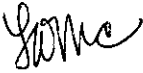


HHS COMMITTEE #1
September 24, 2018

MEMORANDUM

September 19, 2018

TO: Health and Human Services Committee

FROM: Linda McMillan, Senior Legislative Analyst 

SUBJECT: **Health of the County follow-up with Dr. Travis Gayles, County Health Officer**

PURPOSE: Continuation of discussion from Council's July 24, 2018 session.

On July 24th, the Council was briefed by Dr. Gayles on the work that is being done to look at health data for the County. This effort will both allow the County to better target public health resources and understand disparities on health conditions and health care delivery.

A copy of the slides from the July 24th session is attached at © 6-63. A color copy of the slides can be accessed at the following link:

https://cmsinternet.mcgov.org/COUNCIL/Resources/Files/agenda/col/2018/20180724/20180724_6-Presentation.pdf

The Executive summary from the full report, "Health in Montgomery County 2008-2016, A Surveillance Report on Population Health," is attached at © 1-5. The full report can be accessed at:

<https://www.montgomerycountymd.gov/HHS/Resources/Files/Reports/PopHealthReportFINAL.pdf>

At the July 24 session, the Council expressed its appreciation for the data collection and analysis that has been undertaken and expressed its particular interest on health disparities and how this aligns with efforts on equity policy. This included a beginning discussion of what "Health in All Policies" can mean and be successfully implemented in Montgomery County. There were also comments on how the data can be used to bring people together who may now be working separately on common goals to more effectively address health conditions.

Executive Summary

Overall, health outcomes in Montgomery County have performed better than state and national averages. Nevertheless, a close examination of the overall averages reveals several health conditions with increasing trends, and disparities by race/ethnicity, age, sex, and geographic area warrant special attentions. It is critical to highlight these areas, to target efforts and resources to meet the evolving needs of a changing population in the County. The major findings of health topics examined in this report are summarized below.

Demographics, Social Determinants, and Health Care Access

- (1) The County's population is becoming more diverse over time; the NH-Black and Hispanic populations have increased while the NH-White population is decreasing.
- (2) In 2016 an increasing percentage of families living in poverty in the County; however, the County's overall level (4.7%) is lower than Maryland's (6.8%) and much lower than that of the U.S. (11.0%); the Hispanic and NH-Black groups had the highest levels.
- (3) The overall percentage of individuals without health insurance in the County has decreased over time, which is similar to Maryland and the U.S.

Vital Statistics

- (1) Births to adolescent mothers in the County are decreasing over time, the County's rates are consistently lower than those in Maryland and the U.S; Hispanics had the highest rates.
- (2) The leading causes of death in the County were cancer (24%), heart disease (22%), cerebrovascular disease (5%), accidents (4%), and chronic lower respiratory disease (3%).
- (3) The County had decreasing rates of overall mortality, the death rates were consistently lower than that in Maryland and the U.S.

Maternal and Infant Health

- (1) The County had an overall decreasing trend in the percentage of births with late or no prenatal care; the County percentage is consistently lower than that in Maryland.
- (2) Low birth weight in the County has been consistently lower than that in Maryland and the U.S (7.2%, 8.6%, and 8.2% of births, respectively in 2016); NH-Black had the highest percentage.
- (3) The infant mortality rate in the County is consistently lower than that in Maryland and the U.S (5.3, 6.7, and 5.9/1,000 births respectively in 2015); NH-Black had the highest rates.

Chronic Disease

- (1) Though heart disease mortality had decreased in the County, heart disease related ER visits rates increased; however, the County had lower rates of mortality and ER visit than in Maryland. NH-Blacks had the highest mortality and ER visit rates.
- (2) Overall cancer incidence and mortality rates are decreasing in the County. County rates are lower than those in Maryland and the U.S.
- (3) While diabetes mortality showed a decreasing trend in the County, diabetes related ER visits rates increased. The County had lower mortality and ER visit rates than Maryland. NH-Blacks had the highest mortality and ER visit rates.

Infectious Disease

- (1) Tuberculosis rates in the County were consistently higher than in Maryland and the U.S. (7.1, 3.7, and 2.9/100,000 respectively in 2016); Asian/PI had the highest rates.
- (2) Though the rates of sexually transmitted infections of chlamydia, gonorrhea, and syphilis were consistently lower than in Maryland and the U.S., the rates in the County increased over time; NH-Blacks and person ages 20-24 (25-44 for syphilis) had the highest rates.
- (3) HIV rates in the County decreased over time and were consistently lower than in Maryland but higher than the U.S. (14.5, 18.6, and 10.8/100,000 respectively in 2016). NH-Blacks had the highest rates.

Behavioral Health

- (1) Though consistently lower than in Maryland, mental health related ER visit rates in the County increased over time; NH-Blacks and persons ages 18-34 had the highest rates.
- (2) Though substance abuse related ER visit rates were consistently lower than in Maryland, the substance abuse related ER visit rates and drug induced mortality rates in the County increased over time. NH-Whites and persons ages 18-34 had the highest rates.
- (3) Though suicide related hospitalization and ER visit rates were consistently lower than in Maryland, the ER visit rates in the County increased. Persons ages 18-34 and 5-17 had the highest suicide related hospitalization and ER visit rates respectively.

Injury

- (1) Overall injury hospitalization and ER visit rates decreased in the County. County rates were consistently lower than in Maryland.
- (2) Motor vehicle related mortality and hospitalization rates decreased in the County, County rates were consistently lower than in Maryland; NH-Blacks and persons ages 18-34 had the highest ER visit rates.
- (3) Firearm related mortality and ER visit rates decreased in the County, County rates were consistently lower than in Maryland; those ages 18-34 had the highest hospitalization and ER visit rates.

Environmental Health

- (1) The percentage of children with high blood lead level (5-9 ug/dL) in the County was much lower than in Maryland (0.8% and 1.5% respectively in 2016).
- (2) Though there was a decreasing trend of PM2.5 in the County, the particulate matter level in the County was similar to that in Maryland but consistently higher than the U.S.
- (3) Drinking water quality in the County meets all required EPA standards.

Introduction

Montgomery County is the most populous county in Maryland with a population estimate of more than 1 million in 2014 from the U.S. Census. It would be the 10th most populous city in the U.S. if it were a city. Montgomery County is one of the most affluent counties in the country [1] and has the highest percentage (29.2%) of residents over 25 years of age who hold post-graduate degrees. In 2011, it was ranked by Forces as the 10th richest in the country, with a median household income of \$92,213 [2]. Montgomery County has a very diverse population and there is an increasing trend towards becoming more diverse over time. In 2014, there were 47.0% Non-Hispanic White, 18.6% Non-Hispanic Black, 15.0% Asian/Pacific Islander, and 18.3% Hispanic or Latino based on the estimate from 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 Foundation [3]. However, ongoing efforts are needed to make improvements in the areas of access to health care, health inequities, and unhealthy behaviors. Healthy Montgomery is the County's community health improvement process that brings together County government agencies, elected officials, hospital systems, minority health initiatives/program, advocacy groups, academic institutions, community-based service providers, the health insurance community, and other stakeholders to achieve optimal health and well-being for County residents [4]. Six priority areas, including behavioral health, cancer, cardiovascular health, diabetes, maternal and infant health, and obesity were identified by Healthy Montgomery for priority-setting purposes. This report includes all the priority areas identified by Healthy Montgomery, in addition, it comprehensively covers all the major public health areas not addressed in Healthy Montgomery.

This report is organized into three major sections:

- (1) the summary of all mortality, hospitalization, and ER visits by year, sex, race/ethnicity, and age;
- (2) health area-specific statistics, and
- (3) the appendices. Here are the features of this report:
 - A section on prevention is included to illustrate the importance of prevention at different levels to reduce disease burden.
 - Comparison of disease rates by sex, race/ethnicity, age (where appropriate), and geographic areas are included to illustrate the disparities of risks associated with disease burden.

- Trends in disease burden over time are examined by health topic, to illustrate the effectiveness of prevention and intervention programs.
- Primary Care Service Areas (PCSA) are used to illustrate geographic variations in hospitalizations and ER visits due to selected health conditions. PCSAs are geographic areas that are self-sufficient markets of primary care, designed in a manner such that the majority of patients living in these areas use primary care services from within the area. This ensures that any geographic targeting of policies and resources reach the patients for whom they are meant.
- Comparisons of disease rates between sub-county areas (i.e. Census Tract, Zip Codes, PCSA, etc.) and the County overall through Geographic Information System (GIS) mapping are available to identify potential risks of diseases associated with different life styles and possible environmental/occupational exposures.
- Comparison of disease rates between the County, Maryland and U.S. are made where appropriate.
- Information from the 2015 Maryland Behavioral Risk Factor Surveillance System (BRFSS) and 2013-14 Youth Risk Behavior Survey (YRBS) is included to provide information on both risky and health-prompting behaviors, as well as prevalence estimates of certain health conditions.
- Information from the Healthy People 2020 is included to provide a benchmark for the progress made and areas for ongoing efforts.
- A section on "Frequently Asked Questions" is included to provide answers to widely received inquiries from the public.
- Technical notes are included in the appendices to provide information on methodological issues.
- Definitions and ICD-9/10 CM codes for mortality and hospitalization associated with each health condition are provided.
- Sources of additional information are included in the appendices.

**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 at more than 20 locations, with more locations throughout 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 entails 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 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.

Status of Health in Montgomery County, FY2018

Travis A. Gayles, MD, PhD

Health Officer

Chief, Public Health Services

Montgomery County Department of Health and Human Services

Overview

Global, local challenges

Performance of the program

Areas of innovation

Academic partnerships

Grant opportunities

Data utilization

County health report

Outlook for 2018-2019

Thank you...

Director's Office— Uma Ahluwalia

Communicable Disease and
Epidemiology— Cindy Edwards

School Health Services— Joan Glick

Health Prevention and Promotion—
Helen Lettlow

Licensing and Regulatory Services—
Clark Biel

Planning and Epidemiology—
Chunfu Liu

Community Based
Healthcenters/Montgomery Cares—
Rebecca Smith, Ellen Brown, Tara
Clemmons

Healthy Montgomery— Karen
Thompkins, Rita Deng

Administrative and Budgeting—
Charlene Hicks, Stella Sharif, Ellen
Segal

The landscape...

Funding

Federal, state, local levels

Access to health insurance, health services

Eligible, but affordable?

Access to specialty care

Tuberculosis program funding

Elections

Our job

Focus on:

- ROI
- quality improvement
- increased collaboration

Core functions...by the numbers

Outbreak Prevention

- 103 reportable diseases
- 40 outbreak investigations

Chronic Disease Prevention and Management

- 291 Pap Smears (2);
- 203 colonoscopies (2);
- 870 mammograms (11)

School Health Services

- >65000 student visits during FY18

Food/Environmental/Facility Safety

- ~40 STR registrations
- >1500 pool inspections
- 5671 food safety inspections

Health care delivery

- >16,000 immunizations provided to kids
- >10,000 dental visits
- Montgomery Cares >65,000 visits, over 24,500 patients enrolled
- MPP >1500 pregnant women served

Vital Records

- >16,000 birth certificates
- >12,000 death certificates

Accomplishments

Accreditation application submitted to PHAB, site visit pending

Initiation of Short Term Rental Licensing

Personnel

Dental Director

Food Security Manager

Successful grant opportunities

Babies Born Healthy

Healthy Montgomery/RWJF All In Project

Academic Partnerships

University of Maryland School of Public Health

George Washington University School of Public Health

University of Maryland Campuses at Shady Grove

Babies Born Healthy

State funded programming to expand outreach to high risk mothers to curb maternal and infant morbidity, mortality

- Identify 'high risk, high need zip codes' for enhanced outreach
- Identify best practices, scale to entire county
- Coordinate county-wide maternal and infant mortality efforts
- Reframe need based on morbidity

Healthy Montgomery

PROGRESS IN BEHAVIORAL HEALTH 2017-2018



188

behavioral health service providers and programs reviewed and updated on

InfoMONTGOMERY.

We supported the first-ever MCPS-MCCPTA Mental Health and Wellness Forum that was attended by 200+ parents and students



SAVE A LIFE
MONTGOMERY

How do you intervene in the moment to help someone who is in crisis?

INTERVENTION

When you intervene in the moment, you are helping someone who is in crisis.

FOR MORE INFORMATION, VISIT HEALTHYMONTGOMERY.ORG

From American Health Association's

Mental Health Toolkit 1

Staying Well & Living Fully

Staying Well & Living Fully

Staying Well & Living Fully

Staying Well & Living Fully

Staying Well & Living Fully

Staying Well & Living Fully

Healthy Montgomery

PROGRESS IN HEALTH IN ALL POLICIES 2017-2018

Environmental Scan

Includes 7 Montgomery County Agencies 100+ Programs

The Health in All Policies Work Group completed an Environmental Scan of Montgomery County government agencies working on issues related to health across sectors.



We hosted a Health Policy Panel

The Panel presented the environmental scan at



What Community Health Means to Us



FOR MORE INFORMATION, VISIT HEALTHYMONTGOMERY.ORG

Healthy Montgomery

Progress for Eat Well Be Active Partnership 2017-2018

Montgomery County Public Schools (MCPS) passed new regulation requiring Local School Wellness Councils in schools

Partnering with Alliance for a Healthier Generation



Established partnership with Safe Routes to School Program

16

Healthy Montgomery Transforming Communities Initiative (TCI) funded 16 pilot schools

Creating a Local School Wellness toolkit for all schools in the county



MONTGOMERY COUNTY
FOOD COUNCIL

Partner with Food Council to address shared priorities and participate in the following Working Groups:



Food Literacy

Food Recovery & Access

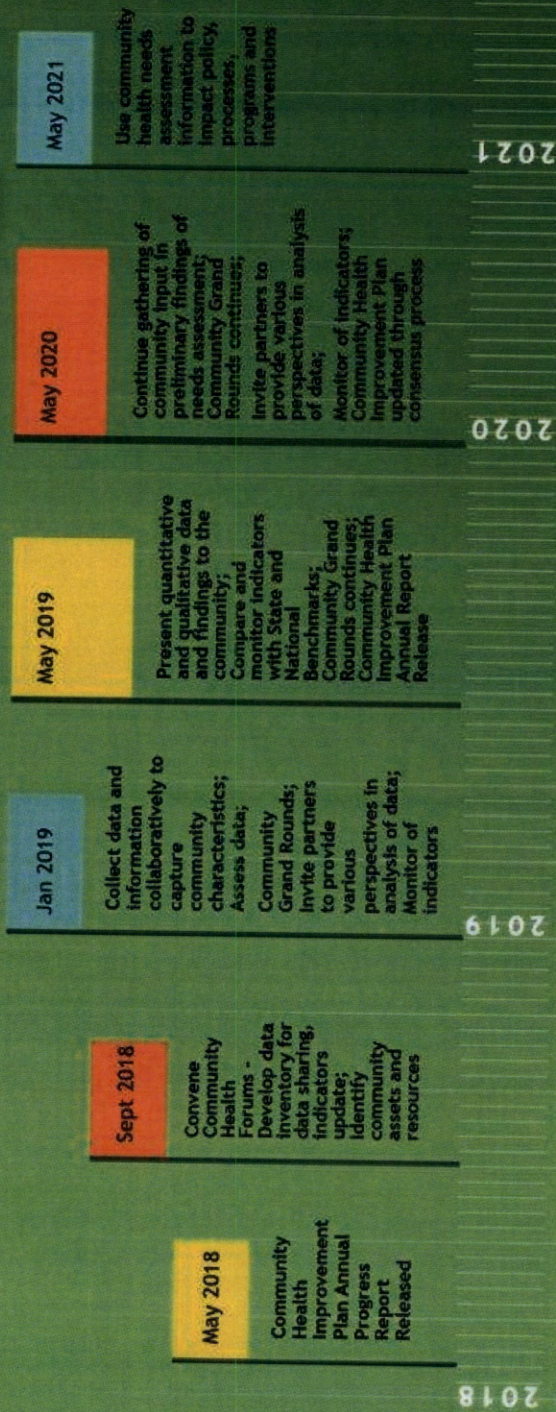


Health Care & Food Access Sub-committee

Stakeholders include local food assistance providers, community service agencies, community clinics and all local hospitals

FOR MORE INFORMATION, VISIT HEALTHYMONTGOMERY.ORG

Proposed Montgomery County Community Health Needs Assessment Cycle



Data Across Sectors for Health



DASH CIC-START Enables More Communities to Go "All In" to Improve Health Through Data Sharing

All In: Data for Community Health, a learning network focused on transforming health through partnerships to share data, is actively working to help more communities make progress towards using multi-sector data to tackle community health challenges. In an effort to further support communities participating in All In, Data Across Sectors for Health (DASH) offered five new awards through CIC-START, a program that provides limited funds to help local leaders take meaningful

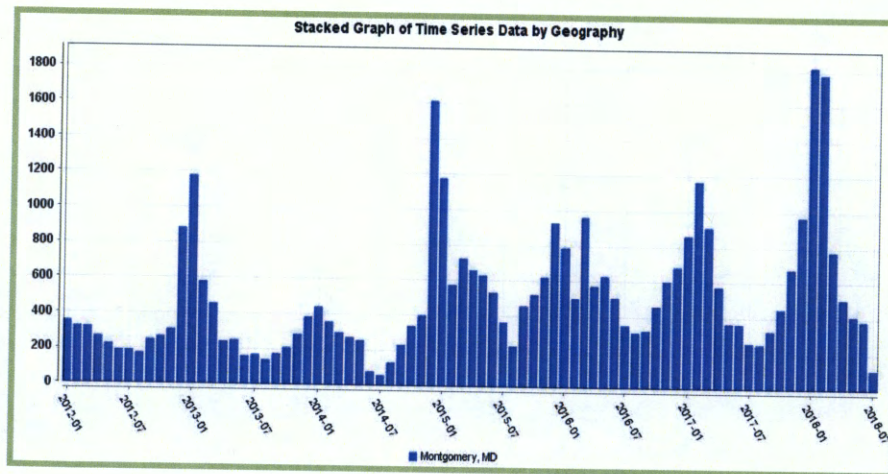
- *Montgomery County, MD: Envisioning Equity in Montgomery County, Maryland Using Data* is convening workshops with multi-sector stakeholders to develop indicators to address social and health inequities and recommend requirements for a new data sharing hub. *Led by Montgomery County Department of Health and Human Services.*



DATA FOR
COMMUNITY
HEALTH

Why use data?
What data to use?
How to use data?
When to use data?
Where to use data?

