hopkins Suburban Hospital CBSA has the lowest diabetes ER visit rates for both males and females across all hospital CBSAs (Table 32).
- Washington Adventist Hospital CBSA has the highest diabetes mortality rates for females and Holy Cross Silver Spring Hospital CBSA has the highest rates for males (Table 32).

Table 32. Diabetes Mortality Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	17.2	15.1-19.2	12.7	10.9-14.6	14.4	12.5-16.3	9.7	8.0-11.4
Holy Cross Germantown	17.8	15.1-20.5	14	11.3-16.7	19.0	16.2-21.8	9.4	7.3-11.5
Holy Cross Silver Spring	21.1	18.8-23.4	17.7	15.5-19.9	19.5	17.3-21.7	12.7	10.8-14.6
Johns Hopkins Suburban	12.0	9.3-14.7	8.5	6.0-11.0	10.5	8.0-13.0	6.9	4.7-9.1
Medstar Montgomery	20.3	17.5-23.1	14.6	12.0-17.2	18.9	16.2-21.6	10.7	8.5-12.9
Shady Grove Adventist	16.8	14.4-19.2	12.1	9.9-14.3	16.2	14.0-18.4	8.9	7.0-10.8
Washington Adventist	20.2	17.0-23.4	20.2	17.1-23.3	18.6	15.5-21.7	15.8	13.2-18.4

* Rate is per 100,000 population

- There is a decreasing trend of diabetes ER visit rates among all population subgroups on race/ethnicity for County overall, however the trend varies across hospital CBSAs (Table 33.1-33.2).
- NH-Blacks have the highest diabetes mortality rates, followed by Hispanics, and Asians/PIs have the lowest rates (Table 33.1-33.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest diabetes mortality rates among all population subgroups on race/ethnicity across all hospital CBSAs (Table 33.1-33.2).
- Washington Adventist Hospital CBSA has the highest diabetes mortality rates for NH-Blacks and Hispanics, Holy Cross Germantown Hospital CBSA has the highest rates for Asians/PIs (Table 33.1-33.2).

Table 33.1. Diabetes Mortality Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	13.7	11.5-15.9	30.8	26.6-35.0	10.2	7.2-13.2	15.5	13.1-17.9
Holy Cross Germantown	14.9	11.7-18.1	32.6	26.5-38.7	9.3	6.0-12.6	17.8	15.1-20.5
Holy Cross Silver Spring	16.5	14.0-19.0	33.3	29.0-37.6	13	9.6-16.4	24.2	21.7-26.7
Johns Hopkins Suburban	9.3	6.5-12.1	21.1	15.5-26.7	6.6	3.1-10.1	9.7	6.8-12.6
Medstar Montgomery	15.9	12.6-19.2	23.6	18.5-28.7	12.1	8.5-15.7	22.4	19.5-25.3
Shady Grove Adventist	13.9	11.3-16.5	30.1	25.2-35.0	9.4	6.4-12.4	11.6	9.1-14.1
Washington Adventist	14.1	10.0-18.2	31.1	25.9-36.3	18	13.1-22.9	34.7	31.5-37.9

* Rate is per 100,000 population

Table 33.2. Diabetes Mortality Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	11.4	9.3-13.5	25.9	22.1-29.8	7.8	5.2-10.5	11.5	9.4-13.5
Holy Cross Germantown	15.3	12.2-18.4	17.7	12.9-22.5	11.1	7.8-14.4	11.9	9.0-14.8
Holy Cross Silver Spring	15.8	13.3-18.3	24.8	20.9-28.7	12.2	9.2-15.2	13.0	10.9-15.1
Johns Hopkins Suburban	8.9	6.2-11.6	18.6	13.6-23.6	7.2	3.9-10.5	4.4	2.1-6.7
Medstar Montgomery	18.1	14.8-21.4	15.3	11.2-19.4	6.7	3.2-10.2	15.6	13.0-18.2
Shady Grove Adventist	13.5	11.0-16.0	20.0	16.0-24.0	8.4	5.7-11.1	10.0	7.8-12.2
Washington Adventist	15.2	11.2-19.2	26.5	21.9-31.1	9.2	4.5-13.9	21.0	18.1-23.9

* Rate is per 100,000 population

Cardiovascular Health

Heart Disease Mortality

- Heart disease mortality rates decrease over time for County overall and across all hospital CBSAs. (Table 34)
- Washington Adventist Hospital CBSA has the highest heart disease mortality rates, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 34).

Fig. 10. Heart Disease Mortality Rate by Hospital CBSA, 2011-2017

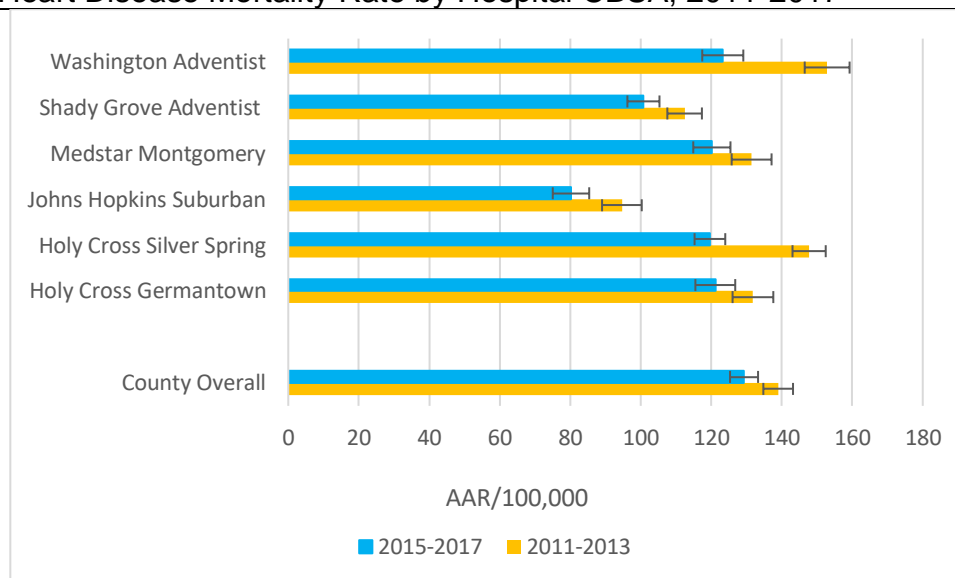


Table 34. Heart Disease Mortality Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	139.0	134.8-143.2	129.3	125.3-133.3
Holy Cross Germantown	131.8	126.0-137.6	121.1	115.5-126.8
Holy Cross Silver Spring	147.8	143.0-152.5	119.6	115.3-124.0
Johns Hopkins Suburban	94.6	89.0-100.3	80.2	75.0-85.4
Medstar Montgomery	131.4	125.8-137.1	120.2	114.9-125.4
Shady Grove Adventist	112.4	107.5-117.3	100.8	96.2-105.3
Washington Adventist	152.9	146.5-159.2	123.3	117.4-129.1

* Rate is per 100,000 population

- There is a decreasing trend of heart disease mortality rates for both males and females over time (Table 35).
- Johns Hopkins Suburban Hospital CBSA has the lowest heart disease mortality rates for both males and females across all hospital CBSAs (Table 35).
- Medstar Montgomery Hospital CBSA has the highest heart disease mortality rates for both males and females (Table 35).

Table 35. Heart Disease Mortality Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	152.4	146.2-158.5	120.1	114.3-125.9	132.6	126.7-138.5	98.9	93.5-104.3
Holy Cross Germantown	157.7	149.1-166.3	114.3	106.6-122.0	138.4	130.1-146.7	108.2	100.5-115.9
Holy Cross Silver Spring	186.5	179.6-193.4	136.6	130.1-143.1	155.5	149.1-161.9	107.3	101.4-113.2
Johns Hopkins Suburban	109.5	101.3-117.7	81.8	74.1-89.5	93.0	85.4-100.6	68.2	61.2-75.2
Medstar Montgomery	180.3	172.0-188.6	141	133.3-148.7	164.3	156.5-172.1	109.1	101.9-116.3
Shady Grove Adventist	158.9	151.7-166.1	116.8	110.1-123.5	138.9	132.2-145.6	106.8	100.6-113.0
Washington Adventist	175.3	166.0-184.6	136.2	127.4-145.0	151.5	142.8-160.2	101.5	93.6-109.4

* Rate is per 100,000 population

- There is a decreasing trend of heart disease mortality rates for all population subgroups on race/ethnicity for County overall and across all hospital CBSAs (Table 36.1-36.2).
- NH-Blacks have the highest heart disease mortality rates, followed by NH-Whites, and Hispanics have the lowest rates (Table 36.1-36.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest heart disease mortality rates across all population subgroups on race/ethnicity among all hospital CBSAs (Table 36.1-36.2).
- Medstar Montgomery Hospital CBSA has highest heart disease mortality rates for NH-Whites, and Washington Adventist Hospital CBSA has the highest rates for NH-Blacks (Table 36.1-36.2).

