



Research Infrastructure in Minority Institutions (RIMI) Health Disparities Database

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Research Infrastructure in Minority Institutions (RIMI)

- ❖ The NIH National Center on Minority Health and Health Disparities (NCMHD) awarded a Research Infrastructure in Minority Institutions (RIMI) Program award to SSU for its “Strengthening Research Collaborations in Health Disparities” program (September 2009 – May 2014, \$3,978,129).
- ❖ RIMI is aimed at strengthening the research capacity and infrastructure of SSU to promote minority health and eliminate health disparities within Savannah and the surrounding areas.
- ❖ RIMI program focuses on developing faculty research capabilities and professional development in areas of health disparities research; enhancing academic and experimental opportunities for students; building the University’s research infrastructure including development of a regional health disparities database; and sustaining community partnerships and effective community outreach to link SSU public health research to Savannah area health needs and policy.




Health Disparities Database

- ❖ **Develop a regional health disparities database that compile spatial and demographic data on health disparities of the population of the Chatham County**
- ❖ **Disseminate health disparities database in support of health disparity research by SSU faculty members and others**



Spatial and demographic data on health disparities of the population of Chatham County were compiled using the following data sources:

- ❖ **The OASIS: A web-based tool for public health and public policy data analysis and can be accessed at <http://oasis.state.ga.us/>. The service is provided by the Georgia Department of Community Health, Division of Public Health, Office of Health Information and Policy.**
- ❖ **Health data from the Office of Health Information and Policy of the Georgia Department of Human Resources**



The health disparities data have been retrieved from the OASIS including mortality, morbidity and Emergency Room visits measures from 2002 to 2010 by 4 (four) categories:

- ❖ Gender:
 - Male and Female
- ❖ Race:
 - White and African American
- ❖ Age groups:
 - 30-44 years old
 - 45-59 years old
 - 60-74 years old
 - 75 years old and older
- ❖ Payor (ER Visits only)
 - Medicaid
 - Peach Care
 - Medicare
 - Private Insurance
 - Self Pay
 - Other/Unknown



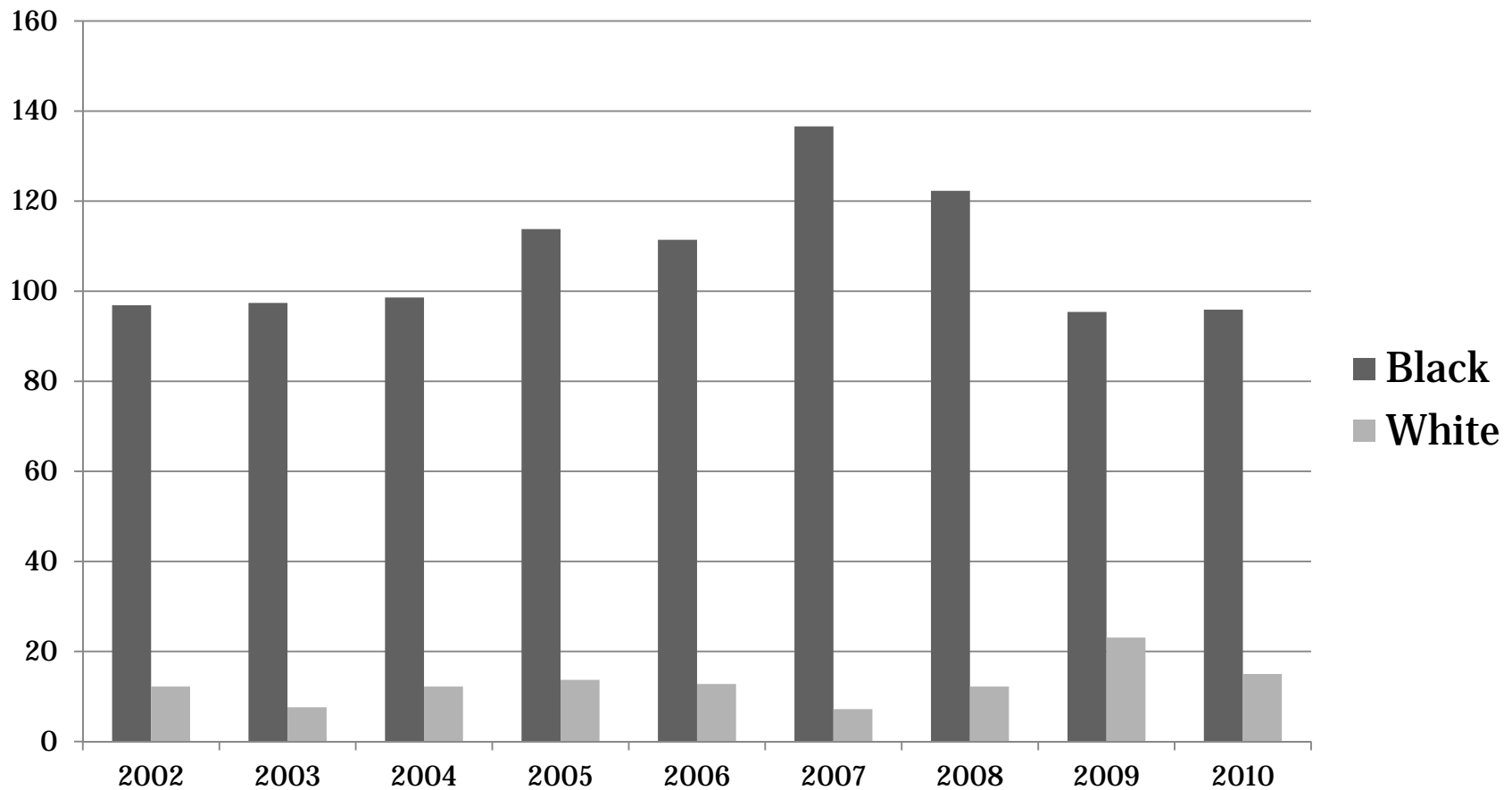
The health disparities data have been retrieved from the OASIS for 22 diseases:

- 1) Major Cardiovascular disease
- 2) High blood pressure
- 3) Obstructive heart disease
- 4) Stroke
- 5) Colon cancer
- 6) Prostate cancer
- 7) Lung cancer
- 8) HIV
- 9) Diabetes
- 10) Respiratory disease
- 11) Cancer
- 12) Breast cancer
- 13) Asthma
- 14) Bronchitis
- 15) Emphysema
- 16) Flu
- 17) Pneumonia
- 18) Blood Poisoning
- 19) Alzheimer
- 20) Parkinson
- 21) Leukemia
- 22) Pancreatic cancer



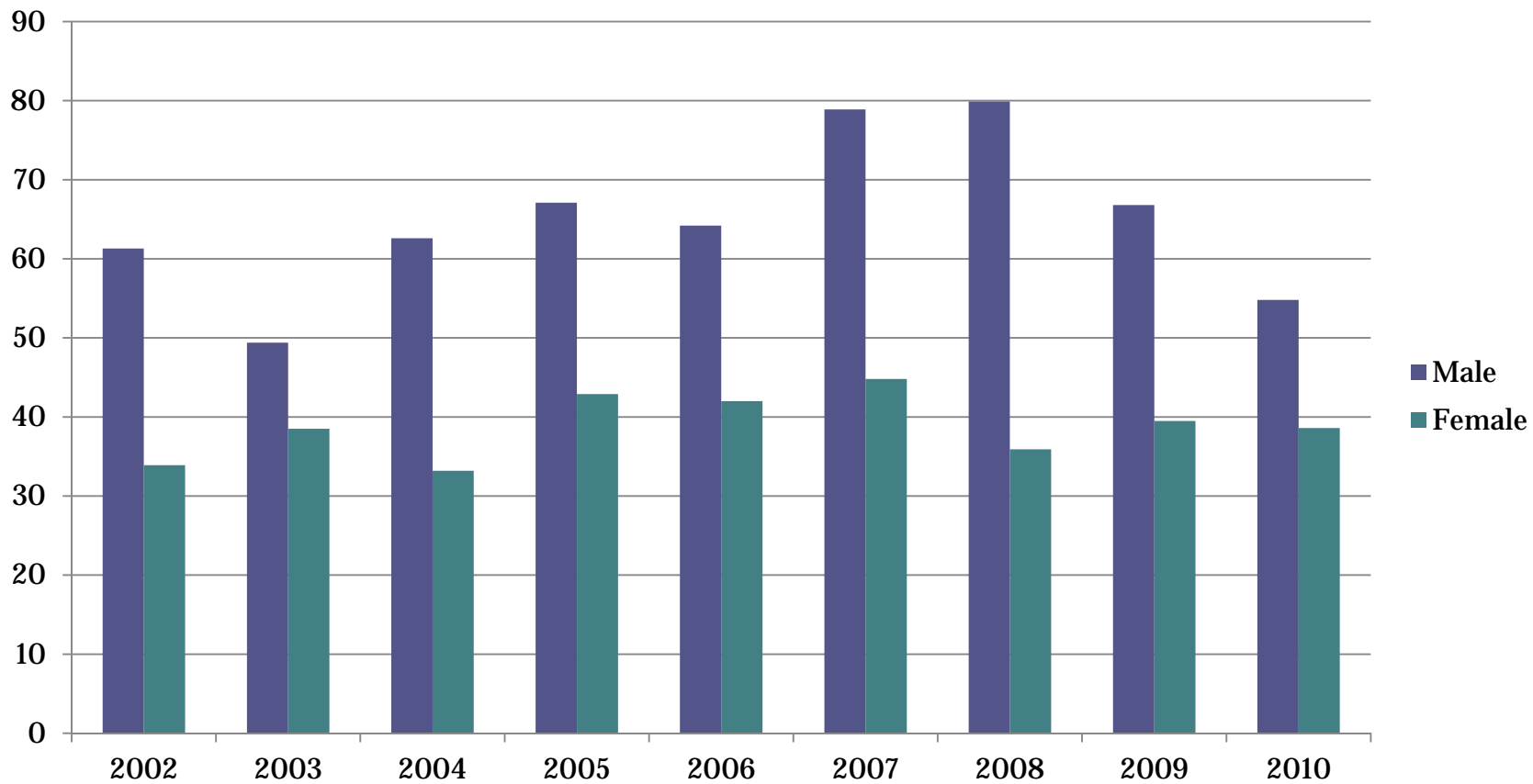
Example:
HIV

Morbidity Rate of HIV by Race in Chatham County