Report on Infectious Disease



Supplemental report to 'Health in Montgomery County 2008-2016' to more focus on infectious diseases in the County and DHHS's programs

Disease burden in the County 2012-2016

DHHS's programs and services, and clients served

Report on Infectious Disease

Overview of communicable disease
surveillance and reportable diseases

County population

Infectious Disease in the County

Program areas:

- General Disease Control

- Tuberculosis Control

- HIV/STD

- Immunization

- Public Health Preparedness and Response

Technical notes

Reportable conditions

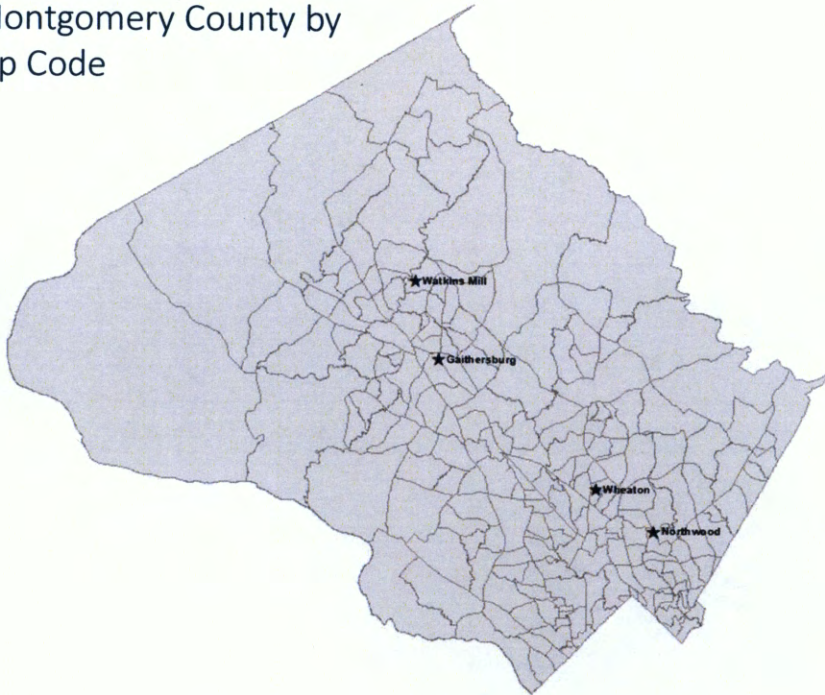


Eligible Population Served and Chronic Disease Management In Montgomery Cares

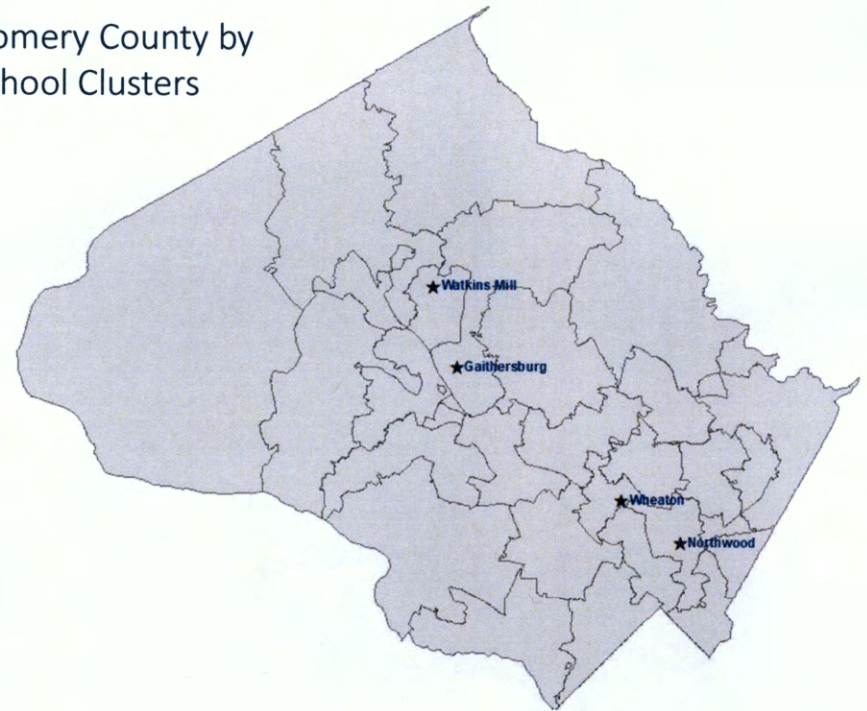
Sara Safi
Chunfu Liu

School Wellness Center Cluster Analysis

Montgomery County by
Zip Code

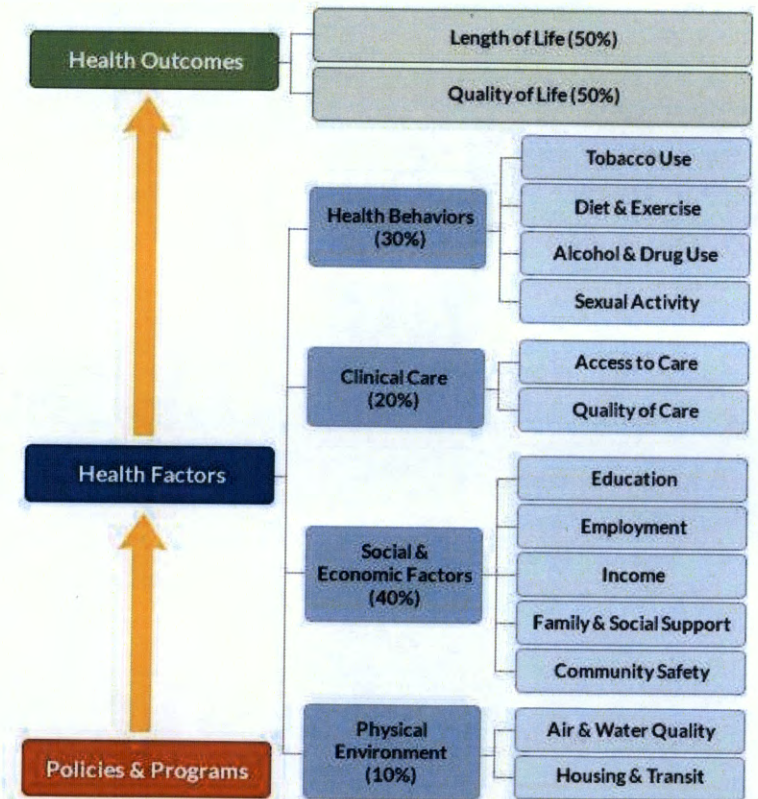


Montgomery County by
High School Clusters



County Health Rankings & Roadmaps

“The annual County Health Rankings measure vital health factors [...] revealing [a] snapshot of how health is influenced by where we live, learn, work and play. They [also] provide a starting point for change in communities.”



Even within a county, there can be substantial variation in health factors and outcomes.

Most surveillance systems don't collect zip-code level data.

Statisticians created a new algorithm using alternative data sources to rank zip codes using a framework that was still true to the original County Health Rankings algorithm.

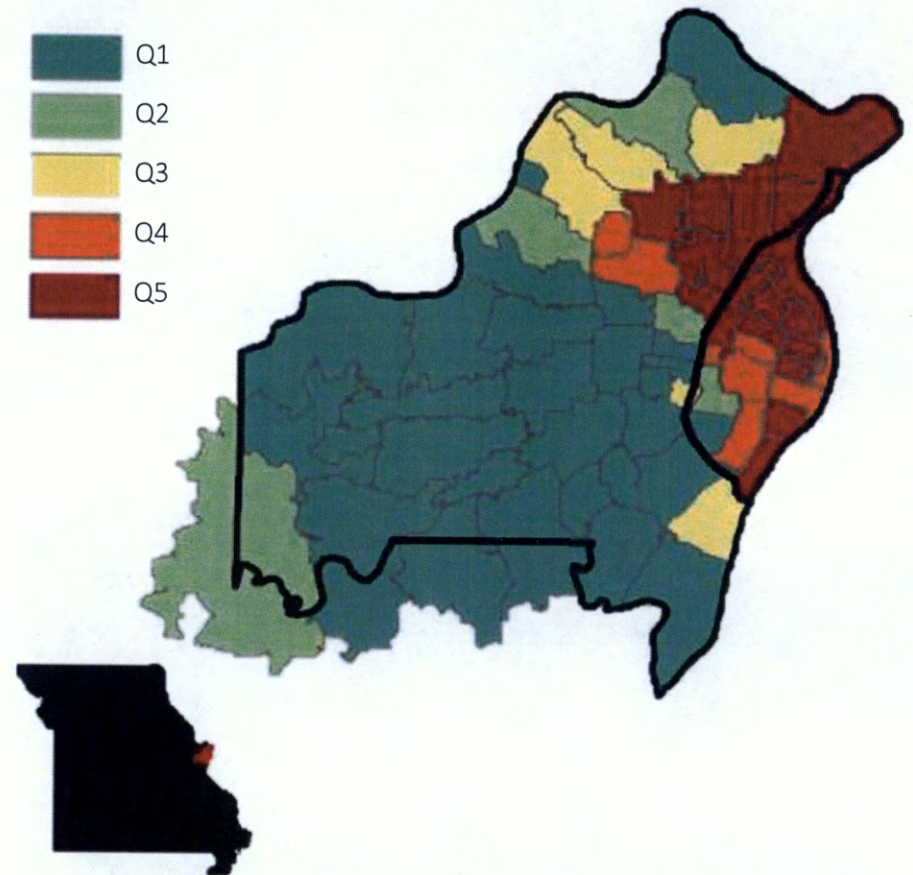
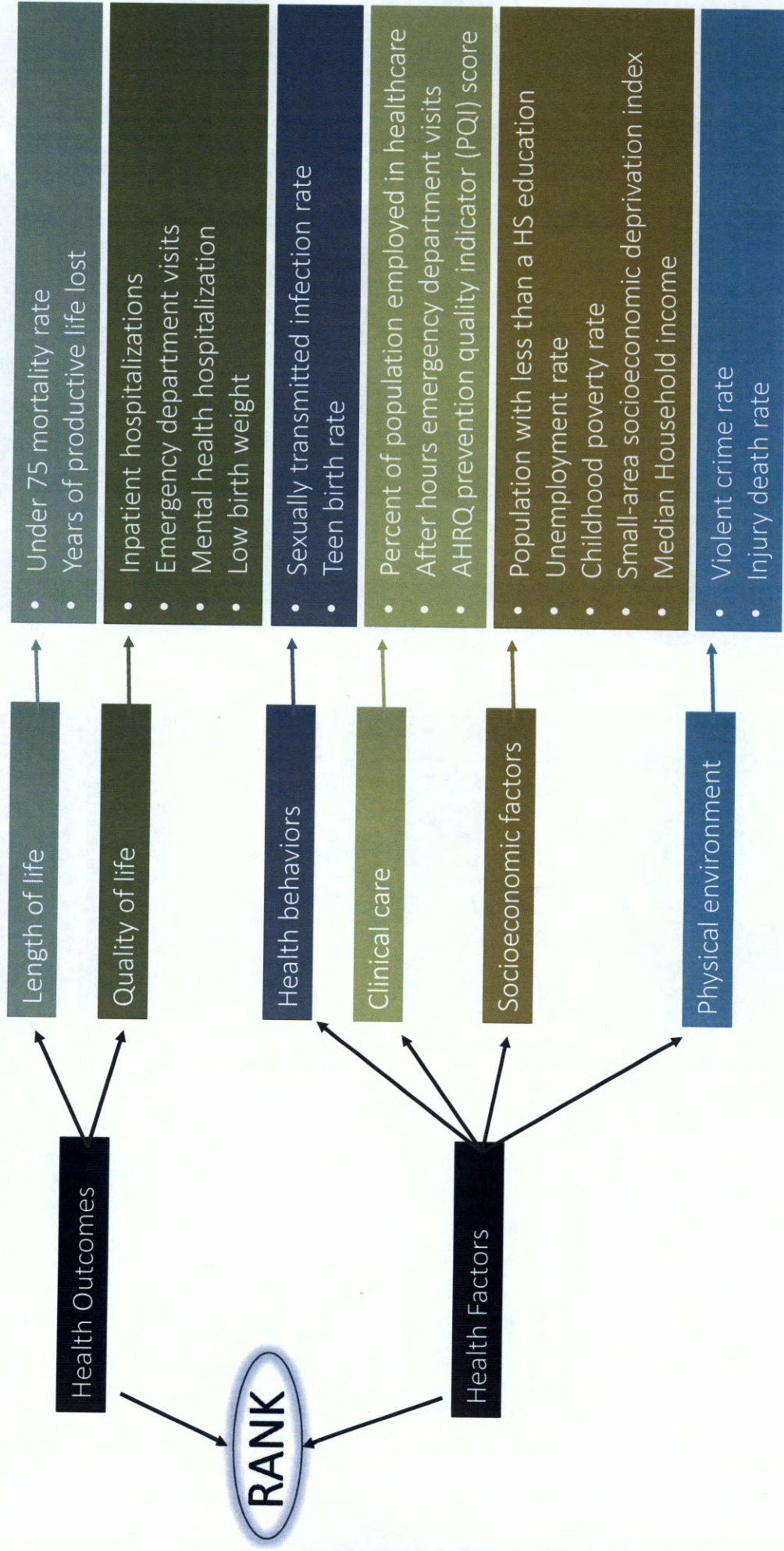