Table 36.1. Heart Disease Mortality Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	164.1	156.4-171.8	152.7	143.5-162.0	72.7	64.9-80.5	67.4	62.4-72.5
Holy Cross Germantown	168.3	157.7-178.9	155.5	141.5-169.5	69.6	59.5-79.7	43.6	36.8-50.4
Holy Cross Silver Spring	194.2	185.4-203.0	152.2	142.9-161.5	88.3	79.6-97.0	86.7	81.5-91.9
Johns Hopkins Suburban	110.2	100.3-120.1	109.9	97.7-122.1	47.1	37.6-56.6	46.2	39.6-52.8
Medstar Montgomery	186.6	175.3-197.9	136.7	125.8-147.6	87.4	77.4-97.4	79.2	73.2-85.2
Shady Grove Adventist	163.9	155.0-172.8	158.9	148.3-169.5	73.5	65.2-81.8	52.6	47.0-58.2
Washington Adventist	204.7	190.4-219.0	142.1	131.2-153.0	74.7	62.5-86.9	91.5	85.4-97.6

* Rate is per 100,000 population

Table 36.2. Heart Disease Mortality Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	137.9	130.4-145.3	151.4	142.1-160.6	66.8	59.1-74.5	65.2	60.4-70.0
Holy Cross Germantown	152.4	141.3-163.5	136.9	124.0-149.8	75.7	65.7-85.7	45.4	39.1-51.7
Holy Cross Silver Spring	152.1	143.6-160.6	147.8	138.5-157.1	75.1	66.6-83.6	66.3	61.4-71.2
Johns Hopkins Suburban	91.8	82.3-101.3	102.2	90.4-114.0	45.5	36.2-54.8	47.7	41.3-54.1
Medstar Montgomery	161.9	151.0-172.8	136.6	126.0-147.2	83.7	73.8-93.6	61.4	55.6-67.2
Shady Grove Adventist	146.9	138.3-155.5	142.1	131.7-152.5	71.0	62.9-79.1	64.0	58.5-69.5
Washington Adventist	142.7	129.2-156.2	145.0	134.2-155.8	78.8	66.6-91.0	64.8	59.0-70.6

* Rate is per 100,000 population

Heart Disease ER Visit

- Heart disease ER visit rates increase over time for County overall and all hospital CBSAs (Table 37).
- Washington Adventist Hospital CBSA has the highest heart disease ER visit rates 2011-2013, while Holy Cross Germantown Hospital CBSA has the highest rates 2015-2017 (Table 37).
- Johns Hopkins Suburban Hospital CBSA has the lowest rates over time (Table 37).

Fig. 11. Heart Disease ER Visit Rate by Hospital CBSA, 2011-2017

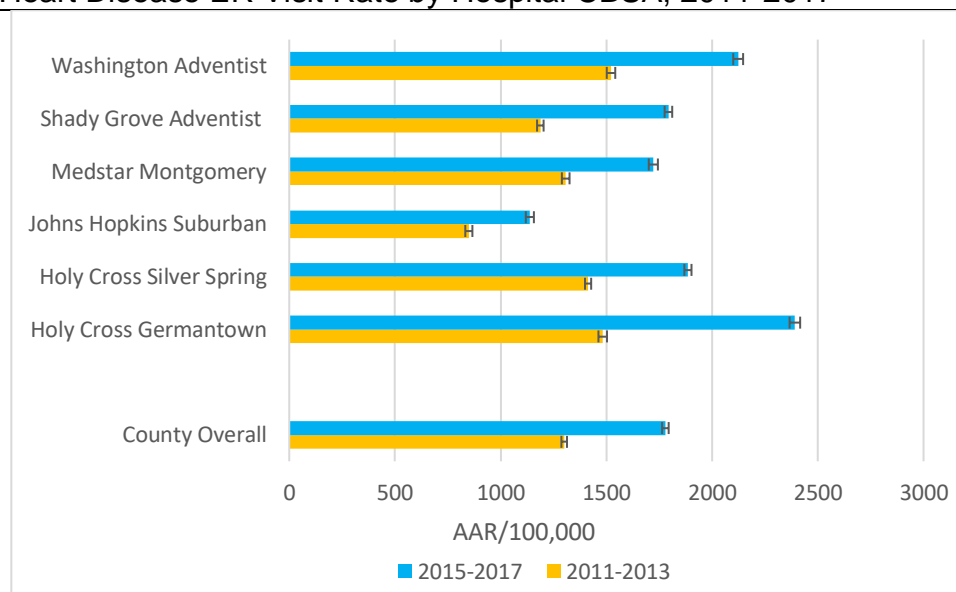


Table 37. Heart Disease ER Visit Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	1300.4	1287.2-1313.6	1779	1763.6-1794.4
Holy Cross Germantown	1482.6	1462.4-1502.8	2391.4	2366.4-2416.4
Holy Cross Silver Spring	1413.4	1398.8-1428.0	1885.5	1868.6-1902.4
Johns Hopkins Suburban	849.4	832.7-866.1	1137.9	1118.8-1157.0
Medstar Montgomery	1307.5	1289.4-1325.6	1721.9	1700.3-1743.5
Shady Grove Adventist	1187.5	1172.1-1202.9	1793.3	1775.4-1811.3
Washington Adventist	1521.7	1501.6-1541.8	2123.3	2100.0-2146.6

* Rate is per 100,000 population

- There is an increasing trend of heart disease ER visit rates for both males and females over time (Table 38).
- Females have higher heart disease ER visit rates than males for County overall and all Hospital CBSAs (Table 38).
- Johns Hopkins Suburban Hospital CBSA has the lowest heart disease ER visit rates for both males and females across all hospital CBSAs (Table 38).
- Washington Adventist Hospital CBSA has the highest heart disease ER visit rates for females 2011-2013; Holy Cross Germantown Hospital CBSA has the highest rates among males over time and for females 2015-2017 (Table 38).

Table 38. Heart Disease ER Visit Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	1265.1	1246.9-1283.3	1326.8	1307.8-1345.8	1751.6	1730.2-1773.0	1798.3	1776.2-1820.4
Holy Cross Germantown	1459.1	1430.9-1487.3	1506.2	1477.2-1535.2	2377.8	2343.0-2412.6	2407.3	2371.6-2443.0
Holy Cross Silver Spring	1404.5	1384.5-1424.5	1580.3	1559.2-1601.4	1926.4	1903.0-1949.8	2055.1	2030.8-2079.4
Johns Hopkins Suburban	836.1	813.0-859.2	860.1	836.1-884.1	1132.1	1105.6-1158.6	1141.2	1113.8-1168.6
Medstar Montgomery	1514.1	1489.3-1538.9	1634.8	1608.5-1661.1	2032.9	2003.3-2062.5	2090.2	2058.9-2121.5
Shady Grove Adventist	1370.5	1349.2-1391.8	1398.7	1376.6-1420.8	2063.8	2038.9-2088.7	2074.0	2048.2-2099.8
Washington Adventist	1361.5	1334.5-1388.5	1657.5	1628.0-1687.0	1988.6	1956.8-2020.4	2235.8	2202.0-2269.6

* Rate is per 100,000 population

- There is an increasing trend of heart disease ER visit rates for all population subgroups on race/ethnicity for County overall and across all hospital CBSAs (Table 39.1-39.2).
- NH-Blacks have the highest heart disease ER visit rates, followed by Hispanics, and Asians/PIs have the lowest rates (Table 39.1-39.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest heart disease ER visit rates across all population subgroups on race/ethnicity among all hospital CBSAs (Table 39.1-39.2).

- Holy Cross Germantown Hospital CBSA has the highest heart disease ER visit rates across population subgroups on race/ethnicity, except for Hispanics 2011-2013 and Asians/PIs 2015-2017 where Washington Adventist Hospital CBSA has the highest rates respectively (Table 39.1-39.2).

Table 39.1. Heart Disease ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	735.1	719.5-750.8	1651.3	1617.5-1685.0	379.8	361.1-398.4	843.8	822.9-864.8
Holy Cross Germantown	988.5	962.3-1014.7	2236.1	2175.5-2296.7	479.1	452.9-505.3	728.4	700.3-756.5
Holy Cross Silver Spring	688.6	671.4-705.8	1443.2	1409.7-1476.7	370.9	350.5-391.3	1062.2	1040.8-1083.6
Johns Hopkins Suburban	459.3	440.3-478.3	993.2	952.6-1033.8	221.8	205.2-238.4	486.7	461.1-512.3
Medstar Montgomery	1047.2	1023.0-1071.4	1732.1	1691.3-1772.9	443.3	419.6-467.0	831.8	806.4-857.2
Shady Grove Adventist	897.6	898.9-916.3	2047.0	2007.6-2086.4	433.2	418.5-447.9	697.4	674.9-719.9
Washington Adventist	572.2	545.3-599.1	1398.7	1361.3-1436.1	435	406.5-463.5	1260.5	1233.4-1287.6

* Rate is per 100,000 population

Table 39.2. Heart Disease ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	1408.4	1385.8-1431.0	3618.4	3569.9-3666.9	622.3	598.3-646.3	1750	1721.3-1778.7
Holy Cross Germantown	2020.8	1982.5-2059.1	4631.6	4548.6-4714.6	955.7	919.1-992.3	1900.0	1856.4-1943.6
Holy Cross Silver Spring	1511.1	1486.1-1536.1	3272.1	3223.2-3321.0	797.3	770.3-824.3	1734.7	1705.5-1763.9
Johns Hopkins Suburban	940.1	912.4-967.8	2226.7	2166.5-2286.9	390.9	362.5-419.3	994.0	959.2-1028.8
Medstar Montgomery	1715.4	1680.7-1750.1	3380.2	3322.1-3438.3	507.2	475.3-539.1	1750.7	1714.4-1787.0
Shady Grove Adventist	1767.0	1740.3-1793.7	4045.7	3988.6-4102.8	780.0	754.4-805.6	1831.0	1799.0-1863.0
Washington Adventist	1356.3	1316.5-1396.1	3205.4	3150.2-3260.6	1342.2	1295.9-1388.5	1797.7	1761.6-1833.8

* Rate is per 100,000 population

Chronic Lower Respiratory Disease Mortality

- Chronic lower respiratory disease ER visit rates increase over time for County overall, but variations exist across hospital CBSAs (Table 40).
- Washington Adventist Hospital CBSA has the highest chronic lower respiratory disease mortality rate 2011-2013, however Holy Cross Germantown Hospital CBSA has the highest rate 2015-2017 (Table 40).
- Johns Hopkins Suburban Hospital CBSA has the lowest rates over time (Table 40).

Fig. 12. Chronic Lower Respiratory Disease Mortality Rate by Hospital CBSA, 2011-2017

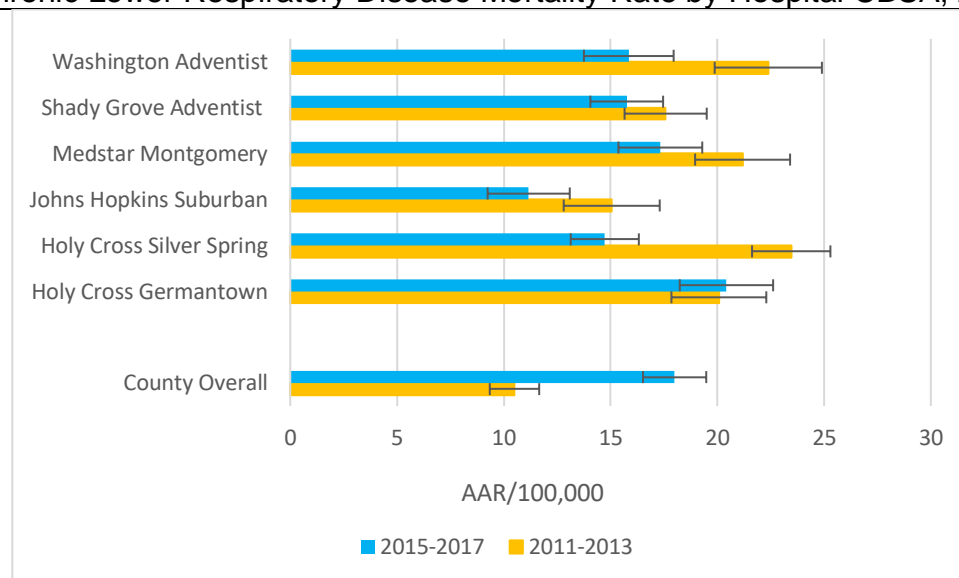


Table 40. Chronic Lower Respiratory Disease Mortality Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	10.5	9.3-11.7	18.0	16.5-19.5
Holy Cross Germantown	20.1	17.9-22.3	20.4	18.2-22.6
Holy Cross Silver Spring	23.5	21.6-25.3	14.7	13.1-16.3
Johns Hopkins Suburban	15.1	12.8-17.3	11.2	9.2-13.1
Medstar Montgomery	21.2	19.0-23.4	17.3	15.4-19.3
Shady Grove Adventist	17.6	15.7-19.5	15.8	14.1-17.5
Washington Adventist	22.4	19.9-24.9	15.9	13.8-18.0

* Rate is per 100,000 population

- There is a decreasing trend of chronic lower respiratory disease rates for both males and females over time (Table 41).
- Johns Hopkins Suburban Hospital CBSA has the lowest chronic lower respiratory disease mortality rates for both males and females among all hospital CBSAs (Table 41).
- Medstar Montgomery Hospital CBSA has the highest chronic lower respiratory disease mortality rates for males over time and for females 2011-2013; Holy Cross Germantown Hospital CBSA has the highest rates for females 2015-2017 (Table 41).

Table 41. Chronic Lower Respiratory Disease Mortality Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	19.7	17.5-21.9	21	18.6-23.4	14.9	12.9-16.9	16.4	14.2-18.6
Holy Cross Germantown	20.3	17.3-23.3	20.2	16.9-23.5	19.1	16.1-22.1	20.4	17.2-23.6
Holy Cross Silver Spring	25.5	23.0-28.0	24.4	21.7-27.1	17.8	15.7-19.9	14.7	12.3-17.1
Johns Hopkins Suburban	15.2	12.2-18.2	14.9	11.6-18.2	10.4	7.9-12.9	11.7	8.8-14.6
Medstar Montgomery	23.2	20.3-26.1	25.6	22.3-28.9	21.6	18.9-24.3	17.3	14.5-20.1
Shady Grove Adventist	20.6	18.0-23.2	20.5	17.6-23.4	18.0	15.8-20.2	19.0	16.5-21.5
Washington Adventist	23.0	19.7-26.3	21.9	18.2-25.6	18.1	15.1-21.1	14.0	11.1-16.9

* Rate is per 100,000 population

- There is a decreasing trend of chronic lower respiratory disease mortality rates for NH-Whites and Hispanics overall, while an increasing trend is found for NH-Blacks (Table 42.1-42.2).
- NH-Whites have the highest chronic lower respiratory disease mortality rates, followed by NH-Blacks (Table 42.1-42.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest chronic lower respiratory disease mortality rates for NH-Whites and NH-Blacks, Medstar Montgomery Hospital CBSA has the lowest rates for Hispanics, and Washington Adventist Hospital CBSA has the lowest rates for Asians/PIs (Table 42.1-42.2).

- Holy Cross Germantown Hospital CBSA has the highest chronic lower respiratory disease mortality rates for both NH-Whites and NH-Blacks, Medstar Montgomery Hospital has the highest rates for Asians/Pis, and Washington Adventist Hospital CBSA has the highest rates for Hispanics (Table 42.1-42.2).

Table 42.1. Chronic Lower Respiratory Disease Mortality Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	27.8	24.6-31.0	14.5	11.8-17.2	5.3	3.2-7.4	8.6	7.0-10.2
Holy Cross Germantown	31	26.6-35.4	10.4	6.7-14.1	3.2	0.4-6.0	6.7	4.5-8.9
Holy Cross Silver Spring	36.5	32.8-40.2	14.2	11.5-16.9	7.2	4.7-9.7	7.7	6.1-9.3
Johns Hopkins Suburban	19.7	15.5-23.9	9.8	5.9-13.7	4.7	1.9-7.5	8.7	6.3-11.1
Medstar Montgomery	31.7	26.9-36.5	17.6	14.2-21.0	9.3	6.5-12.1	6.9	5.1-8.7
Shady Grove Adventist	28.6	24.9-32.3	12.3	9.2-15.4	4.7	2.6-6.8	9.4	7.5-11.3
Washington Adventist	40.7	34.5-46.9	10.4	7.2-13.6	5.6	2.3-8.9	4.8	3.0-6.6

* Rate is per 100,000 population

Table 42.2. Chronic Lower Respiratory Disease Mortality Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	21.4	18.4-24.4	16	13.0-19.0	5.4	3.2-7.6	5.1	3.9-6.3
Holy Cross Germantown	27.8	23.2-32.4	25.6	21.1-30.1	7.4	4.7-10.1	3.3	1.9-4.7
Holy Cross Silver Spring	21.6	18.3-24.9	13.1	10.2-16.0	5.8	3.4-8.2	4.9	3.6-6.2
Johns Hopkins Suburban	14.3	10.5-18.1	13.8	10.1-17.5	3.6	0.8-6.4	4.0	2.4-5.6
Medstar Montgomery	24.8	20.4-29.2	15.3	12.0-18.6	10.0	7.1-12.9	1.9	0.9-2.9
Shady Grove Adventist	25.1	21.7-28.5	21.6	18.3-24.9	6.7	4.3-9.1	3.7	2.4-5.0
Washington Adventist	21.5	16.2-26.8	15.4	12.0-18.8	2.9	0-6.6	6.0	4.7-7.3

* Rate is per 100,000 population

Chronic Lower Respiratory Disease ER Visit

- Chronic lower respiratory disease ER visit rates increase over time for County overall and all hospital CBSAs (Table 43).
- Washington Adventist Hospital CBSA has the highest chronic lower respiratory disease ER visit rate 2011-2013, while Holy Cross Germantown Hospital CBSA has the highest rate 2015-2017 (Table 43).
- Johns Hopkins Suburban Hospital CBSA has the lowest chronic lower respiratory disease ER visit rates over time (Table 43).

Fig. 13. Chronic Lower Respiratory Disease ER Visit Rate by Hospital CBSA, 2011-2017

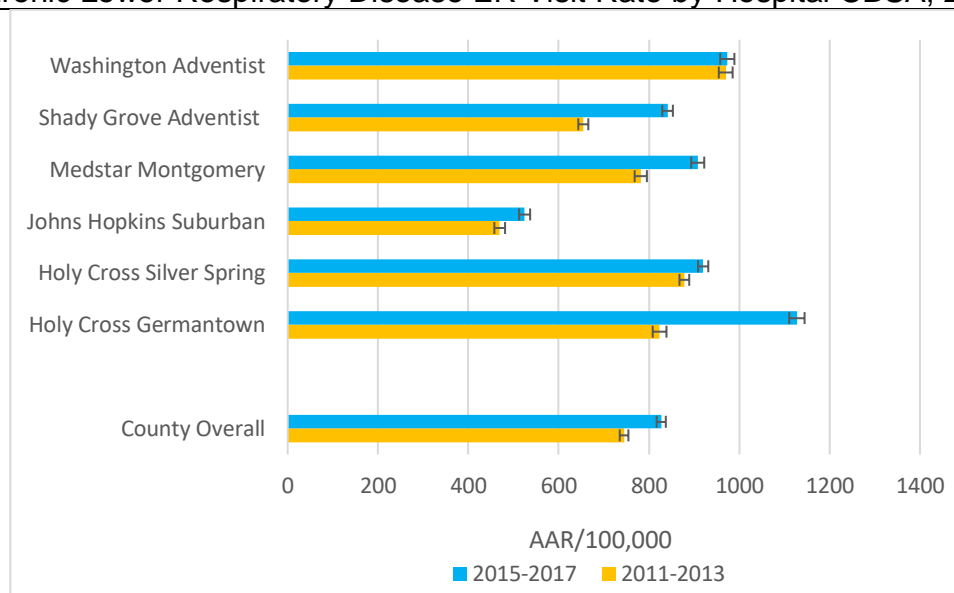


Table 43. Chronic Lower Respiratory Disease ER Visit Rate by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	744.8	735.2-754.4	827.1	817.1-837.2
Holy Cross Germantown	823.5	808.2-838.8	1127.5	1110.5-1144.5
Holy Cross Silver Spring	878.3	867.5-889.1	920.0	908.8-931.2
Johns Hopkins Suburban	469.5	457.6-481.4	524.6	512.3-536.9
Medstar Montgomery	781.8	768.3-795.3	907.9	893.4-922.4
Shady Grove Adventist	654.6	643.5-665.7	841.2	829.5-852.9
Washington Adventist	969.9	954.5-985.3	973.4	957.7-989.1

* Rate is per 100,000 population

- There is an increase trend of chronic lower respiratory disease ER visit rates for both males and females over time (Table 44).
- Females have higher chronic lower respiratory disease ER visit rates than males for County overall and all Hospital CBSAs (Table 44).
- Johns Hopkins Suburban Hospital CBSA has the lowest chronic lower respiratory disease ER visit rates for both males and females across all hospital CBSAs (Table 44).
- Washington Adventist Hospital CBSA has the highest chronic lower respiratory disease ER visit rates for both males and females 2011-2013; however Holy Cross Germantown Hospital CBSA has the highest chronic lower respiratory disease ER visit rates for both males and females 2015-2017 (Table 44).