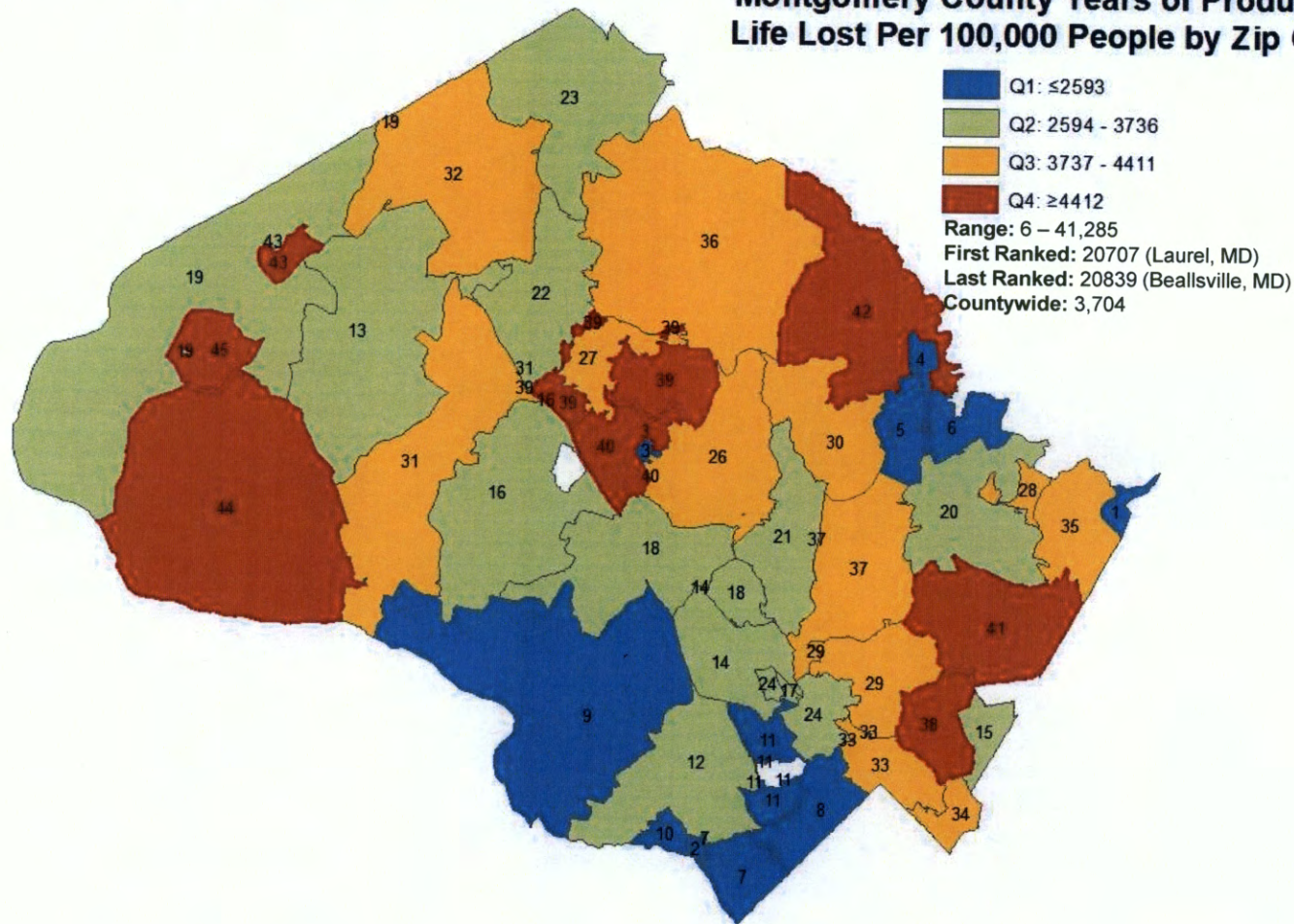
Figure 1. Subcounty Variation in Health Factors and Outcomes in St. Louis City and St. Louis County, Missouri

Modified Algorithm



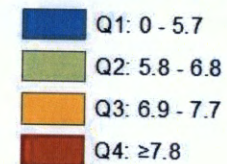
Preliminary Results

Montgomery County Years of Productive Life Lost Per 100,000 People by Zip Code



Preliminary Results

Montgomery County Percent of Live Births With Low Birth Weight (>2,500 g or >5 lbs, 8 oz) by Zip Code

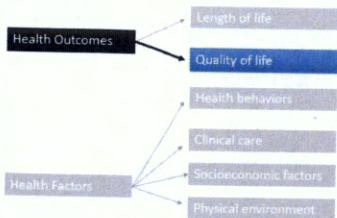
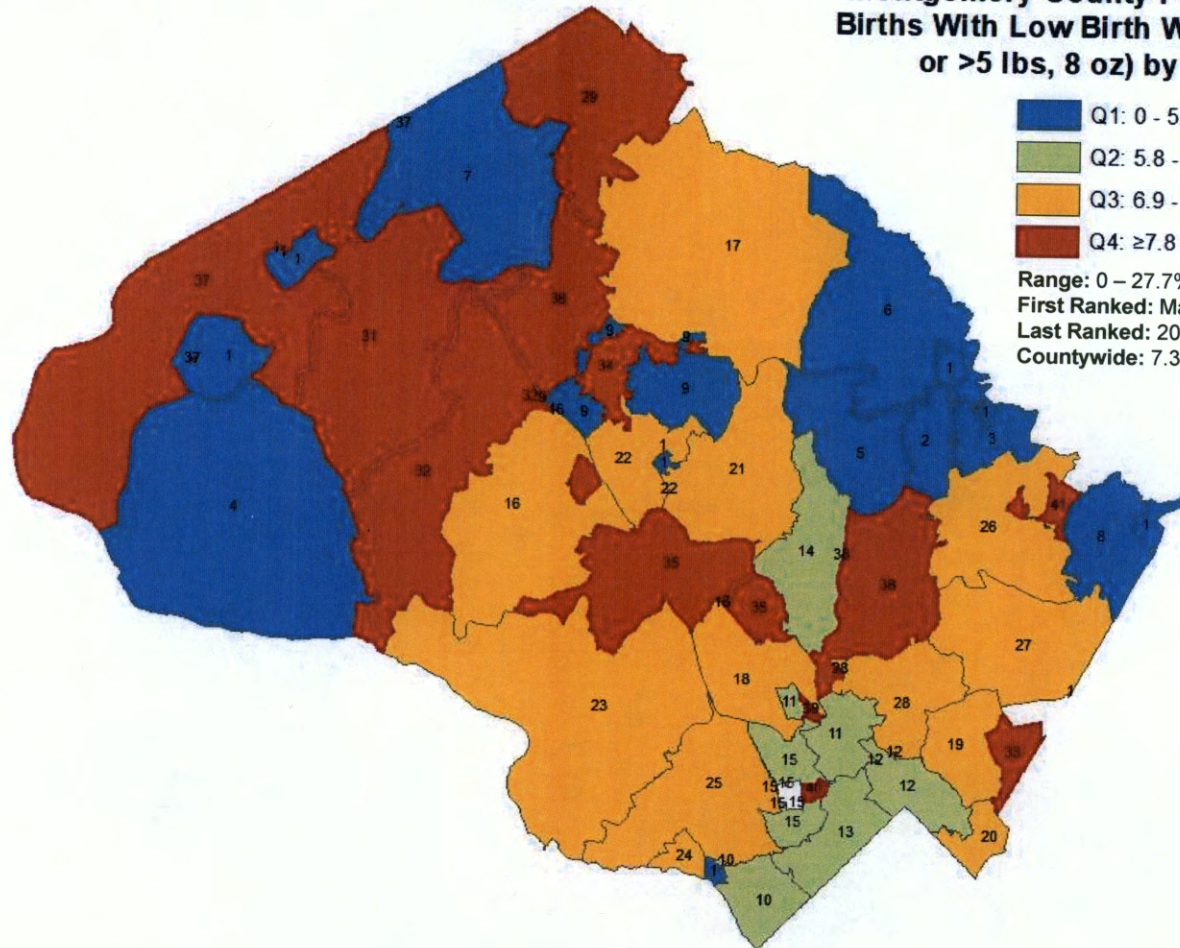


Range: 0 - 27.7%

First Ranked: Many tied at 0%

Last Ranked: 20868 (Spencerville, MD)

Countywide: 7.3%

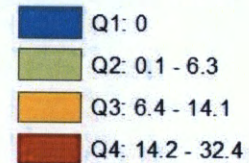


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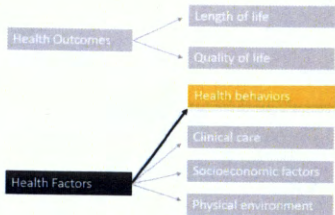
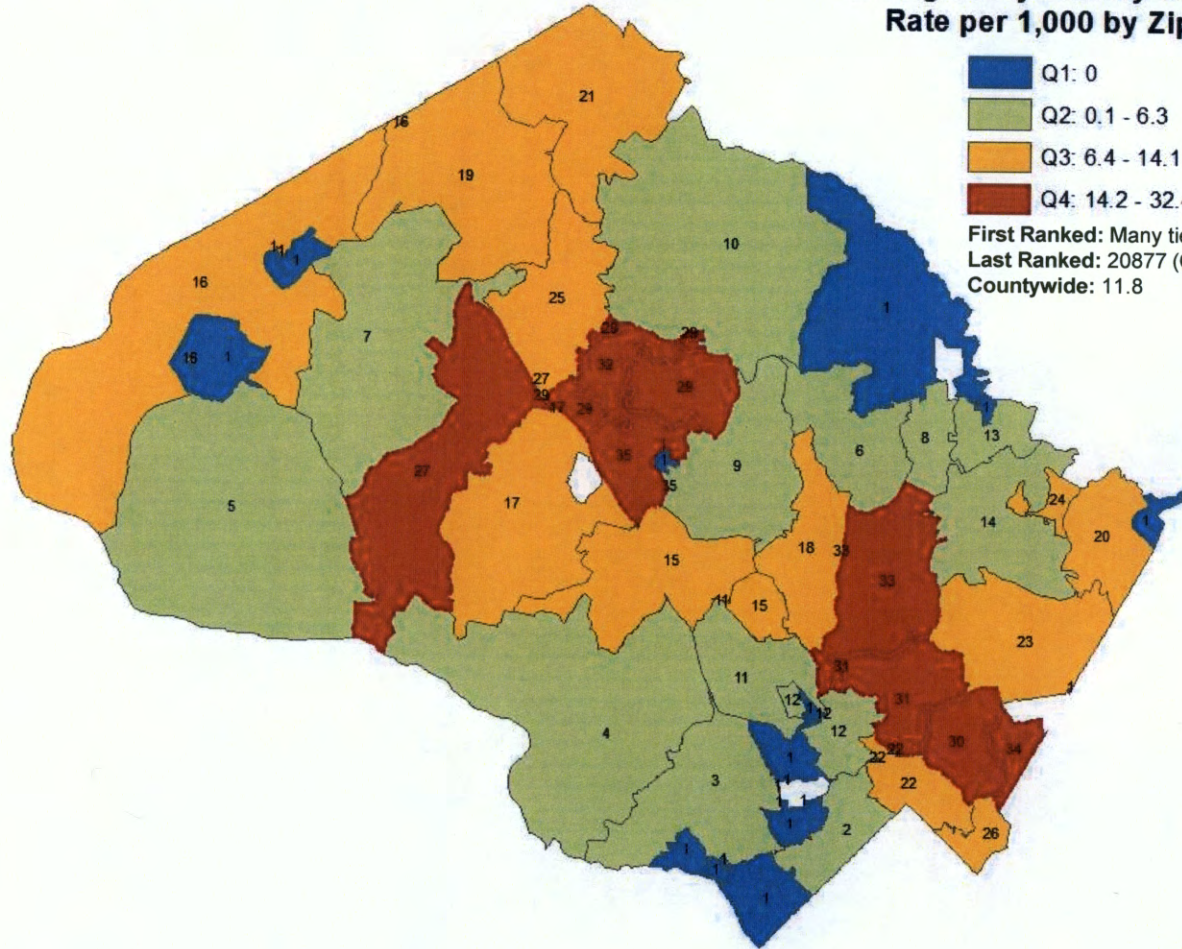
20

Preliminary Results

**Montgomery County Teen Birth
Rate per 1,000 by Zip Code**



First Ranked: Many tied at 0
Last Ranked: 20877 (Gaithersburg, MD)
Countywide: 11.8

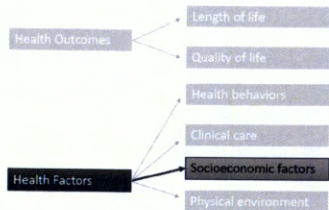
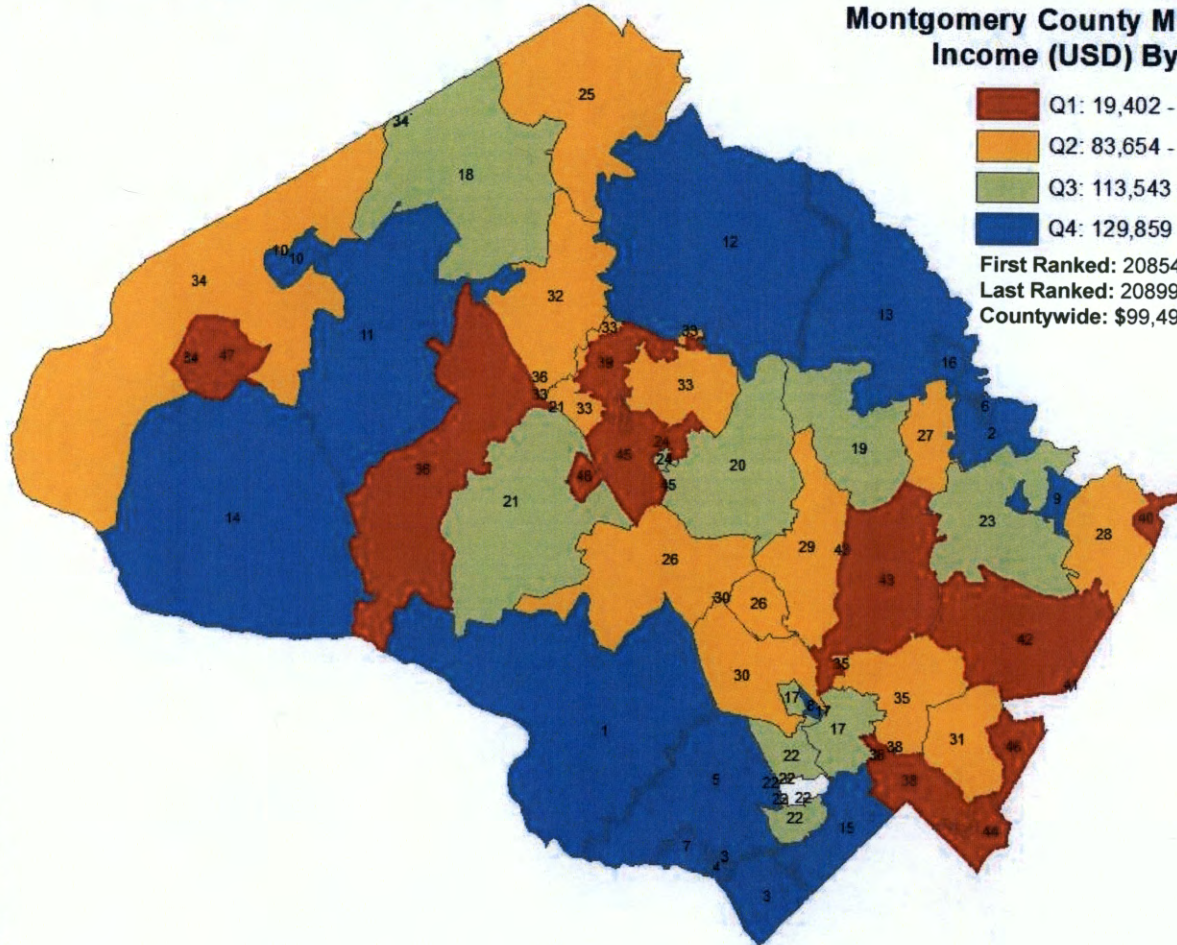


Preliminary Results

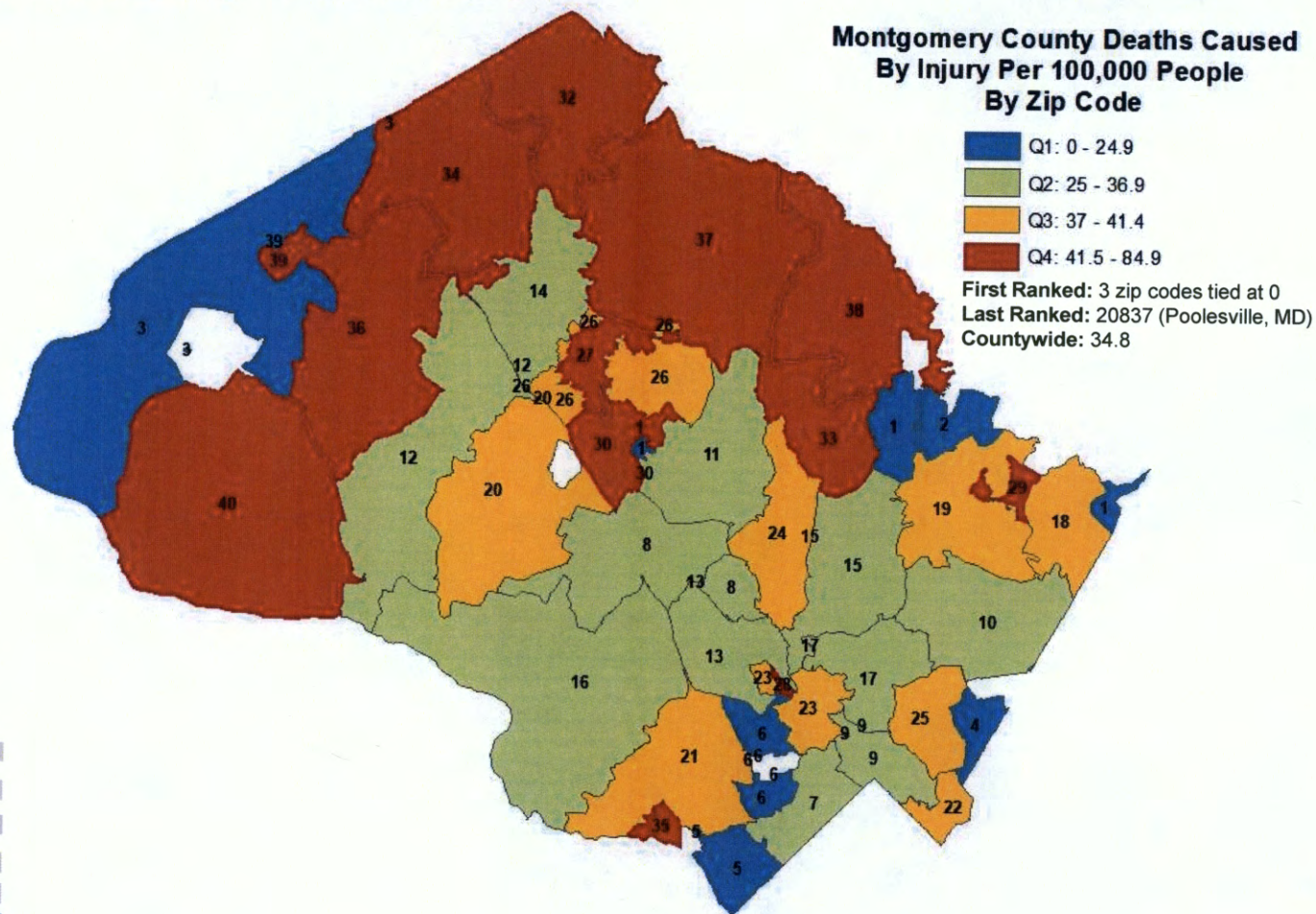
Montgomery County Median Household Income (USD) By Zip Code



First Ranked: 20854 (Potomac, MD)
 Last Ranked: 20899 (Gaithersburg, MD)
 Countywide: \$99,497



Preliminary Results



County's First Status of Health Report

<http://www.montgomerycountymd.gov/HH/S/Resources/Files/Reports/PopHealthReportFINAL.pdf>

OR

Search for "population health report" in the search bar
(include quotation marks)

montgomerycountymd.gov/home.aspx



MontgomeryCountyMD.GOV
Montgomery County Government



"population health report"

Search

Services ~ Residents ~ Business ~ Government ~ County Executive ~ County Council ~ Calendar



County Executive
Ike Leggett

HEALTH IN MONTGOMERY COUNTY 2008-2016

A Surveillance Report on Population Health



About the Report

Covers all major health topics

Comprehensive and Centralized Health Statistics at One Location

Target Various Level of Audiences

Trends over Time, Population Subgroups, and Geographic Areas

Comparisons with MD and U.S., and Benchmarking with Healthy People 2020

Population Health Surveillance, Program Effectiveness Evaluation, and Planning and Resource Allocation

Health Topics

Demographics, Social Determinants, and Health Care Access

Vital Statistics

Maternal and Infant Health

Chronic Diseases

Infectious Diseases

Behavioral Health

Injuries

Environmental Health

Summary of Mortality

Table 1. Leading Cause of Deaths by Year, Montgomery County, 2014-16

	2014		2015		2016		2014-16	
	%	Rank	%	Rank	%	Rank	n (%)	Rank
Cancer	23.6	1	23.8	1	23.5	1	4,146 (23.7)	1
Heart Disease	22.9	2	22.3	2	22.0	2	3,925 (22.4)	2
Cerebrovascular Disease	5.1	3	4.9	3	5.1	3	881 (5.0)	3
Accident	3.5	4	3.5	4	3.6	4	615 (3.5)	4
Chronic Lower Respiratory Disease	3.4	5	3.4	5	3.3	5	589 (3.4)	5
Alzheimer's Disease	2.6	7	2.9	6	2.8	6	481 (2.7)	6
Influenza & Pneumonia	2.8	6	2.8	7	2.4	7	471 (2.7)	7
Diabetes Mellitus	2.4	9	2.3	9	2.4	7	416 (2.4)	8
Septicemia	2.6	7	2.5	8	1.9	9	409 (2.3)	9
Nephritis	1.5	10	1.9	10	1.6	10	291 (1.7)	10
All Other Causes	29.7		29.7		31.4		30.3	

Summary of Mortality

Table 3. Leading Cause of Deaths* by Race/Ethnicity, Montgomery County, 2014-16

	NH-White		NH-Black		Asian/PI		Hispanic	
	%	Rank	%	Rank	%	Rank	%	Rank
Cancer	22.7	2	24.7	1	29.4	1	24.1	1
Heart Disease	24.0	1	23.2	2	19.0	2	16.0	2
Cerebrovascular Disease	4.4	3	4.2	3	6.9	3	5.0	4
Accident	3.1	5	2.9	4	3.2	4	8.3	3
Chronic Lower Respiratory Disease	3.9	4	2.7	5	1.5	7	0.9	7
Alzheimer's Disease	3.1	5	1.7	7	1.8	6	2.3	5
Nephritis	1.4	7	2.6	6	1.9	5	1.6	6
Diabetes Mellitus	0.5	8	0.9	8	0.3	8	0.7	8
Influenza & Pneumonia	0.2	9	0.2	9	0.1	9	0.1	9

* based on list of leading causes for overall population only

Summary of Hospitalization

Table 5. Leading Cause of Hospitalization by Year, Montgomery County, 2014-16

	2014		2015		2016		2014-16	
	%	Rank	%	Rank	%	Rank	%	Rank
Injuries	18.5	1	15.2	1	9.5	2	14.5	1
Heart Disease	12.8	2	12.9	2	14.7	1	13.4	2
Mental Health	5.8	3	6.3	3	6.2	3	6.1	3
Cerebrovascular Disease	3.9	4	3.6	4	3.2	6	3.6	4
Diabetes Mellitus	3.3	5	3.4	5	3.6	4	3.6	4
Cancer	2.8	6	2.9	6	3.3	5	3.0	6
Chronic Lower Respiratory Disease	2.7	7	2.3	7	2.1	7	2.4	7
Substance Abuse	1.7	8	1.7	8	1.5	8	1.6	8
Suicide	0.6	9	0.5	9	0.4	9	0.5	9
All Other Causes	47.9		51.2		55.5		54.9	

Summary of Hospitalization

Table 7. Leading Cause of Hospitalization* by Race/Ethnicity, Montgomery County, 2014-16

	NH-White		NH-Black		Asian/PI		Hispanic	
	%	Rank	%	Rank	%	Rank	%	Rank
Injuries	17.7	1	11.7	2	10.7	1	12.8	1
★ Heart Disease	15.8	2	13.3	1	10.5	2	11.5	2
Mental Health	6.4	3	6.5	3	2.9	5	5.6	3
★ Cerebrovascular Disease	4.0	4	3.7	5	3.7	4	3.4	5
Cancer	4.0	4	3.1	6	3.8	3	2.0	7
★ Diabetes Mellitus	2.7	6	3.9	4	2.7	6	4.2	4
★ Chronic Lower Respiratory Disease	2.6	7	2.6	7	1.6	7	3.1	6
Substance Abuse	2.0	8	1.1	8	0.5	8	2.0	7
Suicide	0.6	9	0.4	9	0.3	9	0.7	9

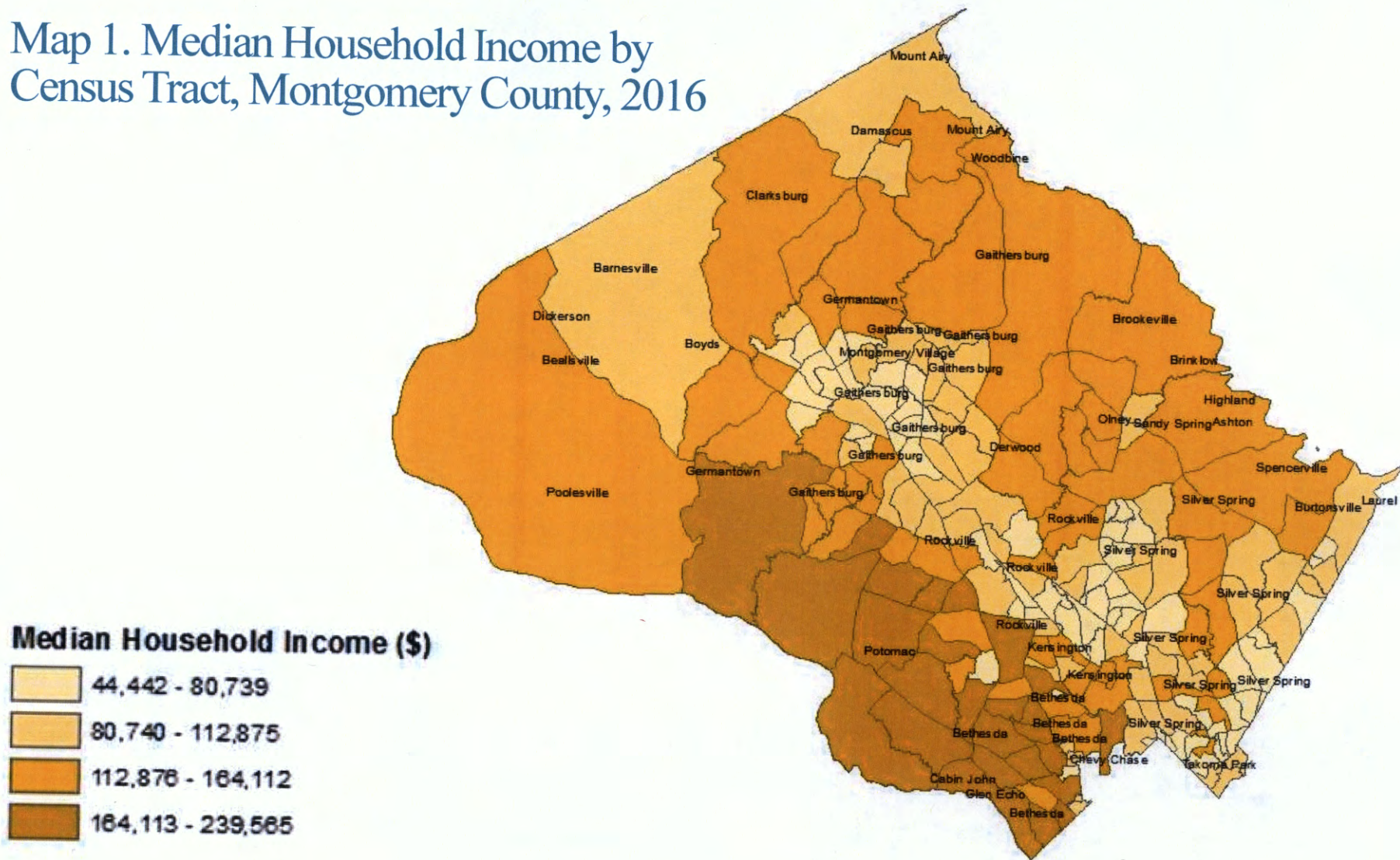
* based on list of leading causes for overall population only

Social Determinants

Table 14. Percent Families below Poverty Level by Race/Ethnicity, Montgomery County, Maryland, and U.S., 2012-16

	2012	2013	2014	2015	2016		
	MoCo	MoCo	MoCo	MoCo	MoCo	MD	US
All	4.4	4.5	4.5	4.6	4.7	6.8	11.0
NH-White	1.9	2.0	1.8	1.8	1.8	4.0	6.9
NH-Black	9.5	9.6	9.3	8.8	8.9	11.6	22.3
Asian/PI	4.0	4.2	4.8	4.7	5.0	5.7	8.9
Hispanic	8.3	9.0	8.7	9.2	9.1	11.5	20.9

Map 1. Median Household Income by
Census Tract, Montgomery County, 2016



Health Care Access

Table 17. Percent Individuals without Health Insurance, Montgomery County, Maryland, and U.S., 2010-14

	2010	2011	2012	2013	2014
MoCo	13%	13%	13%	12%	10%
MD	13%	12%	12%	12%	9%
US*	11%	11%	11%	11%	8%

* 10th percentile

Table 18. Population/PCP Ratio, Montgomery County, Maryland, and U.S., 2010-14

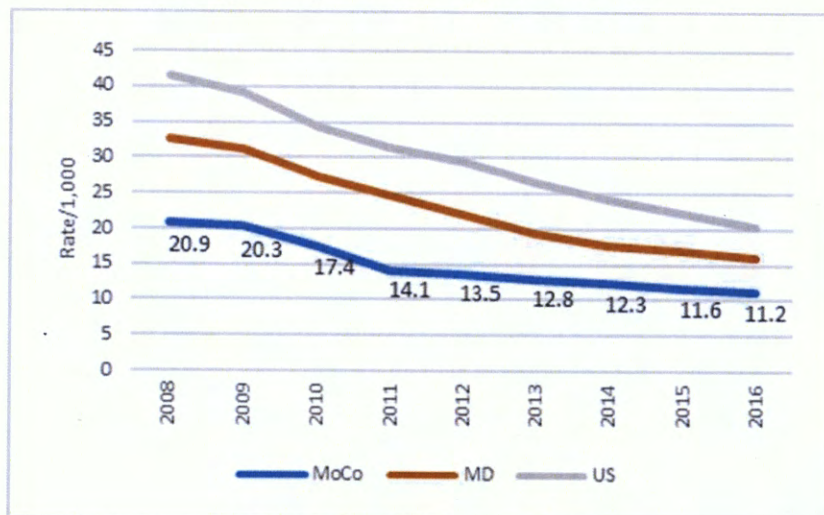
	2010	2011	2012	2013	2014
MoCo	731	729	741	720	720
MD	1153	1134	1131	1120	1130
US*	1067	1051	1045	1040	1040

* 90th percentile

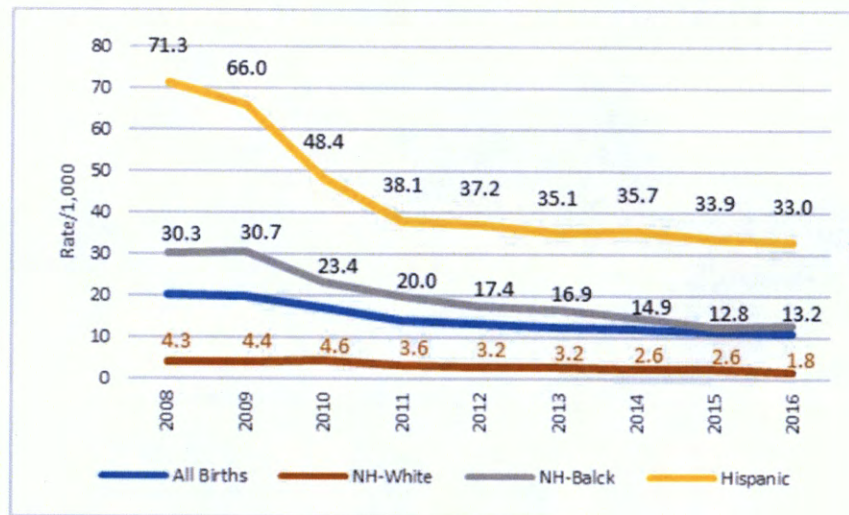
** Source: County Health Ranking <http://www.countyhealthrankings.org/>