Table 44. Chronic Lower Respiratory Disease ER Visit Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	723.7	709.9-737.4	755.3	741.9-768.8	765.6	751.5-779.7	872.4	858.1-886.7
Holy Cross Germantown	794.6	772.9-816.3	844.1	822.6-865.6	1065.0	1041.3-1088.7	1177.6	1153.3-1201.9
Holy Cross Silver Spring	899.4	883.8-915.0	933	918.0-948.0	909.8	894.0-925.6	1026.6	1010.6-1042.6
Johns Hopkins Suburban	457.8	440.7-474.9	474.5	458.1-490.9	493.4	476.2-510.6	549.6	532.2-467.0
Medstar Montgomery	910.5	891.2-929.8	957.2	938.2-976.2	1029.3	1009.3-1049.3	1102.4	1081.6-1123.2
Shady Grove Adventist	722.7	706.9-738.5	765.7	750.1-781.3	907.4	891.0-923.8	998.7	982.0-1015.4
Washington Adventist	957.9	935.8-980.0	975.9	954.6-997.2	886.6	864.7-908.5	1054.3	1031.9-1076.7

* Rate is per 100,000 population

- There is an increasing trend of chronic lower respiratory disease ER visit rates for all population subgroups on race/ethnicity for County overall and across all hospital CBSAs (Table 45.1-45.2).
- NH-Blacks have the highest chronic lower respiratory disease ER visit rates, followed by Hispanics, and Asians/PIs have the lowest rates (Table 45.1-45.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest chronic lower respiratory disease ER visit rates across all population subgroups on race/ethnicity among all hospital CBSAs (Table 45.1-45.2).
- Holy Cross Germantown Hospital CBSA has the highest chronic lower respiratory disease ER visit rates for NH-Blacks over time and for NH-Whites 2015-2017; while Washington Adventist Hospital CBSA has the highest rates for Hispanics and Asians/PIs (Table 45.1-45.2).

Table 45.1. Chronic Lower Respiratory Disease ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	315	306.0-324.0	910.3	883.8-936.9	132.4	121.6-143.2	664.3	640.8-687.9
Holy Cross Germantown	479.8	463.2-496.4	1286.3	1235.6-1337.0	161.1	145.4-176.8	424.4	395.4-453.4
Holy Cross Silver Spring	353	343.2-362.8	763.7	737.1-790.3	136.8	124.9-148.7	861.9	837.6-886.2
Johns Hopkins Suburban	209.7	199.3-220.1	537.1	505.1-569.1	82.9	70.4-95.4	363.7	334.9-392.5
Medstar Montgomery	536.2	521.9-550.5	959.6	926.9-992.3	190.4	176.6-204.2	703.0	673.8-732.2
Shady Grove Adventist	413.3	402.6-424.0	1138.3	1106.5-1170.1	149.4	138.0-160.8	447.9	423.0-472.8
Washington Adventist	315.9	300.5-331.3	697.6	668.7-726.5	1296.6	1263.6-1329.6	1008.0	975.9-1040.1

* Rate is per 100,000 population

Table 45.2. Chronic Lower Respiratory Disease ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	544.1	532.0-556.2	1651.1	1616.7-1685.5	196.9	184.2-209.6	892.4	867.1-917.7
Holy Cross Germantown	974.9	952.5-997.3	2242.9	2180.1-2305.7	304.9	285.6-324.2	872.6	835.0-910.2
Holy Cross Silver Spring	664.6	651.0-678.2	1555.6	1520.8-1590.4	275.6	261.2-290.0	1010.3	984.3-1036.3
Johns Hopkins Suburban	395.2	380.7-409.7	1070.3	1027.5-1113.1	129.8	115.0-144.6	519.9	489.2-550.6
Medstar Montgomery	806.2	787.1-825.3	1687.0	1645.0-1729.0	231.0	214.0-248.0	1056.8	1024.4-1089.2
Shady Grove Adventist	809.4	795.0-823.8	1956.4	1915.0-1997.8	255.2	241.5-268.9	848.5	820.5-876.5
Washington Adventist	598.9	577.3-620.5	1357.5	1319.2-1395.8	278.8	258.2-299.4	1012.8	979.8-1045.8

* Rate is per 100,000 population

INFECTIOUS DISEASE

Sexually Transmitted Infections

Chlamydia

- There is an increasing trend of Chlamydia incidence rates over time for County overall and all hospital CBSAs (Table 46)
- Washington Adventist Hospital CBSA has the highest Chlamydia incidence rates, followed by Holy Cross Silver Spring Hospital CBSA, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 46).

Fig. 14. Chlamydia Incidence Rate by Hospital CBSA, 2013-2017

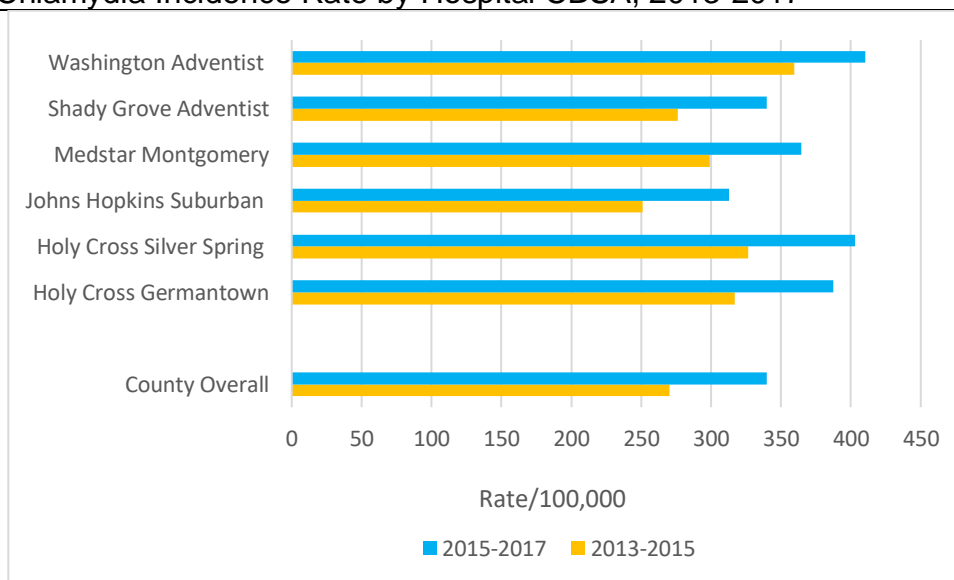


Table 46. Chlamydia Incidence Rate by Hospital CBSA, 2013-2017

	2013-2015	2015-2017
	Rate	Rate
County Overall	270.3	339.7
Holy Cross Germantown	316.8	387.6
Holy Cross Silver Spring	326.3	403.2
Johns Hopkins Suburban	251.2	312.8
Medstar Montgomery	299.1	364.4
Shady Grove Adventist	276.1	340.0
Washington Adventist	359.7	410.3

*Rate is per 100,000 population

Gonorrhea

- There is an increasing trend of Gonorrhea incidence rates over time for County overall and all hospital CBSAs (Table 47)
- Washington Adventist Hospital CBSA has the highest Gonorrhea incidence rates, followed by Holy Cross Silver Spring Hospital CBSA, while Johns Hopkins Suburban Hospital CBSA has the lowest rates (Table 47).

Fig. 15. Gonorrhea Incidence Rate by Hospital CBSA, 2013-2017

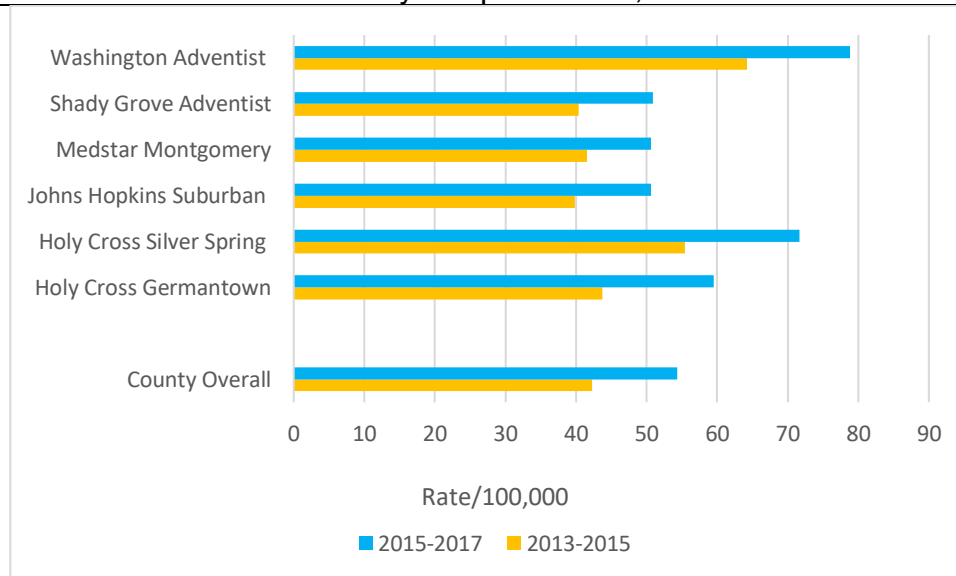


Table 47. Gonorrhea Incidence Rate by Hospital CBSA, 2013-2017

	2013-2015	2015-2017
	Rate	Rate
County Overall	42.3	54.3
Holy Cross Germantown	43.7	59.5
Holy Cross Silver Spring	55.4	71.6
Johns Hopkins Suburban	39.8	50.6
Medstar Montgomery	41.5	50.7
Shady Grove Adventist	40.4	50.9
Washington Adventist	64.2	78.8

*Rate is per 100,000 population

Syphilis

- There is an increasing trend of Syphilis incidence rates over time for County overall and all hospital CBSAs (Table 48)
- Washington Adventist Hospital CBSA has the highest Syphilis incidence rates, followed by Holy Cross Silver Spring Hospital CBSA, while Medstar Montgomery Hospital CBSA has the lowest rates (Table 48).