Vital Statistics

Adolescent Birth Rates, Montgomery County, Maryland, and U.S., 2008-2016

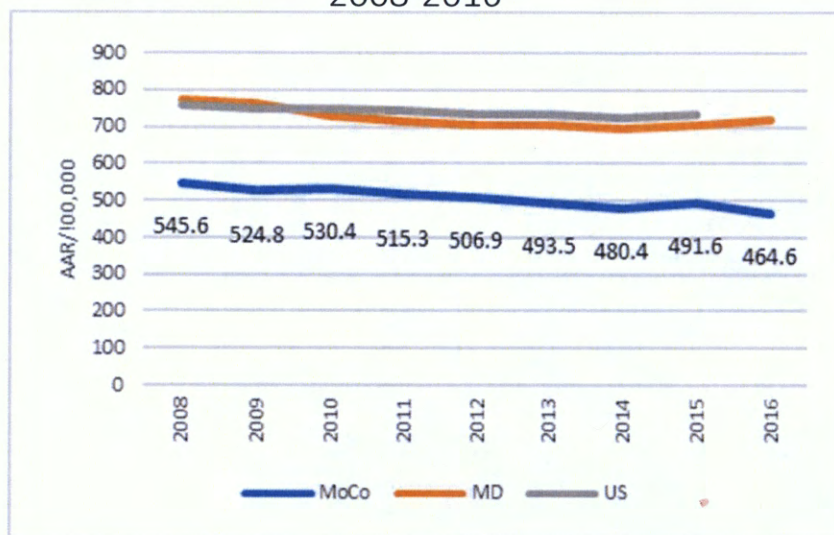


Adolescent Birth Rates by Race/Ethnicity, Montgomery County, 2008-2016

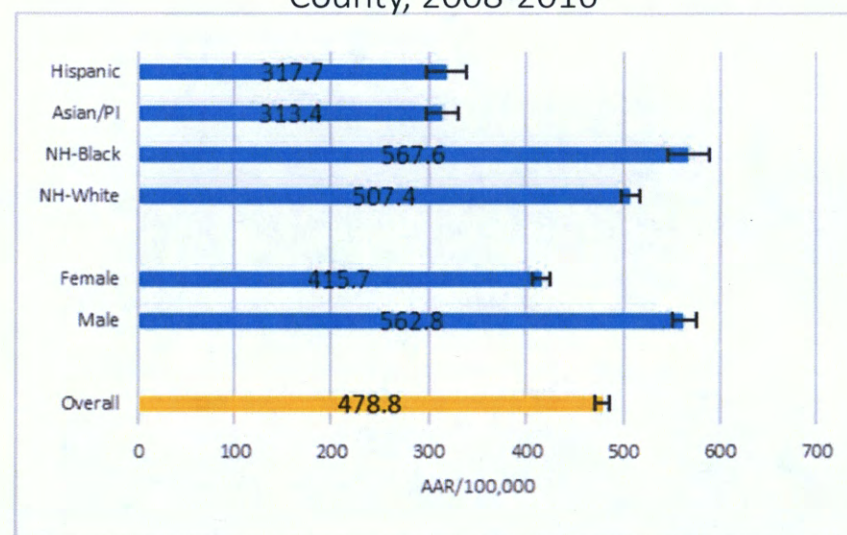


Vital Statistics

Age-Adjusted Mortality Rates, All Causes, Montgomery County, Maryland, and U.S., 2008-2016

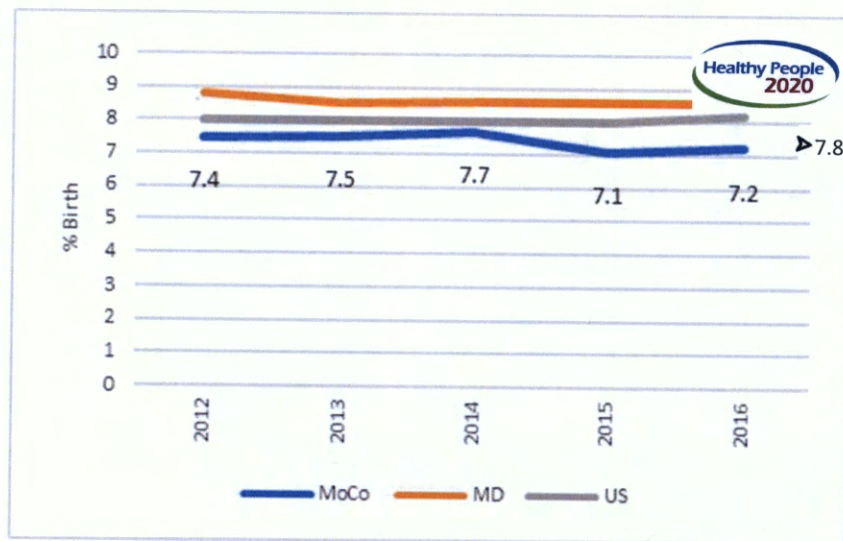


Age-Adjusted Mortality Rates by Race/Ethnicity, All Causes, Montgomery County, 2008-2016

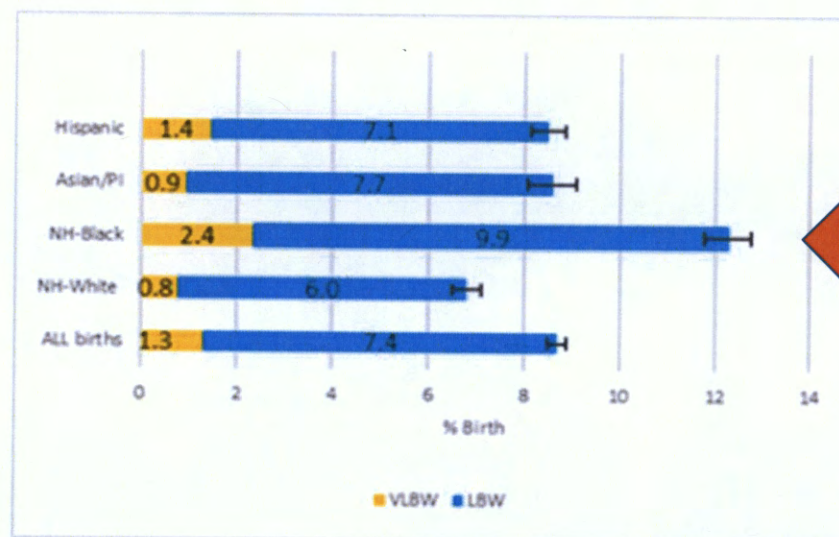


Maternal and Infant Health

Percent Low Weight Births, Montgomery County, Maryland, and U.S., 2012-2016

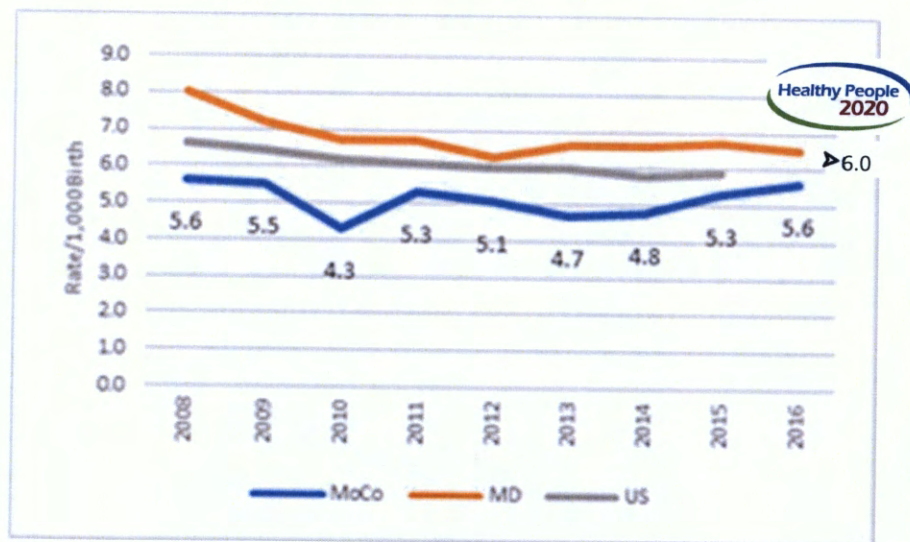


Percent Low and Very Low Weight Births, Montgomery County, 2012-2016

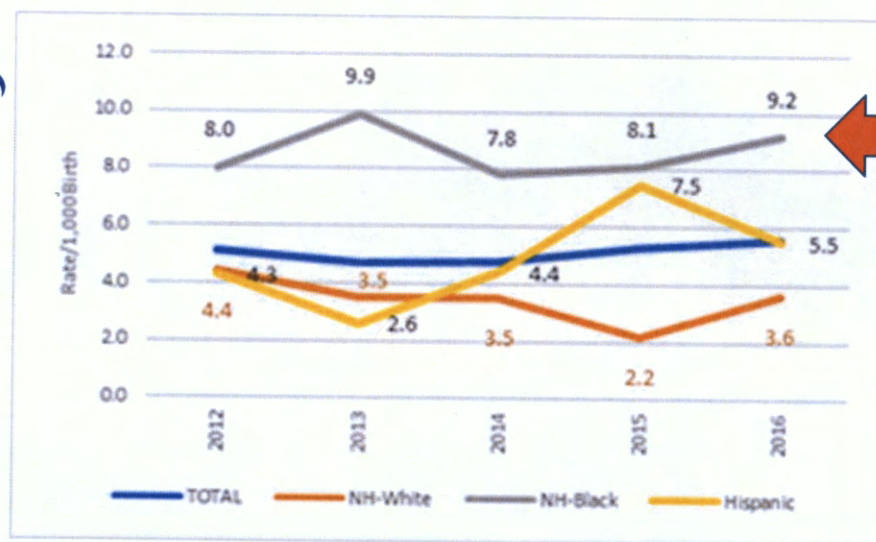


Maternal and Infant Health

Infant Mortality Rates, Montgomery County, Maryland, and U.S., 2008-2016



Infant Mortality Rates by Race/Ethnicity, Montgomery County, 2012-2016



Infant Mortality Rates by Census Tract, Montgomery County, 2008-2016

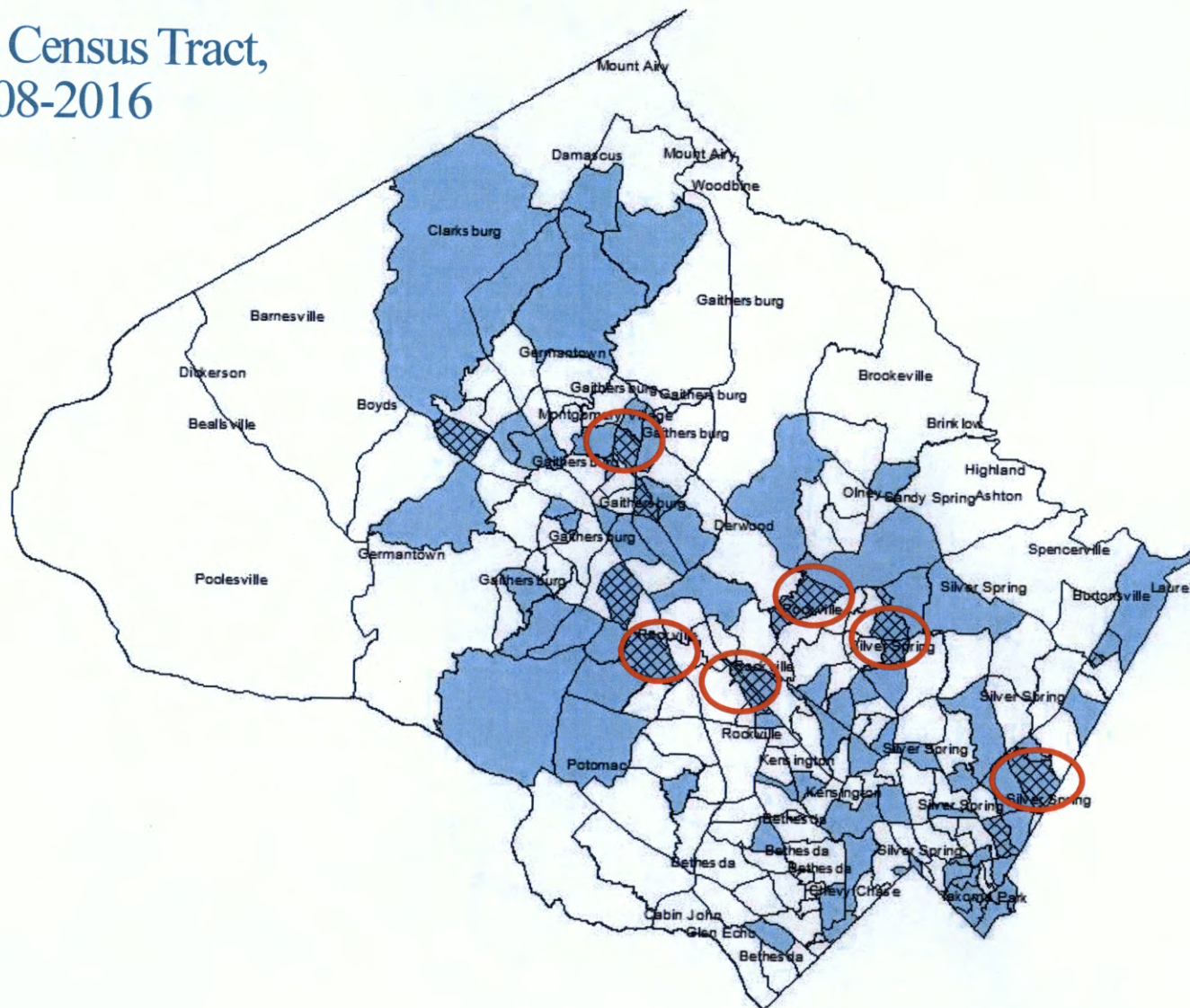
County Rate=5.2/1,000 births

County comparison (p=0.2)

- No difference
- Significantly higher

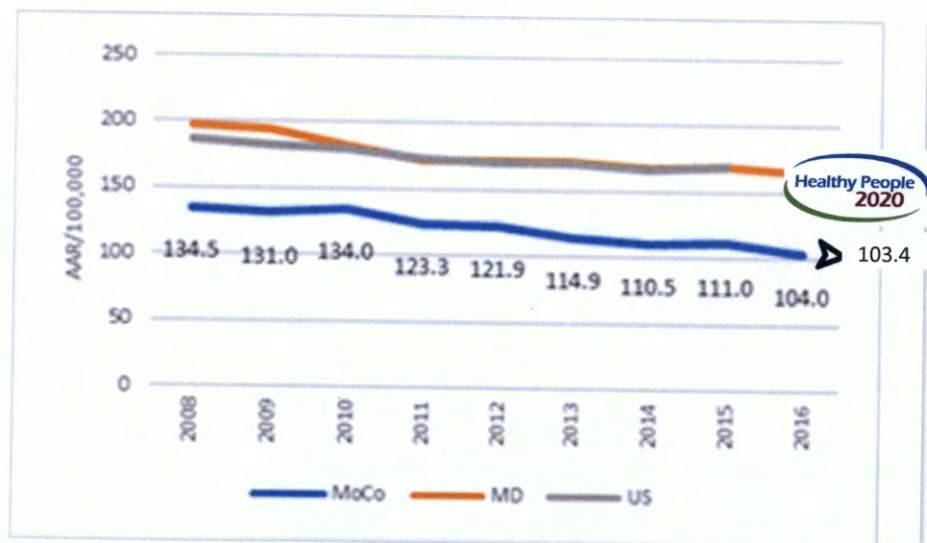
IMR

- ≤ County rate
- > County rate

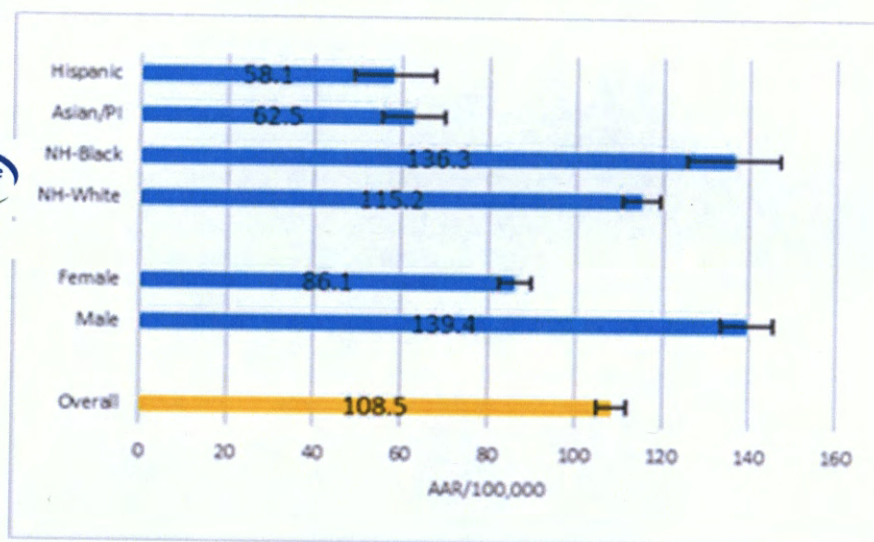


Chronic Diseases

Heart Disease Age-Adjusted Mortality Rates,
Montgomery County, Maryland, and U.S.,
2008-2016