Fig. 16. Syphilis Incidence Rate by Hospital CBSA, 2013-2017

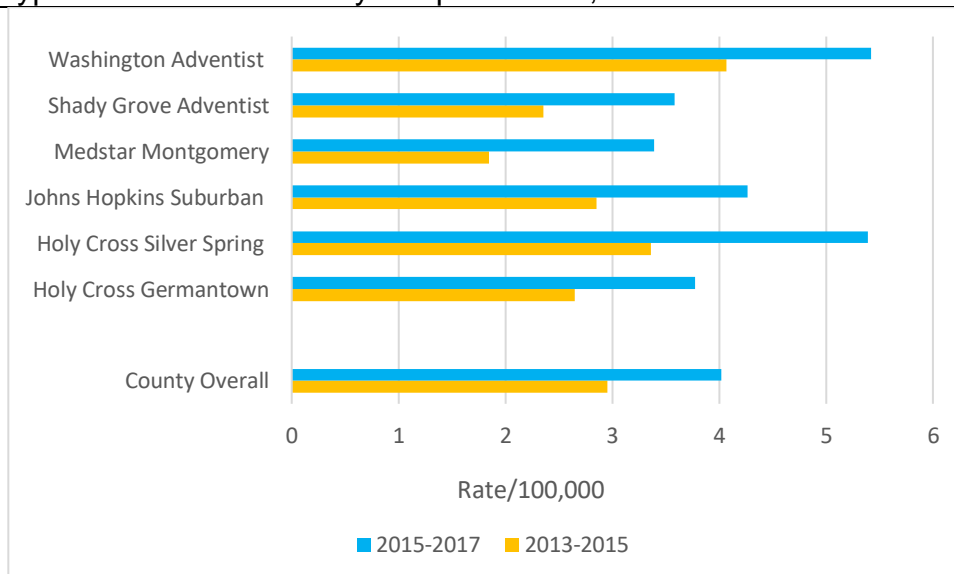


Table 48. Syphilis Incidence Rate by Hospital CBSA, 2013-2017

	2013-2015	2015-2017
	Rate	Rate
County Overall	3.0	4.0
Holy Cross Germantown	2.6	3.8
Holy Cross Silver Spring	3.4	5.4
Johns Hopkins Suburban	2.9	4.3
Medstar Montgomery	1.8	3.4
Shady Grove Adventist	2.4	3.6
Washington Adventist	4.1	5.4

*Rate is per 100,000 population

INJURY

Firearm

Firearm Hospitalization

- There is an increasing trend of firearm related hospitalization rates over time for County overall and all hospital CBSAs; however, the statistically significant increase is only found for Medstar Montgomery Hospital CBSA (Table 49).
- While Holy Cross Silver Spring CBSA has the highest firearm related hospitalization rate for 2011-2013, Medstar Montgomery Hospital CBSA has the highest rate for 2015-2017 (Table 49).

Fig. 17. Firearm Hospitalization by Hospital CBSA, 2011-2017

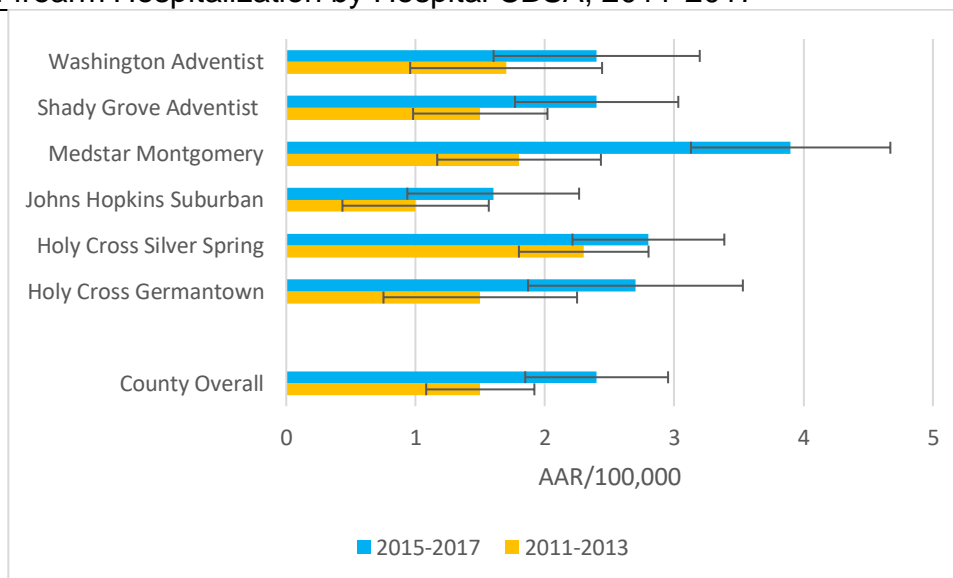


Table 49. Firearm Hospitalization by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	1.5	1.1-1.9	2.4	1.8-3.0
Holy Cross Germantown	1.5	0.8-2.2	2.7	1.9-3.5
Holy Cross Silver Spring	2.3	1.8-2.8	2.8	2.2-3.4
Johns Hopkins Suburban	1.0	0.4-1.6	1.6	0.9-2.3
Medstar Montgomery	1.8	1.2-2.4	3.9	3.1-4.7
Shady Grove Adventist	1.5	1.0-2.0	2.4	1.8-3.0
Washington Adventist	1.7	1.0-2.4	2.4	1.6-3.2

* Rate is per 100,000 population

Fall

Fall Mortality

- Though there is a decreasing trend of fall mortality for County overall and all hospital CBSAs, such decrease does not reach statistically significant level (Table 50).
- While Shady Grove Hospital CBSA has the highest fall mortality rate for 2011-2013, MedStar Montgomery Hospital CBSA has the highest rate for 2015-2017. Washington Adventist Hospital CBSA has the lowest fall mortality rates over time (Table 50).

Fig. 18. Fall Mortality Rates by Hospital CBSA, 2011-2017

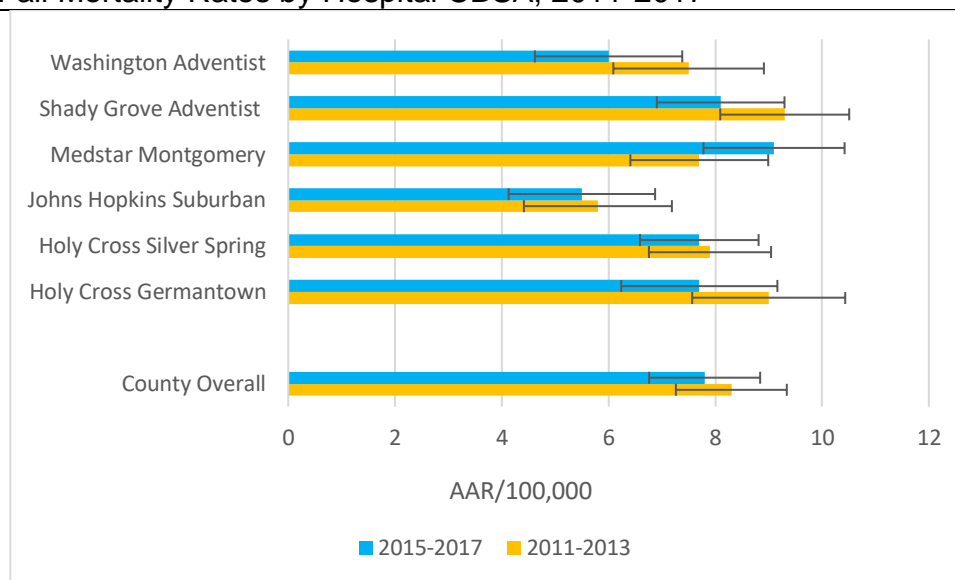


Table 50. Fall Mortality Rates by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	8.3	7.3-9.3	7.8	6.8-8.8
Holy Cross Germantown	9.0	7.6-10.4	7.7	6.2-9.2
Holy Cross Silver Spring	7.9	6.8-9.0	7.7	6.6-8.8
Johns Hopkins Suburban	5.8	4.4-7.2	5.5	4.1-6.9
Medstar Montgomery	7.7	6.4-9.0	9.1	7.8-10.4
Shady Grove Adventist	9.3	8.1-10.5	8.1	6.9-9.3
Washington Adventist	7.5	6.1-8.9	6.0	4.6-7.4

* Rate is per 100,000 population

- Males have significantly higher fall mortality rates than females in Washington Adventist Hospital CBSA, and marginally higher in Holy Cross Silver Spring Hospital CBSA (Table 51).
- While there is a decrease on fall mortality rates for both males and females over time in general, the differences in most of hospital CBSAs do not reach significant level (Table 51).

Table 51. Fall Mortality Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	9.6	8.0-11.1	7.3	5.8-8.7	8.6	7.1-10.1	9.1	7.6-10.6
Holy Cross Germantown	8.7	6.7-10.7	9.1	7.0-11.2	7.2	5.2-9.2	7.8	5.7-9.9
Holy Cross Silver Spring	9.8	8.1-11.5	6.6	5.1-8.1	8.8	7.2-10.4	6.2	4.7-7.7
Johns Hopkins Suburban	6.6	4.6-8.6	5.3	3.4-7.2	5.9	3.9-7.9	5.2	3.3-7.1
Medstar Montgomery	8.8	7.0-10.6	7.6	5.8-9.4	9.4	7.6-11.2	8.7	6.8-10.6
Shady Grove Adventist	9.5	7.7-11.3	8.1	6.5-9.7	8.1	6.4-9.8	8.1	6.4-9.8
Washington Adventist	10.4	8.3-12.5	4.7	2.8-6.6	7.7	5.6-9.8	4.3	2.4-6.2

* Rate is per 100,000 population

- NH-Whites have the highest fall mortality rates among all population subgroups, Asians/PIs have the lowest rates (Table 52.1-52.2).
- There is a decreasing trend of fall mortality rates for NH-Whites for all hospital CBSAs over time, except for Medstar Montgomery Hospital CBSA (Table 52.1-52.2).
- There is an increasing trend of fall mortality rates for NH-Blacks for County overall and across hospital CBSAs over time (Table 52.1-52.2).
- For Hispanics, fall mortality rates increase for CBSAs of Holy Cross Germantown Hospital, Medstar Montgomery Hospital, and Shady Grove Adventist Hospital over time; while the rates decrease for CBSAs of Holy Cross Silver Spring Hospital and Washington Adventist Hospital (Table 52.1-52.2).