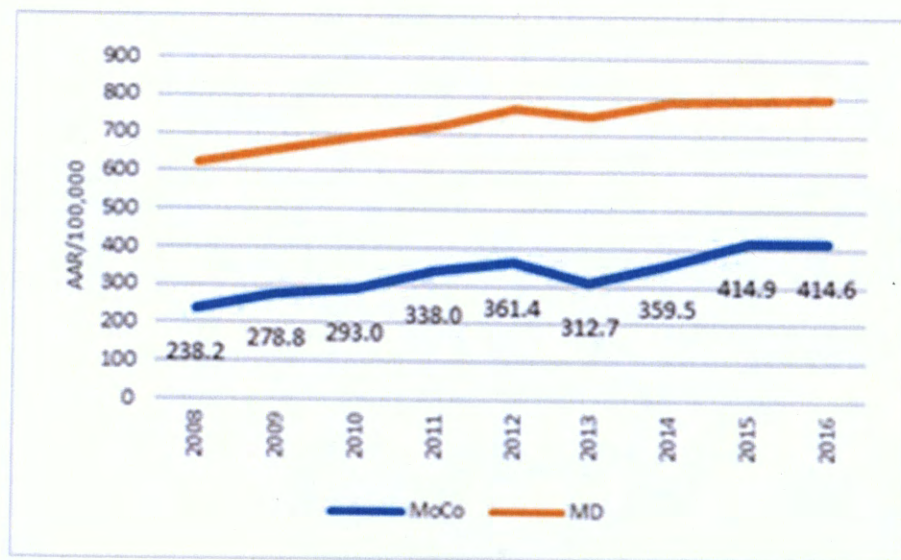


Heart Disease Age-Adjusted Mortality Rates
by Sex and Race/Ethnicity, Montgomery
County, 2014-2016

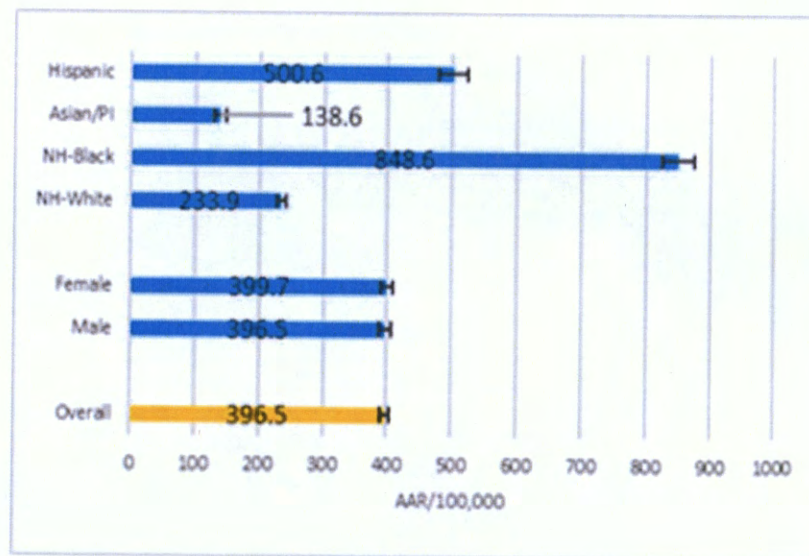


Chronic Diseases

Diabetes Related ER Visit Age-Adjusted Rates,
Montgomery County and Maryland,
2008-2016





Diabetes Related ER Visit Age-Adjusted Rates
by Sex and Race/Ethnicity, Montgomery
County, 2014-2016





Diabetes Related ER Visit Age-Adjusted Rates by PCSA, Montgomery County, 2014-2016

County comparison (p=0.05)

-  No difference
-  Significantly higher

AAR/100,000

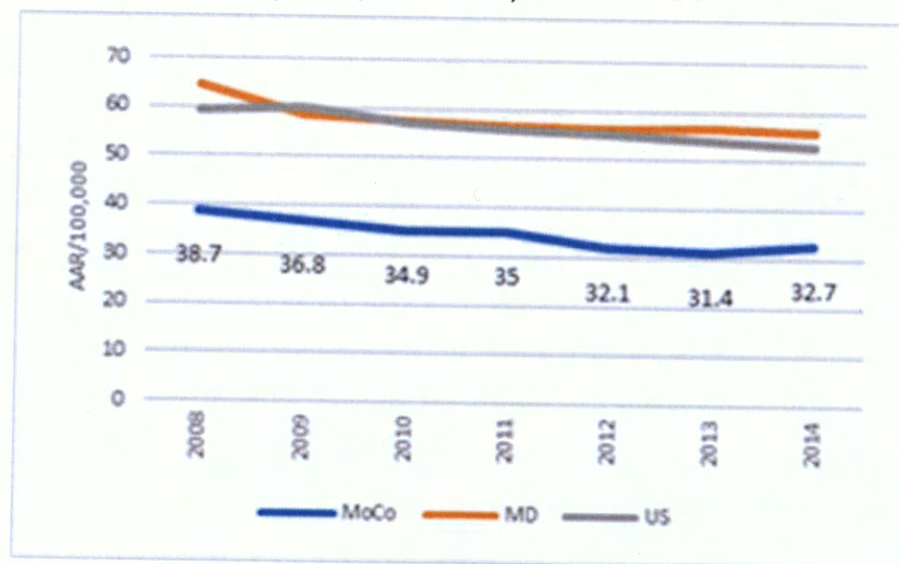
-  ≤ County rate
-  > County rate



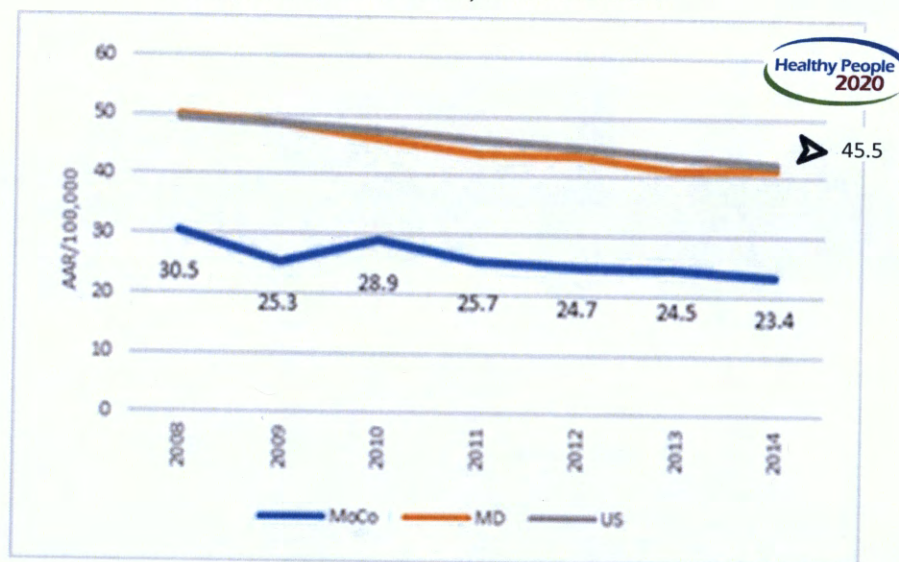
7.4% (95% CI: 5.6-9.2) adults age 18+ ever told have diabetes in Montgomery County, as compared to 10.4% (95% CI: 9.5-11.3) in Maryland.

Chronic Diseases

Cancer Age-Adjusted Incidence Rates, Lung and Bronchus, Montgomery County, Maryland, and U.S., 2008-2014







Cancer Age-Adjusted Mortality Rates, Lung and Bronchus, Montgomery County, Maryland, and U.S., 2008-2014

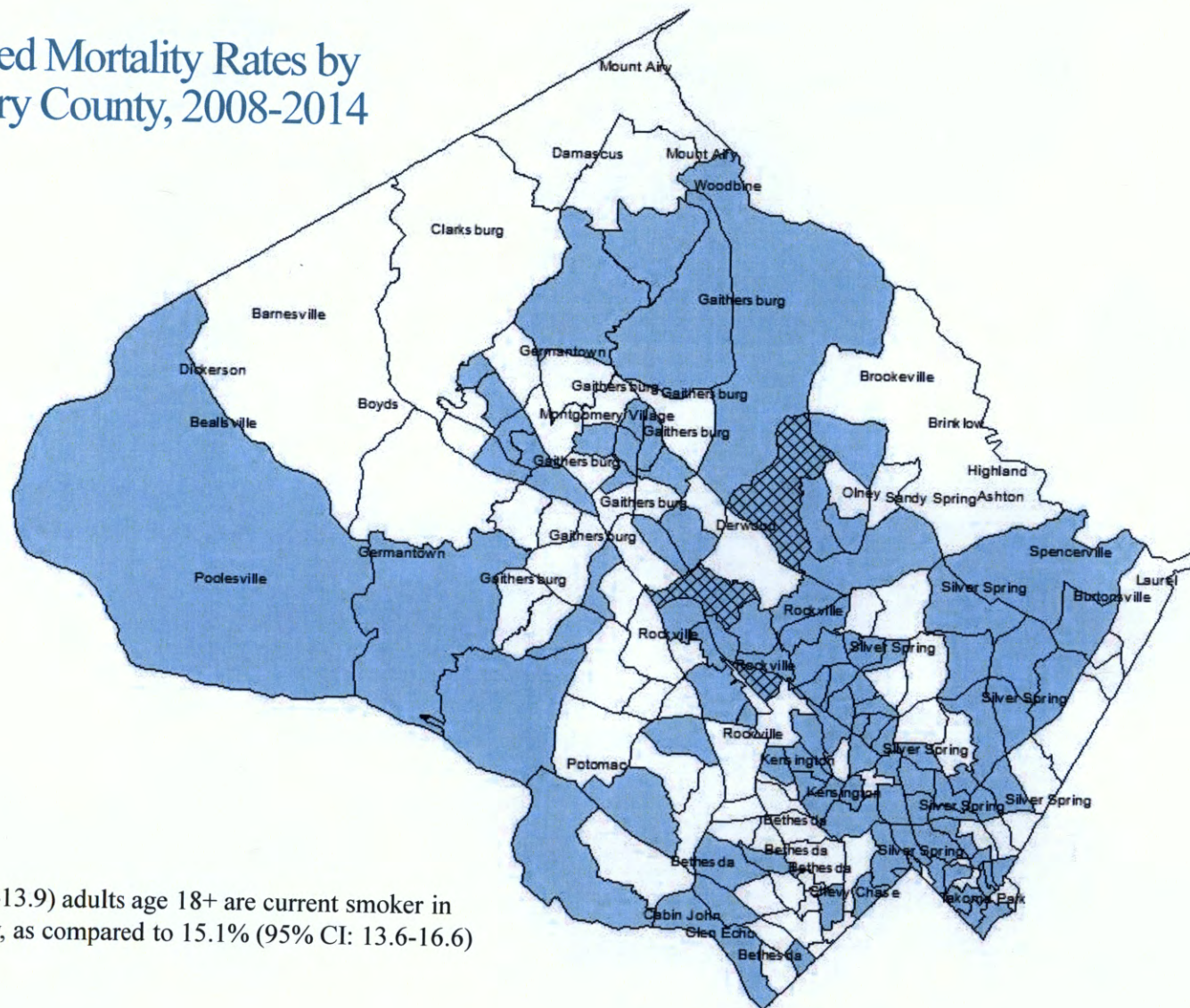


Lung Cancer Age-Adjusted Mortality Rates by Census Tract, Montgomery County, 2008-2014

County Rate=22.7/100,000

County comparison (p=0.05)

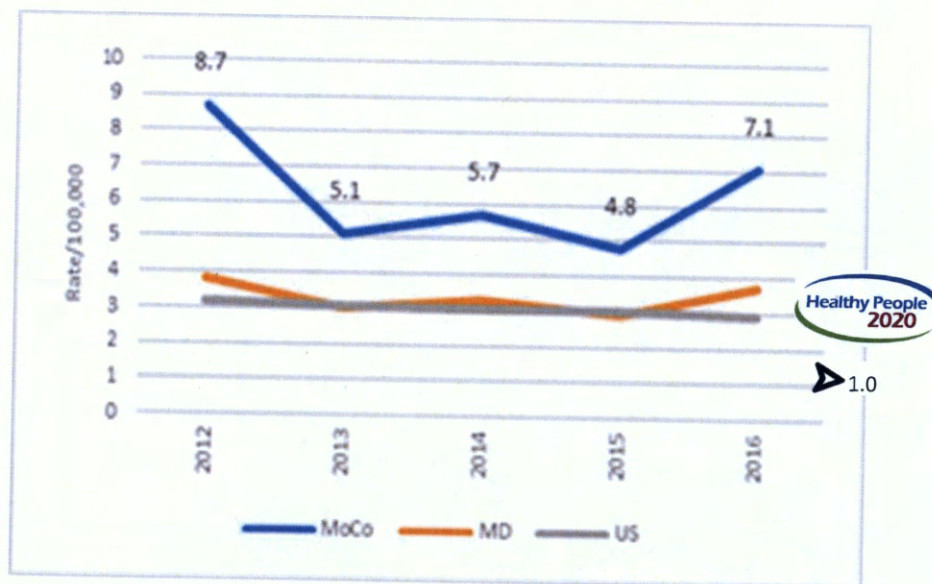
-  No difference
-  Significantly higher
- AAR/100,000**
-  ≤ County rate
-  > County rate



10.5% (95% CI: 7.0-13.9) adults age 18+ are current smoker in Montgomery County, as compared to 15.1% (95% CI: 13.6-16.6) in Maryland.

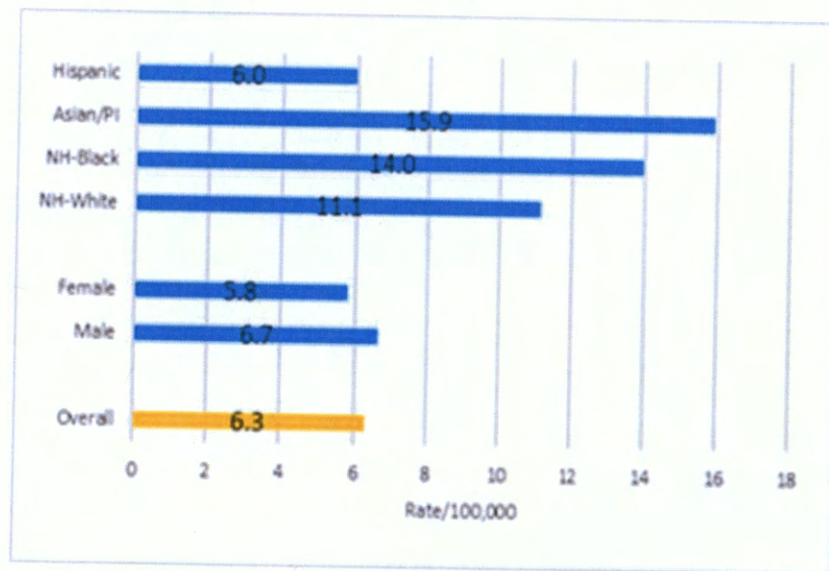
Infectious Diseases

Tuberculosis Incidence Rates, Montgomery County, Maryland, and U.S., 2012-2016

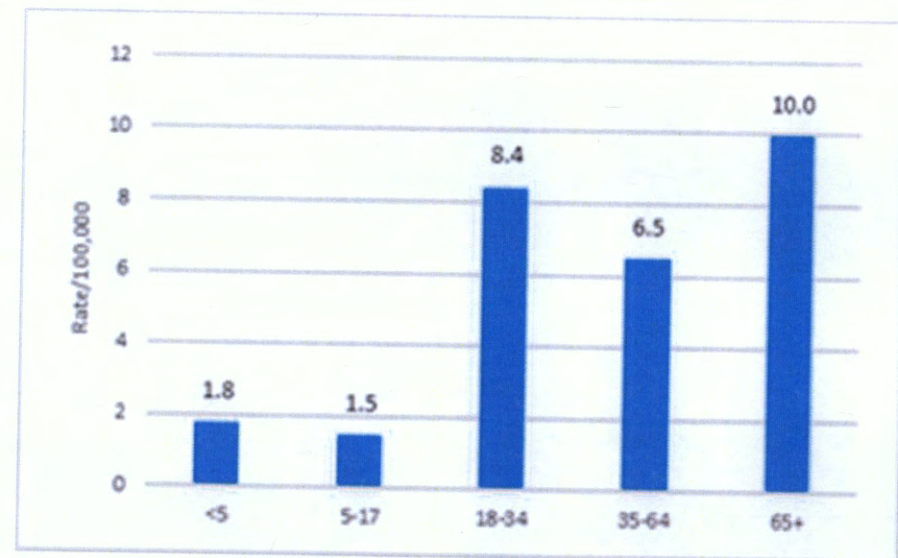


Infectious Diseases

Tuberculosis Incidence Rates by Sex and Race/Ethnicity, Montgomery County, 2012-2016