Table 52.1. Fall Mortality Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	10.9	8.9-12.9	3.2	1.9-4.6	4.2	2.3-6.1	6.6	5.0-8.1
Holy Cross Germantown	12.5	9.6-15.4	2.7	1.2-4.2	4.7	2.8-6.6	5.6	4.0-7.2
Holy Cross Silver Spring	10.7	8.5-12.9	4.2	2.8-5.6	6.2	4.2-8.2	8.8	7.2-10.4
Johns Hopkins Suburban	7.2	4.7-9.7	2.5	1.0-4.0	2.9	0.6-5.2	6.1	3.9-8.3
Medstar Montgomery	10.3	7.6-13.0	3.1	1.7-4.5	8.5	6.3-10.7	1.8	0.3-3.3
Shady Grove Adventist	11.9	9.6-14.2	2.2	0.8-3.6	3.5	1.8-5.2	5.3	3.7-6.9
Washington Adventist	11.3	8.0-14.6	1.6	0.3-2.9	13.7	10.4-17.0	8.3	6.4-10.2

* Rate is per 100,000 population

Table 52.2. Fall Mortality Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	9.6	7.6-11.6	6.9	4.9-8.9	4.8	2.7-6.9	6.4	4.8-8.0
Holy Cross Germantown	8.8	6.0-11.6	7.6	4.5-10.7	4.7	2.2-7.2	9.0	6.3-11.7
Holy Cross Silver Spring	9.2	7.0-11.4	6.5	4.6-8.4	1.8	0-3.8	5.2	3.6-6.8
Johns Hopkins Suburban	6.3	3.8-8.8	7.7	5.1-10.3	3.2	0.4-6.0	4.7	2.6-6.8
Medstar Montgomery	11.5	8.8-14.2	6.1	4.1-8.1	6.1	3.4-8.8	7.8	5.6-10.0
Shady Grove Adventist	9.4	7.1-11.7	9.4	7.3-11.5	5.2	2.9-7.5	9.1	7.2-11.0
Washington Adventist	7.9	4.7-11.1	5.0	2.9-7.1	1.7	0-4.8	3.3	1.4-5.2

* Rate is per 100,000 population

Fall Hospitalization

- There is a decreasing trend of fall hospitalization rates for County overall and across all hospital CBSAs (Table 53).
- While Johns Hopkins Suburban Hospital CBSA has the lowest fall hospitalization rates over time, Holy Cross Germantown Hospital has the highest rate 2011-2013 and Washington Adventist Hospital CBSA has the highest rate 2015-2017 (Table 53).

Fig. 19. Fall Hospitalization Rates by Hospital CBSA, 2011-2017

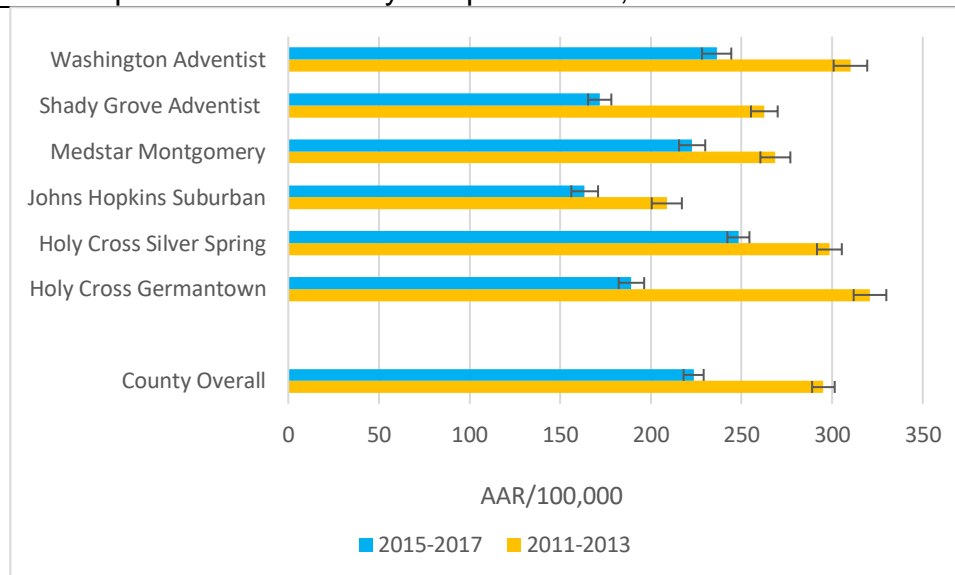


Table 53. Fall Hospitalization Rates by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	295.2	289.0-301.4	223.6	218.1-229.2
Holy Cross Germantown	320.9	311.9-329.9	189.3	182.3-196.3
Holy Cross Silver Spring	298.5	291.6-305.4	248.3	242.2-254.4
Johns Hopkins Suburban	208.8	200.5-217.1	163.5	156.1-170.9
Medstar Montgomery	268.7	260.4-277.0	222.8	215.6-230.0
Shady Grove Adventist	262.6	255.2-270.0	171.8	165.4-178.2
Washington Adventist	310.1	300.8-319.4	236.3	228.2-244.4

* Rate is per 100,000 population

- There is a decreasing trend of fall hospitalization rates for both males and females over time for County overall and across all hospital CBSAs (Table 54).
- Females have significantly higher fall hospitalization rates than males over time (Table 54).
- Johns Hopkins Suburban Hospital CBSA has the lowest fall hospitalization rates for both males and females, Holy Cross Silver Spring Hospital CBSA has the highest rates for both males and females (Table 54).

Table 54. Fall Hospitalization Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	250.4	242.5-258.3	326	316.5-335.5	193.3	186.2-200.4	245.3	236.9-253.7
Holy Cross Germantown	281.6	269.9-293.3	346.3	332.7-359.9	162.6	153.5-171.7	208.2	197.6-218.8
Holy Cross Silver Spring	280.8	272.1-289.5	345.5	335.0-356.0	234.9	227.1-242.7	282.3	273.1-291.5
Johns Hopkins Suburban	179.4	168.9-189.9	228.7	216.0-241.4	140.7	131.3-150.1	179.8	168.5-191.1
Medstar Montgomery	273.4	262.9-283.9	350.6	338.0-363.2	220.5	211.4-229.6	281.0	269.9-292.1
Shady Grove Adventist	277.7	268.4-287.0	346.8	335.5-358.1	175.8	167.6-184.0	218.0	208.2-227.8
Washington Adventist	267.0	255.3-278.7	338.6	324.4-352.8	211.5	201.2-221.8	250.5	238.2-262.8

* Rate is per 100,000 population

- NH-Whites have the highest fall hospitalization rates among all population subgroups, Asians/PIs have the lowest rates (Table 55.1-55.2).
- Variations of trends on fall hospitalization rates exist across hospital CBSAs (Table 55.1-55.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest fall hospitalization rates across population subgroups on race/ethnicity, Holy Cross Silver Spring Hospital CBSA has the highest rates across population subgroups (Table 55.1-55.2).

Table 55.1. Fall Hospitalization Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	276.1	266.3-286.0	156.5	146.8-166.1	102.7	93.4-112.1	140	132.0-147.9
Holy Cross Germantown	374.9	359.3-390.5	209.3	192.5-226.1	130.7	117.5-143.9	107.7	97.5-117.9
Holy Cross Silver Spring	250.6	239.6-261.6	141.7	132.0-151.4	85.2	75.0-95.4	170.8	162.7-178.9
Johns Hopkins Suburban	186.2	173.6-198.8	122.3	110.0-134.6	66.8	55.4-78.2	87.1	77.2-97.0
Medstar Montgomery	295.1	280.7-309.5	144.0	132.9-155.1	100	88.4-111.6	132.4	123.2-141.6
Shady Grove Adventist	342.8	331.1-354.5	203.3	192.2-214.4	119.6	109.5-129.7	109.3	100.8-117.8
Washington Adventist	239.5	222.3-256.7	147.1	136.2-158.0	84.4	70.5-98.3	222.0	211.8-232.2

* Rate is per 100,000 population

Table 55.2. Fall Hospitalization Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	272.4	262.1-282.7	179.1	168.9-189.2	94	84.9-103.1	164	155.9-172.1
Holy Cross Germantown	242.0	228.4-255.6	133.5	120.2-146.8	76.1	66.0-86.2	118.3	108.0-128.6
Holy Cross Silver Spring	342.0	330.2-353.8	186.8	176.5-197.1	139.8	129.6-150.0	176.4	168.2-184.6
Johns Hopkins Suburban	195.6	182.1-209.1	134.4	121.0-147.8	79.3	67.6-91.0	100.4	90.1-110.7
Medstar Montgomery	328.3	313.3-343.3	156.3	144.8-167.8	91.7	80.7-102.7	181.6	171.7-191.5
Shady Grove Adventist	245.8	233.7-257.9	153.5	142.1-164.9	82.9	73.2-92.6	130.2	121.3-139.1
Washington Adventist	320.3	301.5-339.1	171.3	159.3-183.3	125.9	111.2-140.6	176.3	166.0-186.6

* Rate is per 100,000 population

Fall ER Visit

- There is a decreasing trend of fall ER visit rates for County overall and across all hospital CBSAs (Table 56).
- Shady Grove Hospital CBSA has the lowest fall ER rates among all hospital CBSAs over time (Table 56).
- Washington Adventist Hospital CBSA has the highest fall ER visit rate for 2011-2013, Holy Cross Silver Spring Hospital CBSA has the highest rate 2015-2017 (Table 56).

Fig. 20. Fall ER Visit Rates by Hospital CBSA, 2011-2017

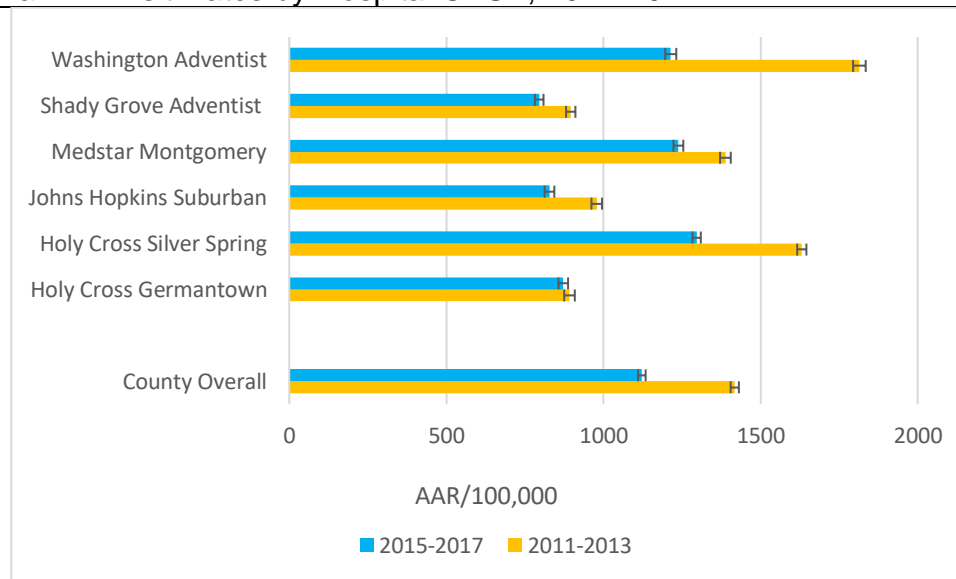


Table 56. Fall ER visit Rates by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	1417.8	1404.4-1431.2	1122.1	1110.1-1134.1
Holy Cross Germantown	891.8	874.6-909.0	872	856.7-887.3
Holy Cross Silver Spring	1631.2	1616.3-1646.1	1296.5	1283.2-1309.8
Johns Hopkins Suburban	978.5	961.4-995.6	828.1	812.7-843.5
Medstar Montgomery	1388.1	1370.8-1405.4	1238.4	1222.7-1254.1
Shady Grove Adventist	895.8	880.7-910.9	795.4	781.7-809.1
Washington Adventist	1814.5	1794.1-1834.9	1214.1	1196.5-1231.7

* Rate is per 100,000 population

- There is a decreasing trend of fall ER visit rates for both males and females over time for County overall and across all hospital CBSAs (Table 57).
- Females have higher fall ER visit rates than males over time (Table 57).
- Johns Hopkins Suburban Hospital CBSA has the lowest fall ER visit rates for both males and females, Washington Adventist Hospital CBSA has the highest rates for both males and females 2011-2013 and Medstar Montgomery Hospital CBSA has the highest rates 2015-2017 (Table 57).

Table 57. Fall ER Visit Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	1321.7	1303.2-1340.2	1476	1456.8-1495.2	1029.9	1013.5-1046.3	1185.7	1168.2-1203.2
Holy Cross Germantown	824.4	800.5-848.3	938.5	913.9-963.1	776.2	775.4-797.0	939.9	917.4-962.4
Holy Cross Silver Spring	1618.2	1597.6-1638.8	1812.2	1790.8-1833.6	1298.3	1280.2-1316.4	1426.6	1407.4-1445.8
Johns Hopkins Suburban	921.6	897.9-945.3	1010.2	985.6-1034.8	769.4	748.4-790.4	868.0	845.5-890.5
Medstar Montgomery	1640.7	1616.9-1664.5	1780.8	1755.9-1805.7	1434.3	1413.1-1455.5	1529.8	1506.9-1552.7
Shady Grove Adventist	1009.5	988.7-1030.3	1132.9	1111.2-1154.6	833.7	815.0-852.4	983.0	963.0-1003.0
Washington Adventist	1685.5	1657.4-1713.6	1903.8	1874.5-1933.1	1148.0	1123.8-1172.2	1257.0	1231.5-1282.5

* Rate is per 100,000 population

- Hispanics have the highest fall ER visit rates among all population subgroups 2011-2013, NH-Whites have the highest rates 2015-2017; Asians/Pis have the lowest rates (Table 58.1-58.2).
- Variations of trends on fall ER visit rates exist across hospital CBSAs (Table 58.1-58.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest fall ER visit rates across population subgroups on race/ethnicity, Holy Cross Silver Spring Hospital CBSA has the highest rates across population subgroups (Table 58.1-58.2).

Table 58.1. Fall ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	885	869.3-900.8	812.3	787.7-836.8	304.8	288.5-321.0	1091.3	1062.6-1119.9
Holy Cross Germantown	815.1	791.2-839.0	786.6	747.5-825.7	265.2	243.6-286.8	603.8	569.6-638.0
Holy Cross Silver Spring	928.7	911.4-946.0	788.7	764.1-813.3	338	320.2-355.8	1439.4	1409.9-1468.9
Johns Hopkins Suburban	551.1	532.2-570.0	496.3	466.8-525.8	197.2	170.2-224.2	634.8	599.7-669.9
Medstar Montgomery	1561.2	1535.6-1586.8	1360.6	1324.1-1397.1	458.8	438.4-479.2	1820.6	1781.9-1859.3
Shady Grove Adventist	857.3	839.1-875.5	828.3	800.7-855.9	296.5	279.4-313.6	723.2	693.3-753.1
Washington Adventist	893.9	867.4-920.4	1733.5	1700.5-1766.5	518.9	495.5-542.3	1747.4	1708.6-1786.2

* Rate is per 100,000 population

Table 58.2. Fall ER visit Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	1219.9	1200.5-1239.3	1148.1	1119.9-1176.3	246.7	232.3-261.1	1117.2	1090.4-1144.0
Holy Cross Germantown	963.2	938.1-988.3	863.7	825.6-901.8	324.9	306.1-343.7	870.8	836.5-905.1
Holy Cross Silver Spring	1508.9	1487.0-1530.8	1345.5	1316.9-1374.1	483.8	467.5-500.1	1333.1	1305.7-1360.5
Johns Hopkins Suburban	887.6	863.2-912.0	926.2	889.7-962.7	196.5	179.9-213.1	747.4	713.9-780.9
Medstar Montgomery	1670.3	1643.8-1696.8	1321.8	1288.2-1355.4	382.2	363.3-401.1	1304.6	1271.1-1338.1
Shady Grove Adventist	1003.7	981.5-1025.9	959.9	927.4-992.4	266.7	251.6-281.8	908.4	878.8-938.0
Washington Adventist	1424.1	1391.3-1456.9	1104.9	1072.0-1137.8	488.3	462.5-514.1	1206.2	1171.4-1241.0

* Rate is per 100,000 population

Motor Vehicle ER Visit

- There is an increasing trend of motor vehicle ER visit rates over time for County overall and all hospital CBSAs, except for Washington Adventist Hospital CBSA (Table 59).
- Johns Hopkins Hospital CBSA has the lowest motor vehicle ER visit rates among all the hospital CBSAs consistently, Washington Adventist Hospital CBSA has the highest rates (Table 59).

Fig. 21. Motor Vehicle ER Visit Rates by Hospital CBSA, 2011-2017

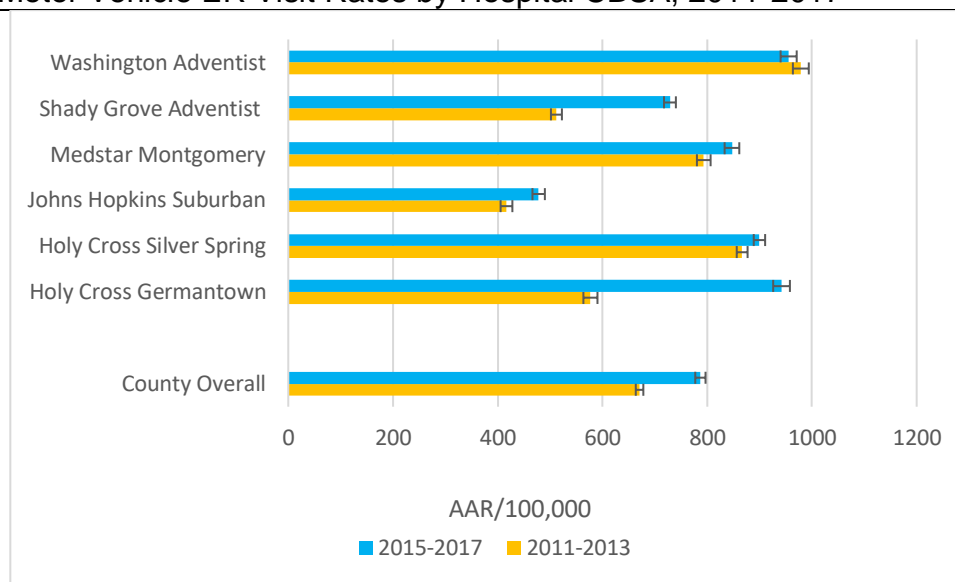


Table 59. Motor Vehicle ER Visit Rates by Hospital CBSA, 2011-2017

	2011-2013		2015-2017	
	Rate	95% CI	Rate	95% CI
County Overall	670.8	663.5-678.0	787.0	777.2-796.8
Holy Cross Germantown	577.0	563.6-590.4	942.0	926.0-957.9
Holy Cross Silver Spring	866.7	857.1-876.4	899.7	889.6-909.8
Johns Hopkins Suburban	416.7	405.4-428.0	478.1	466.3-490.0
Medstar Montgomery	793.4	781.2-805.6	847.3	834.1-860.4
Shady Grove Adventist	512.1	502.3-521.8	728.8	718.2-739.4
Washington Adventist	978.8	963.6-993.9	955.5	940.1-970.9

* Rate is per 100,000 population

- There is an increasing trend of motor vehicle ER visit rates for both males and females over time, females have high rates than males (Table 60).
- Washington Adventist Hospital CBSA has the highest motor vehicle ER visit rates, while Johns Hopkins Hospital CBSA has the lowest rates (Table 60).