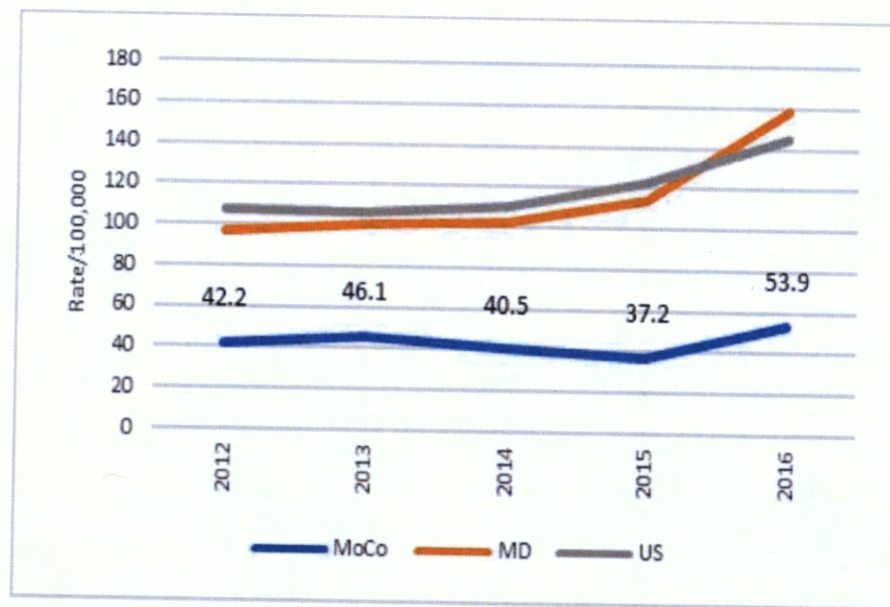


Tuberculosis Incidence Rates by Age, Montgomery County, 2012-2016



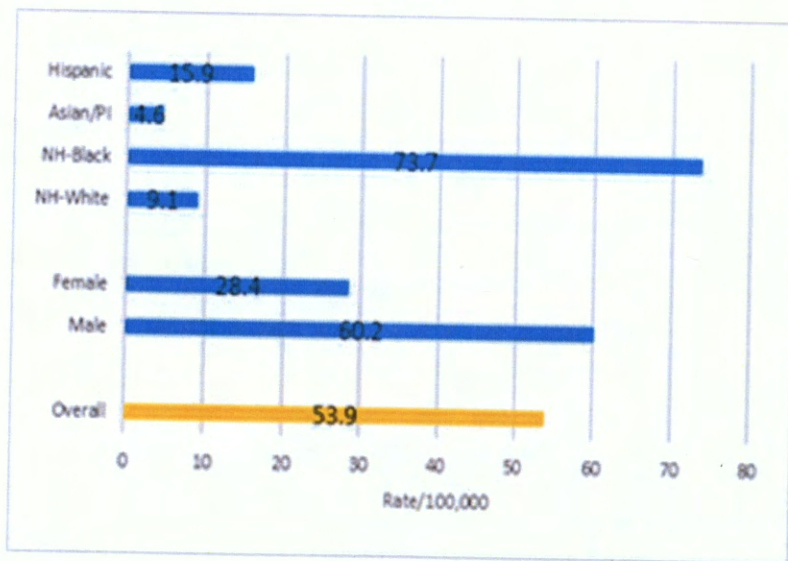
Infectious Diseases

Gonorrhea Incidence Rates, Montgomery County, Maryland, and U.S., 2012-2016

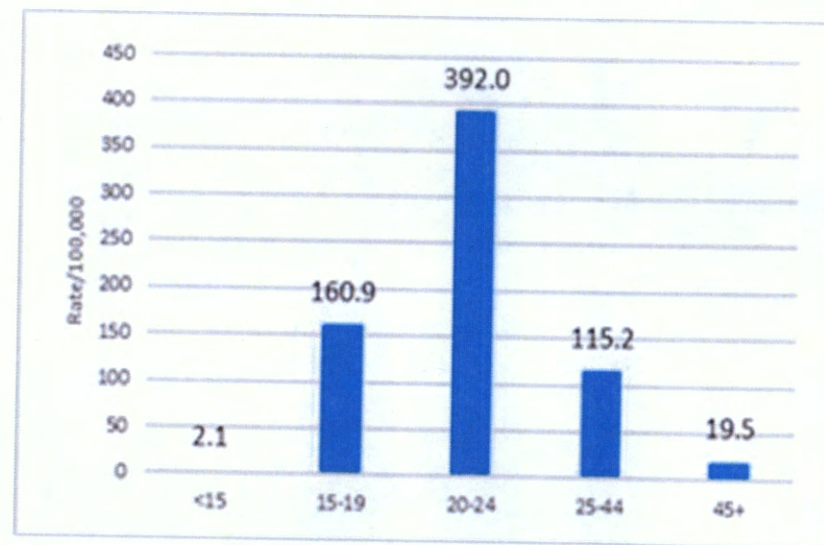


Infectious Diseases

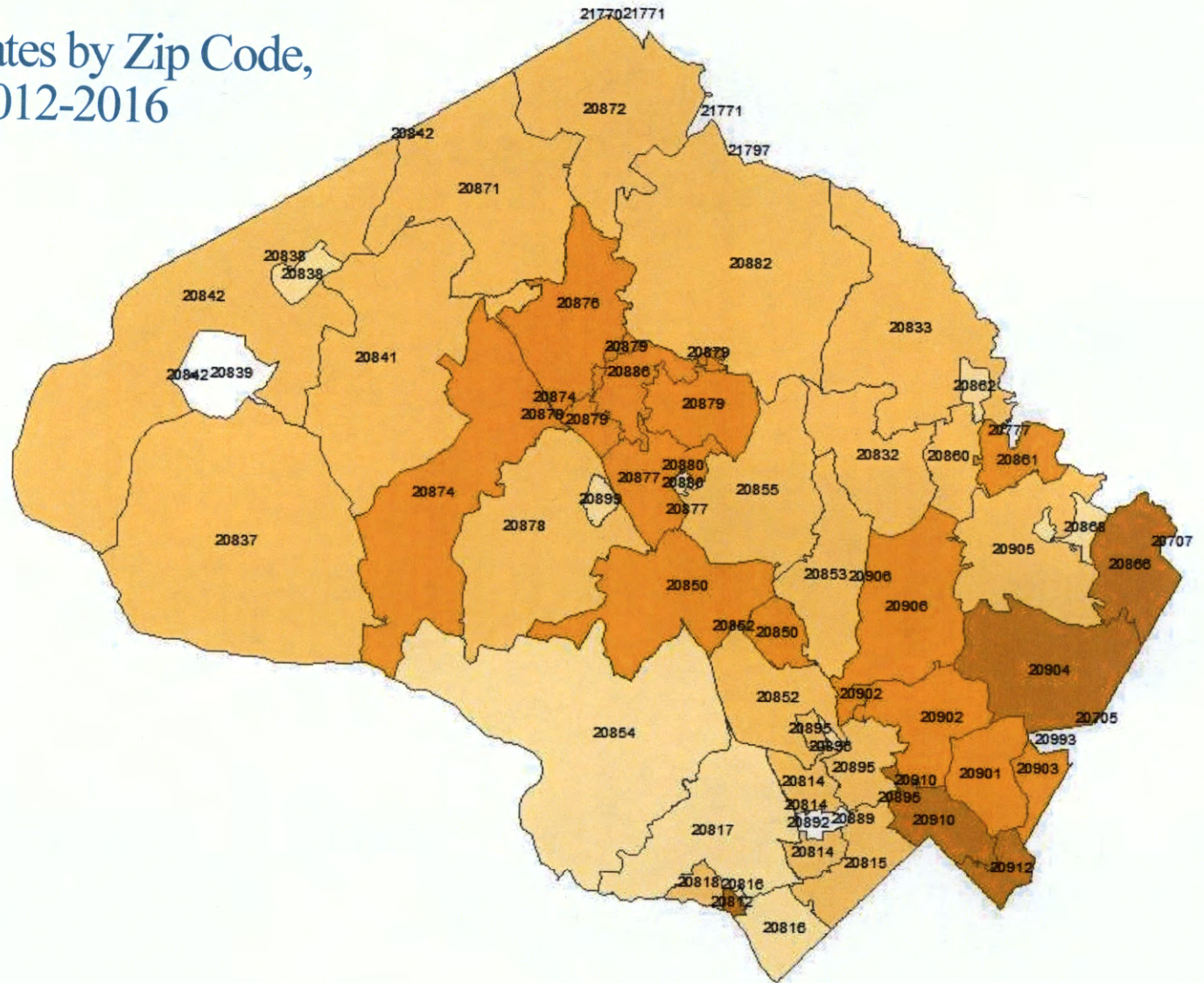
Gonorrhea Incidence Rates by Sex and Race/Ethnicity, Montgomery County, 2012-2016



Gonorrhea Incidence Rates by Age, Montgomery County, 2012-2016

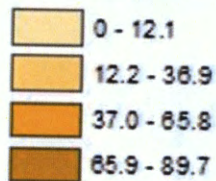


Gonorrhea Incidence Rates by Zip Code, Montgomery County, 2012-2016



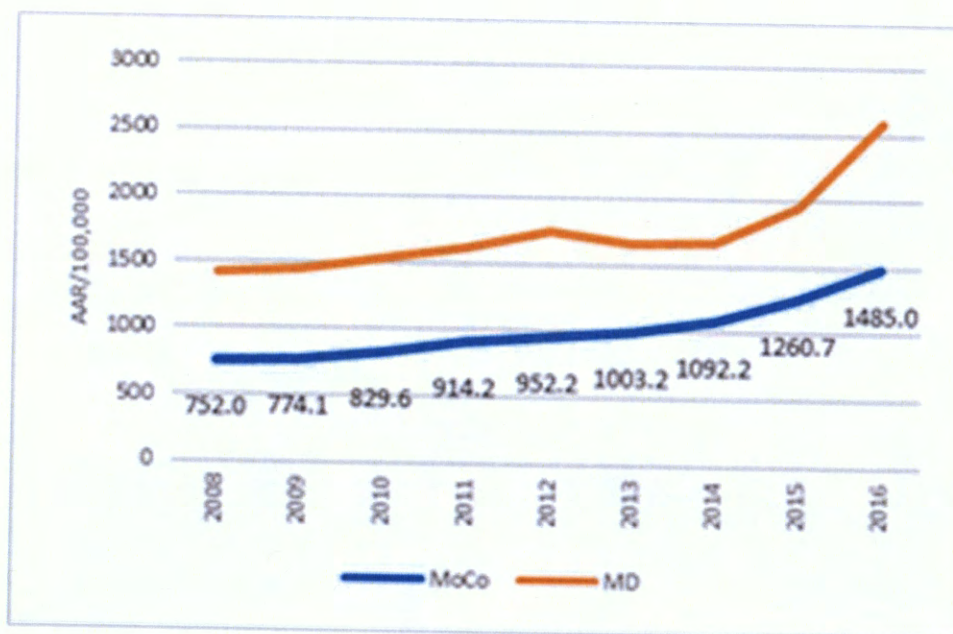
County Rate=43.9/100,000

Rate/100,000



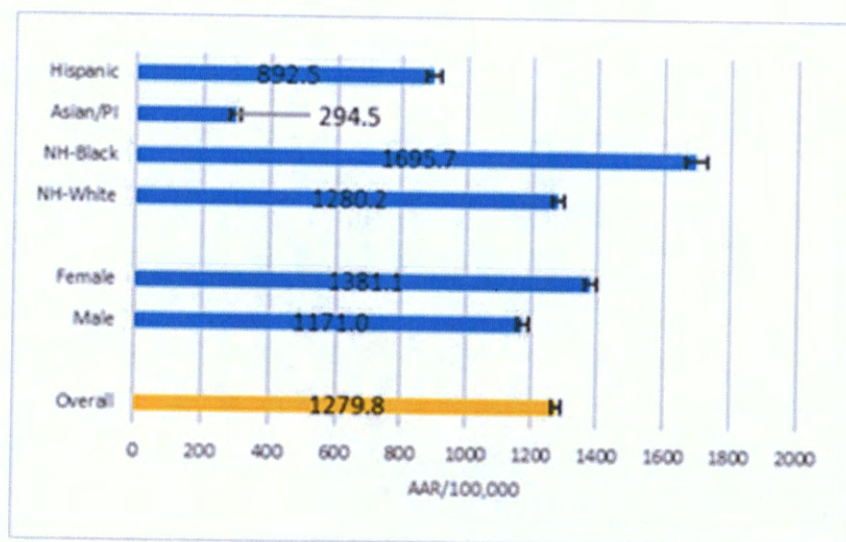
Behavioral Health

Mental Health ER Visit Age-Adjusted Rates,
Montgomery County and Maryland, 2008-2016

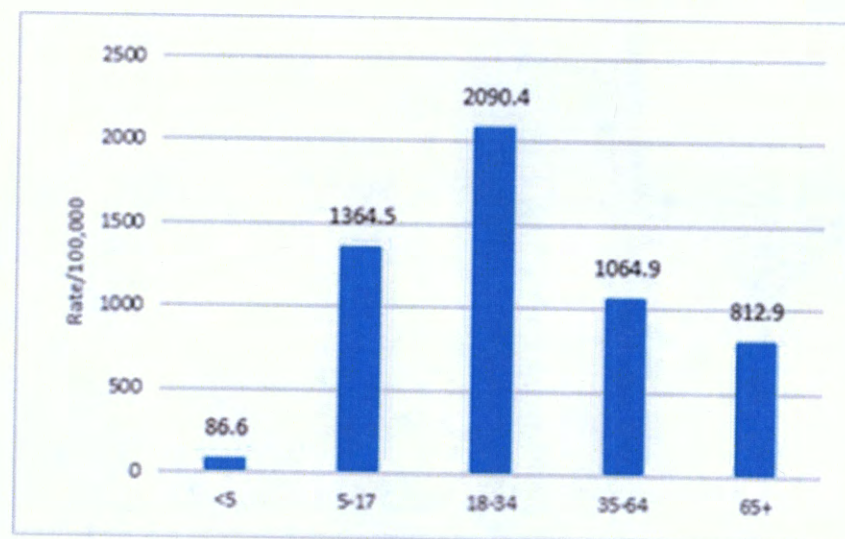


Behavioral Health

Mental Health Related ER Visit Age-Adjusted Rates by Sex and Race/Ethnicity, Montgomery County, 2014-2016