Table 60. Motor Vehicle ER Visit Rates by Gender by Hospital CBSA, 2011-2017

	2011-2013				2015-2017			
	Male		Female		Male		Female	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	615.4	602.6-628.2	723	709.7-736.2	732.5	718.9-746.1	838.7	824.7-852.7
Holy Cross Germantown	531.6	513.0-550.2	623.3	604.0-642.6	880.0	857.9-902.1	1005.8	982.8-1028.8
Holy Cross Silver Spring	830.9	816.5-845.3	973.8	958.9-988.7	880.4	865.2-895.6	1003.6	988.1-1019.1
Johns Hopkins Suburban	384.1	368.4-399.8	447.8	431.7-463.9	445.5	429.0-462.0	510.0	493.1-526.9
Medstar Montgomery	879.3	861.3-897.3	1018.5	999.7-1037.3	905.6	886.3-924.9	1065.1	1044.9-1085.3
Shady Grove Adventist	538.2	523.7-552.7	631.3	616.2-646.4	762.9	747.2-778.6	886.9	870.6-903.2
Washington Adventist	900.1	879.1-921.1	1055.8	1034.0-1077.6	917.4	895.9-938.9	994.8	972.8-1016.8

* Rate is per 100,000 population

- There is an increasing trend of motor vehicle ER visit rates across population subgroups on race/ethnicity over time, NH-Blacks have the most increase in magnitude (Table 61.1-61.2).
- NH-Blacks have the highest motor vehicle ER visit rates among all the groups, followed by Hispanics and NH-Whites (Table 61.1-61.2).
- Johns Hopkins Suburban Hospital CBSA has the lowest motor vehicle ER visit rates across all population subgroups by race/ethnicity over time (Table 61.1-61.2).
- While Medstar Montgomery Hospital CBSA has the highest motor vehicle ER visit rates for NH-Whites over time, Holy Cross Germantown Hospital CBSA has the highest rate for NH-Blacks 2015-2017 (Table 61.1-61.2).
- While Washington Adventist Hospital CBSA has the highest motor vehicle ER visit rates for Hispanics and Asians/PIs 2011-2013, Holy Cross Germantown Hospital CBSA has the highest rates for Hispanics and Asian/PI 2015-2017 (Table 61.1-61.2).

Table 61.1. Motor Vehicle ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2011-2013

	2011-2013							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	250.7	242.8-258.6	707.7	684.2-731.2	172.7	159.8-185.6	733.1	709.0-757.2
Holy Cross Germantown	299.1	285.1-313.1	688.2	650.4-726.0	169.8	152.0-187.6	466.6	435.2-498.0
Holy Cross Silver Spring	303.5	294.9-312.1	658.4	634.7-682.1	185.5	171.3-199.7	927.0	902.2-951.8
Johns Hopkins Suburban	157.7	148.9-166.5	372.0	344.5-399.5	98.3	83.7-112.9	390.7	361.4-420.0
Medstar Montgomery	481.6	468.7-494.5	814.4	786.1-842.7	276.8	260.1-293.5	720.0	690.2-749.8
Shady Grove Adventist	286.7	277.5-295.9	666.5	640.0-693.0	176.4	162.7-190.1	511.3	485.5-537.1
Washington Adventist	271	257.1-284.9	700.2	673.1-727.3	249.6	229.9-269.3	1072.1	1039.9-1104.3

* Rate is per 100,000 population

Table 61.2. Motor Vehicle ER Visit Rates by Race/Ethnicity by Hospital CBSA, 2015-2017

	2015-2017							
	NH-White		NH-Black		Asian/PI		Hispanic	
	Rate	95% CI	Rate	95% CI	Rate	95% CI	Rate	95% CI
County Overall	447.3	436.4-458.1	1419.8	1387.8-1451.8	252.2	237.3-267.2	1081.4	1054.2-1108.6
Holy Cross Germantown	615.1	595.9-634.3	1551.0	1498.2-1603.8	388.5	365.7-411.3	1100.6	1059.2-1142.0
Holy Cross Silver Spring	513.0	501.1-524.9	1380.0	1347.5-1412.5	309.1	292.2-326.0	1141.7	1113.8-1169.6
Johns Hopkins Suburban	296.3	283.7-308.9	819.6	780.1-859.1	147.9	130.7-165.1	606.5	573.4-639.6
Medstar Montgomery	636.1	619.6-652.6	1452.9	1413.7-1492.1	288.4	268.5-308.3	1148.1	1113.0-1183.2
Shady Grove Adventist	540.7	528.0-553.4	1424.2	1386.4-1462.0	307.1	291.0-323.2	1043.6	1013.2-1074.0
Washington Adventist	484.2	465.8-502.6	1314.2	1277.2-1351.2	332.5	307.6-357.4	1088.1	1053.0-1123.2

* Rate is per 100,000 population

CONCLUSION

With the increasing trend of minority population subgroups, Montgomery County faces another layer of complexity and challenge on issues related to access to health care, health inequities, and unhealthy behaviors. Though the County has overall lower disease morbidity and mortality and better health status than the state and the US, efforts need to be continued and made to address issues on disparities among population subgroups on race/ethnicity and geographic areas. This report highlights disparities on disease morbidity and mortality exist among communities and areas served by specific hospitals within the County. Such information can be used to evaluate the effectiveness and progress of intervention and outreach programs from hospitals, as well as to target population subgroups and areas for planning and resource allocation.

Overall, findings in this report shows Johns Hopkins Suburban Hospital CBSA has the best health outcomes mostly, while Washington Adventist Hospital CBSA and Holy Cross Germantown Hospital CBSA have the worse health outcomes. There is a trend that health outcomes in communities of Holy Cross Germantown Hospital CBSA is deteriorating over time. This is likely associated with changing population and social determinants in the communities. Though certain population subgroups are performing better than others, the geographic location of these specific population sub-groups also implicates health outcomes. It is therefore important to take both the demographics and social determinants of population in the communities into consideration when designing intervention efforts. The available neighborhood resources and support in the communities play an important role in achieving better health outcomes. Continued public health surveillance is critical in monitoring and evaluating the progress and ongoing efforts needed to improve population health.

APPENDIX A: TECHNICAL NOTES

1. Data Sources

The Office of Planning and Epidemiology uses various data sources to compile information on disease burden and population health, including vital records, inpatient and outpatient hospitalization, disease registry, surveys, area health resources file, and Census. Data on births and deaths are provided by Vital Statistics Administration of Maryland Department of Health. Data on inpatient and outpatient hospitalization are provided by Health Services Cost Review Commission (HSCRC). Data on population estimates are derived from the American Community Survey (ACS) of U.S. Census Bureau.

In addition, Office of Planning and Epidemiology uses other data sources such as program data collected in electronic medical records and electronic integrated case management system to conduct surveillance and program evaluation. These datasets are used to produce statistical information for health care professionals, researchers, and policy makers as part of surveillance activities.

2. Data Quality and Confidentiality

Data quality is assessed on a routine basis, in terms of completeness, timeliness and accuracy, and is documented to help interpret results from analyzing these population datasets. All data collected and housed by the Office of Planning and Epidemiology complies with the state and federal privacy and confidentiality regulations. Data or data analysis may be requested through the Office of Planning and Epidemiology.

3. Disparities on Race and Ethnicity

The Office of Planning and Epidemiology follows the recommendation of the National Center for Health Statistics of classifying health conditions according to the self-reported race/ethnicity of the individual. Information on race/ethnicity recorded in each data source is used to illustrate disease burdens for population subgroups. There are variations of data quality on race/ethnicity recorded in each population dataset, in terms of completeness and accuracy, thus interpretations of results are to take this into consideration. Though this information can be used to address important topic such as health equity, race/ethnicity is a self-reported item and is subject to the usual limitations of this type of information.

4. Rate

The rates provided in this report are estimations of the proportion of population with specific health conditions. This rate is usually expressed as per 100,000 population (except for birth, where is expressed as per 1,000) and is calculated by the formula:

$$\text{Rate} = \frac{\text{Number of Persons with Specific Conditions}}{\text{Total Population at Risk}} * 100,000$$

5. Graphs

Graphs have varying scales depending on the range of the data displayed. Therefore, cautions should be exercised when comparing such graphs.

6. Standard Errors

The standard errors (S.E.) of the rates were calculated using the following formula:

$$\text{S.E.} = \sqrt{\frac{w_j^2 n_j}{p_j^2}}$$

where,

- w_j = fraction of the standard population in age category
- n_j = number of cases in that age category
- p = person-years denominator

7. Confidence Intervals (CI)

The confidence interval is a method of assessing the magnitude and stability of a rate or ratio. The 95% CI represents a range of values that has a 95% probability of including the true rate or ratio. Observed rates are subject to statistical variation. Thus, even if the underlying risk of specific health condition is identical in two subpopulations, the observed rates for the subpopulations may differ because of random variation. The confidence interval describes the precision of the observed rate as an estimate of the underlying risk of having a specific health condition, with a wider interval indicating less certainty about this estimate. The width of the interval reflects the size of the subpopulation and the number of cases with specific health conditions. Smaller subpopulations with fewer health conditions lead to wider confidence intervals. The 95% confidence intervals used in the report are based on the Poisson distribution.

The standard error can be used to calculate the confidence interval. If the interval produced for one rate does not overlap the interval for another, the probability that the rates are statistically different is 95% or higher.

(This test can be inaccurate for rates based on fewer than 10 events.) The formula used is:

$$R \pm z (SE)$$

where,

- R=age-adjusted rate of one population
- z = 1.96 for 95% confidence limits
- SE= standard error as calculated above



Public Health Services