Mental Health Related ER Visit Rates by Age, Montgomery County, 2014-2016



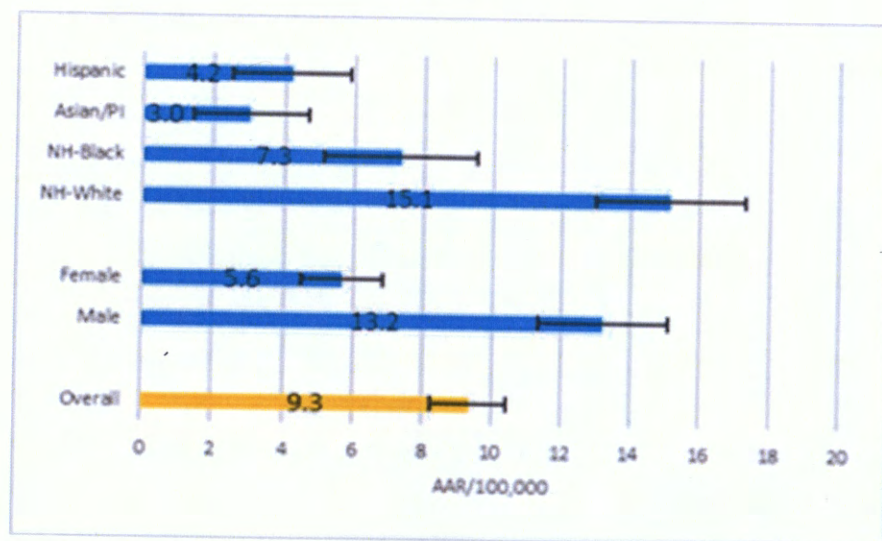
Behavioral Health

Drug-induced Age-Adjusted Mortality Rate,
Montgomery County, 2008-2016

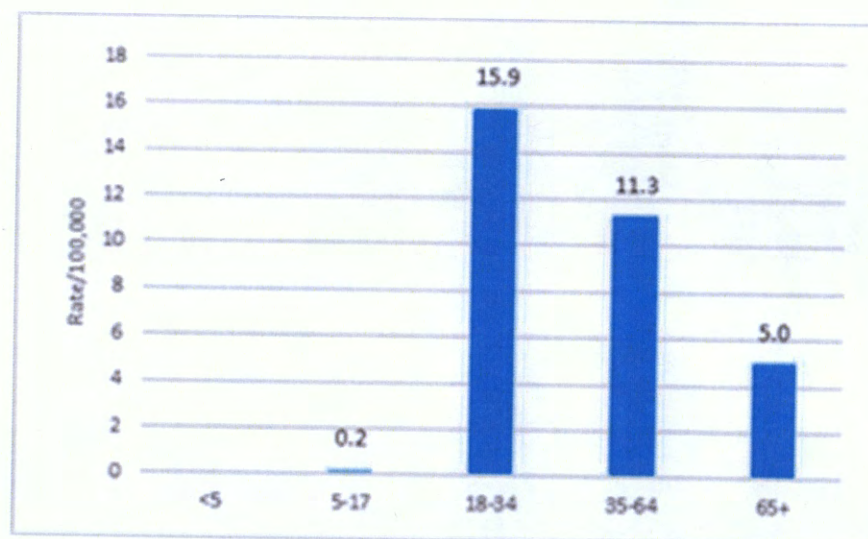


Behavioral Health

Drug-induced Age-Adjusted Mortality Rates by Sex and Race/Ethnicity, Montgomery County, 2014-2016





Drug-induced Mortality Rates by Age, Montgomery County, 2014-2016





Drug-induced Age-Adjusted Mortality Rates by Census Tract, Montgomery County, 2014-2016

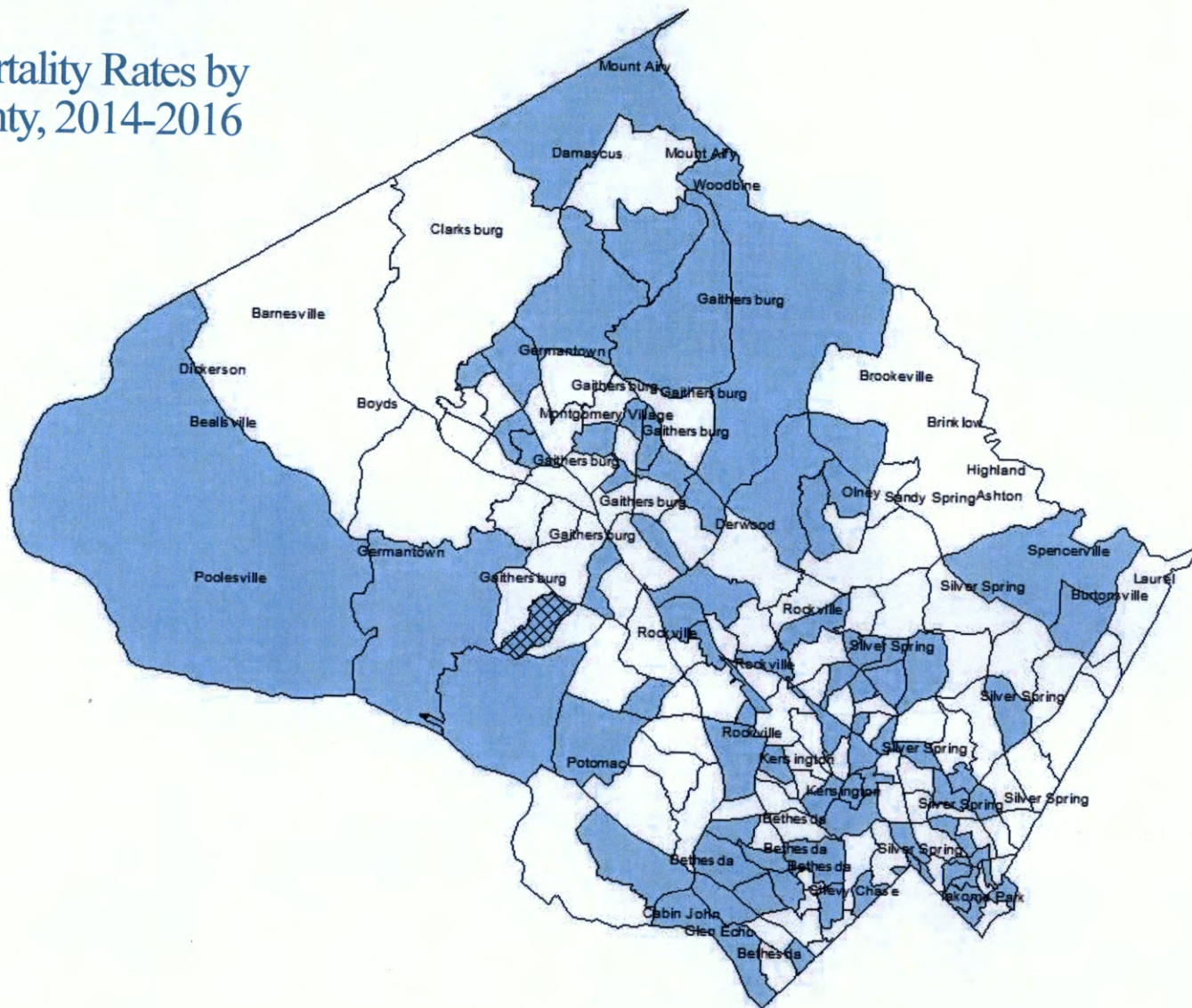
County Rate=10.2/100,000

County comparison (p=0.05)

-  No difference
-  Significantly higher

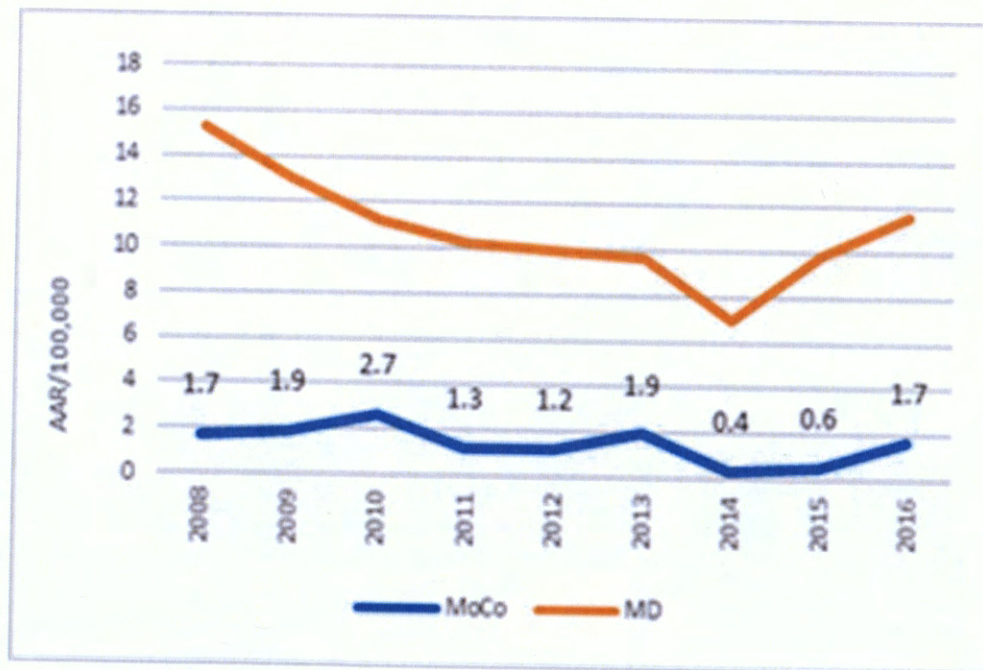
AAR/100,000

-  ← County rate
-  > County rate



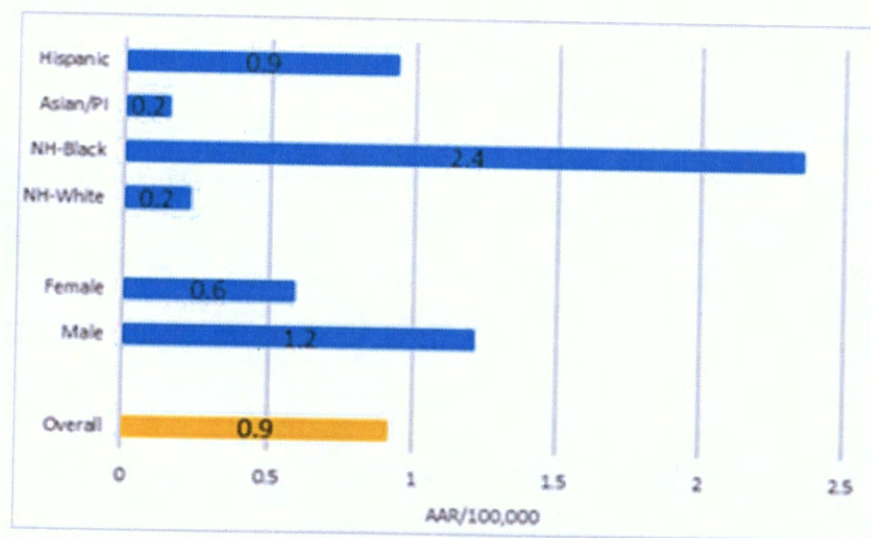
Injuries

Firearm Related Hospitalization Age-Adjusted Rates, Montgomery County and Maryland, 2008-2016

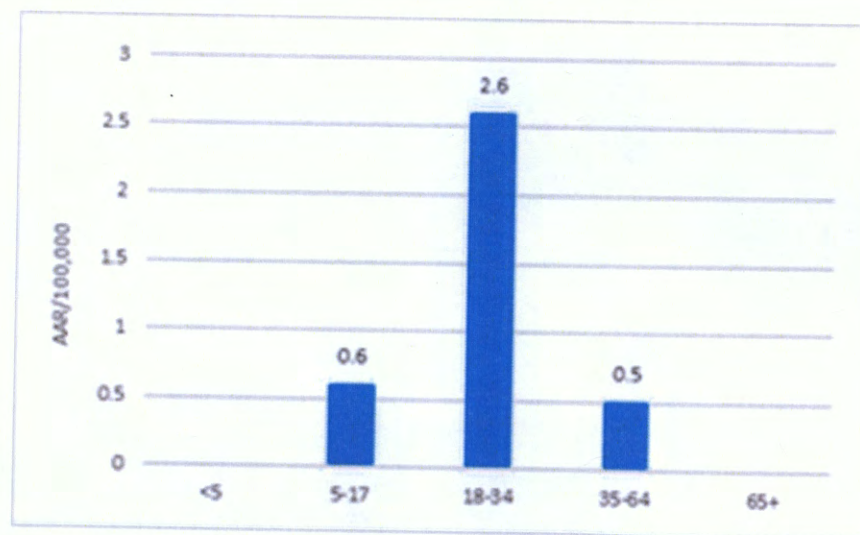


Injuries

Firearm Related Hospitalization Age-Adjusted Rates by Sex and Race/Ethnicity, Montgomery County, 2014-2016



Firearm Related Hospitalization Rates by Age, Montgomery County, 2014-2016

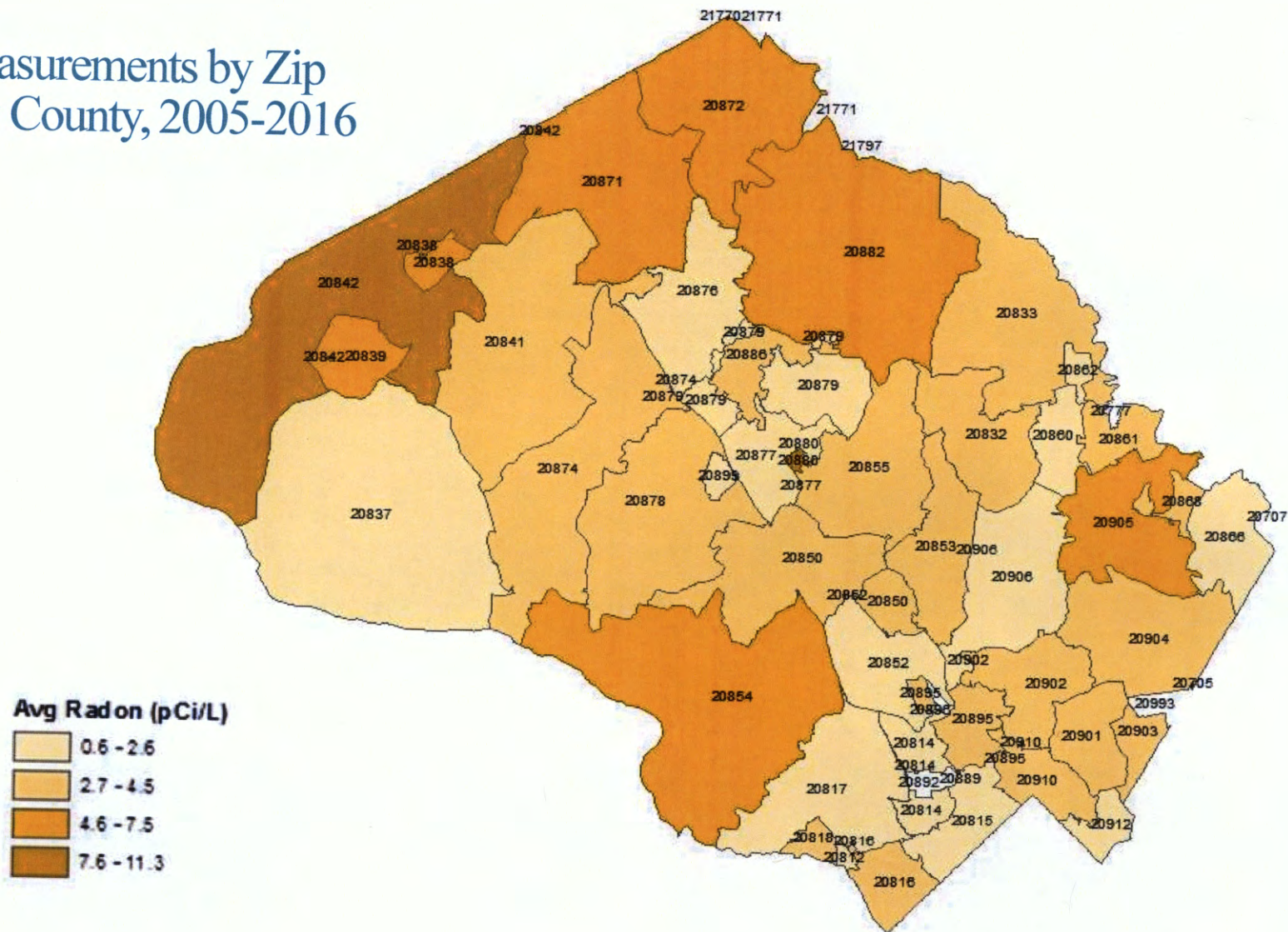


Environmental Health

Table 32. Children Age 0-6 Tested for Blood Lead Level, Montgomery County and Maryland, 2016

			MoCo	MD
Children Tested	Age 0-6	Total	94,806	541,994
		No Tested	22,392	118,619
		% Tested	23.6	21.9
	Age 1-2	Total	31,877	182,177
		No Tested	13,766	81,125
		% Tested	43.2	44.5
Blood Lead Level 5-9 ug/dL				
Age 0-6	No	180	1,729	
	%	0.8	1.5	
Blood Lead Level >=10 ug/dL				
Age 0-6	No	31	355	
	%	0.1	0.3	

Average Radon Measurements by Zip Code, Montgomery County, 2005-2016



Conclusion

Comparisons with MD and U.S., and Benchmarking with HP 2020

Trends over Time, Population Subgroups, and Geographic Areas

Population Health Surveillance, Program Effectiveness Evaluation, and Planning and Resource Allocation

Future Efforts