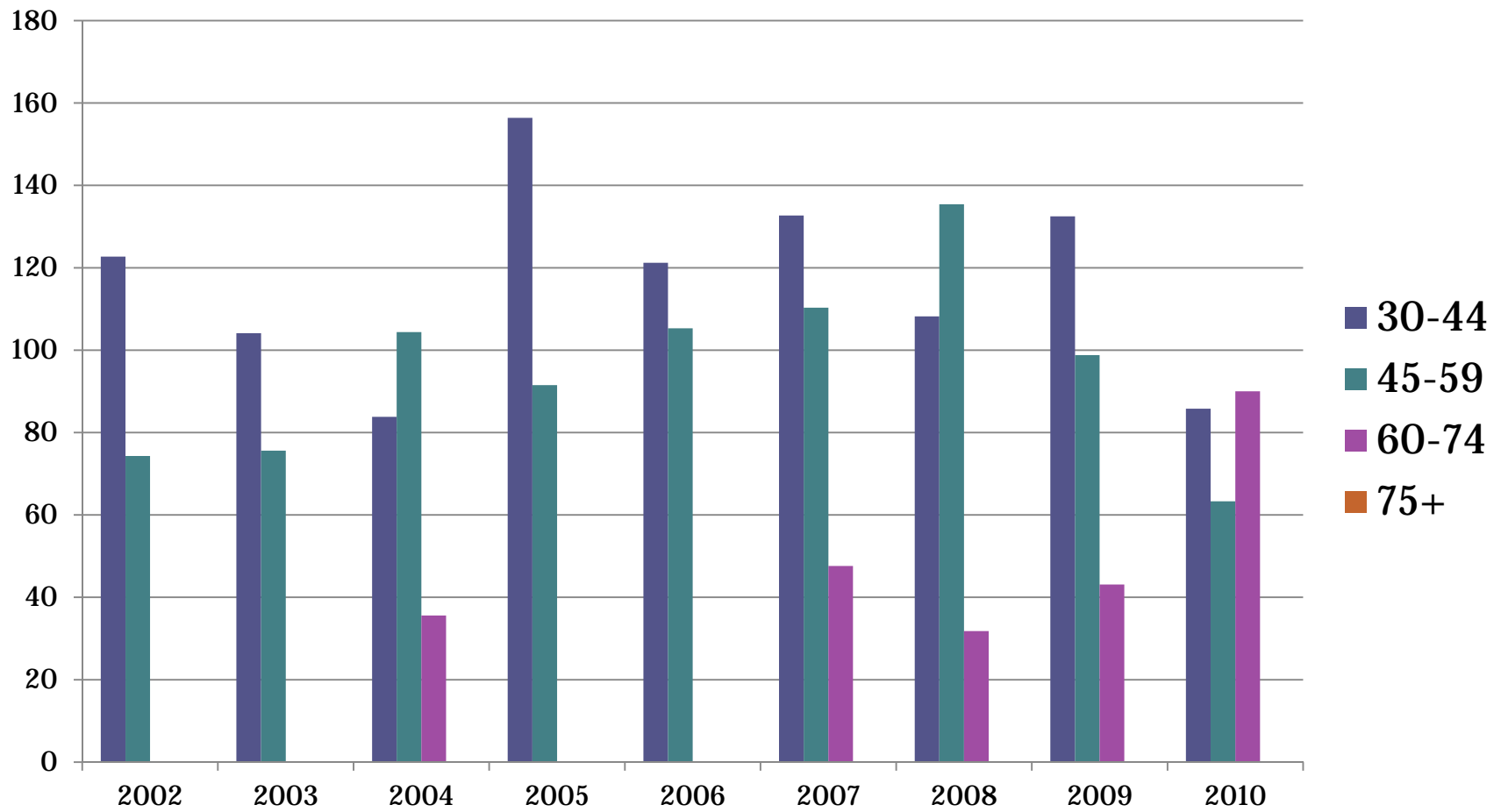
Rates are per 100,000 population

Morbidity Rate of HIV by Gender in Chatham County



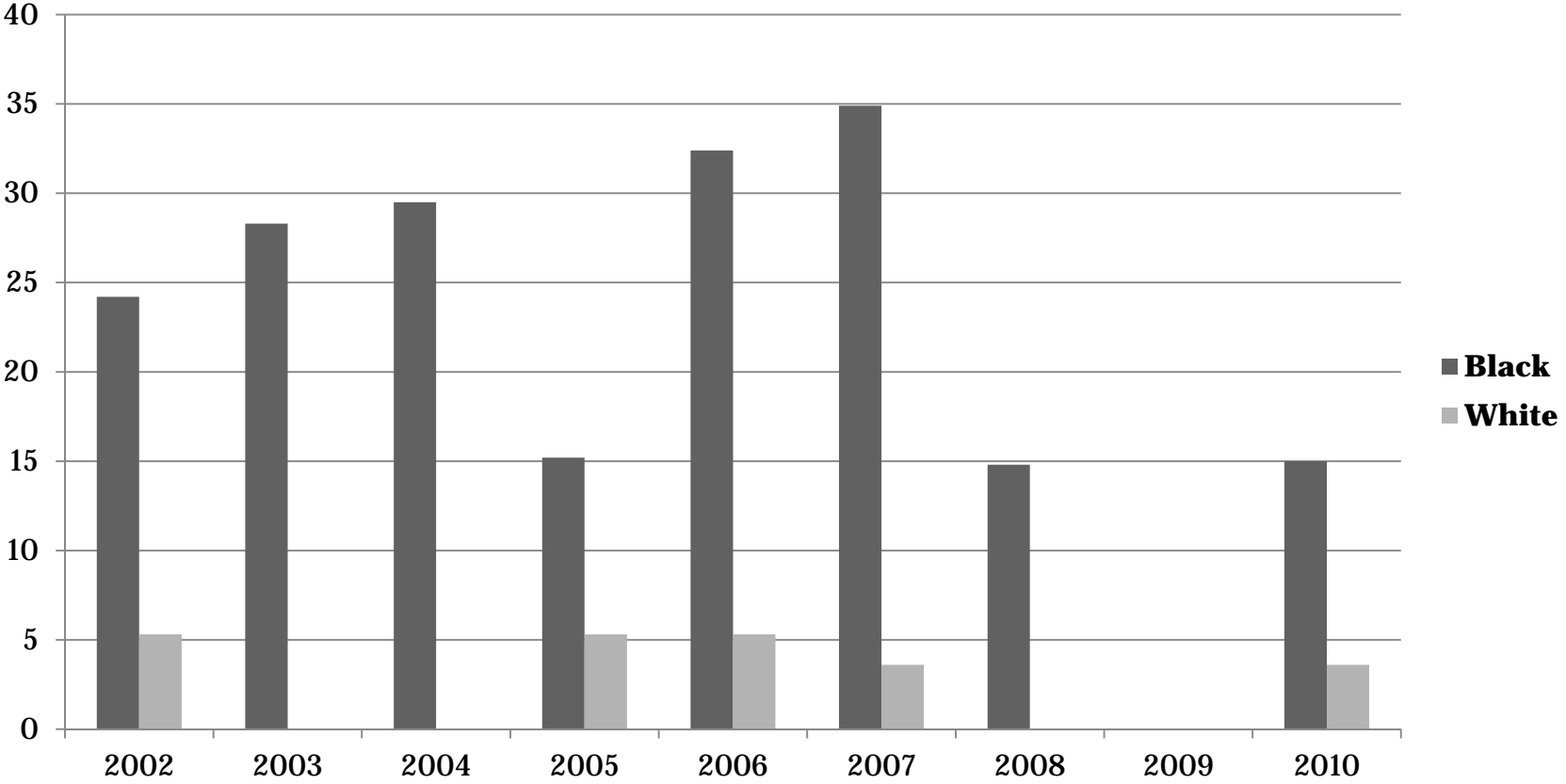
Rates are per 100,000 population

Morbidity Rate of HIV by Age Group in Chatham County



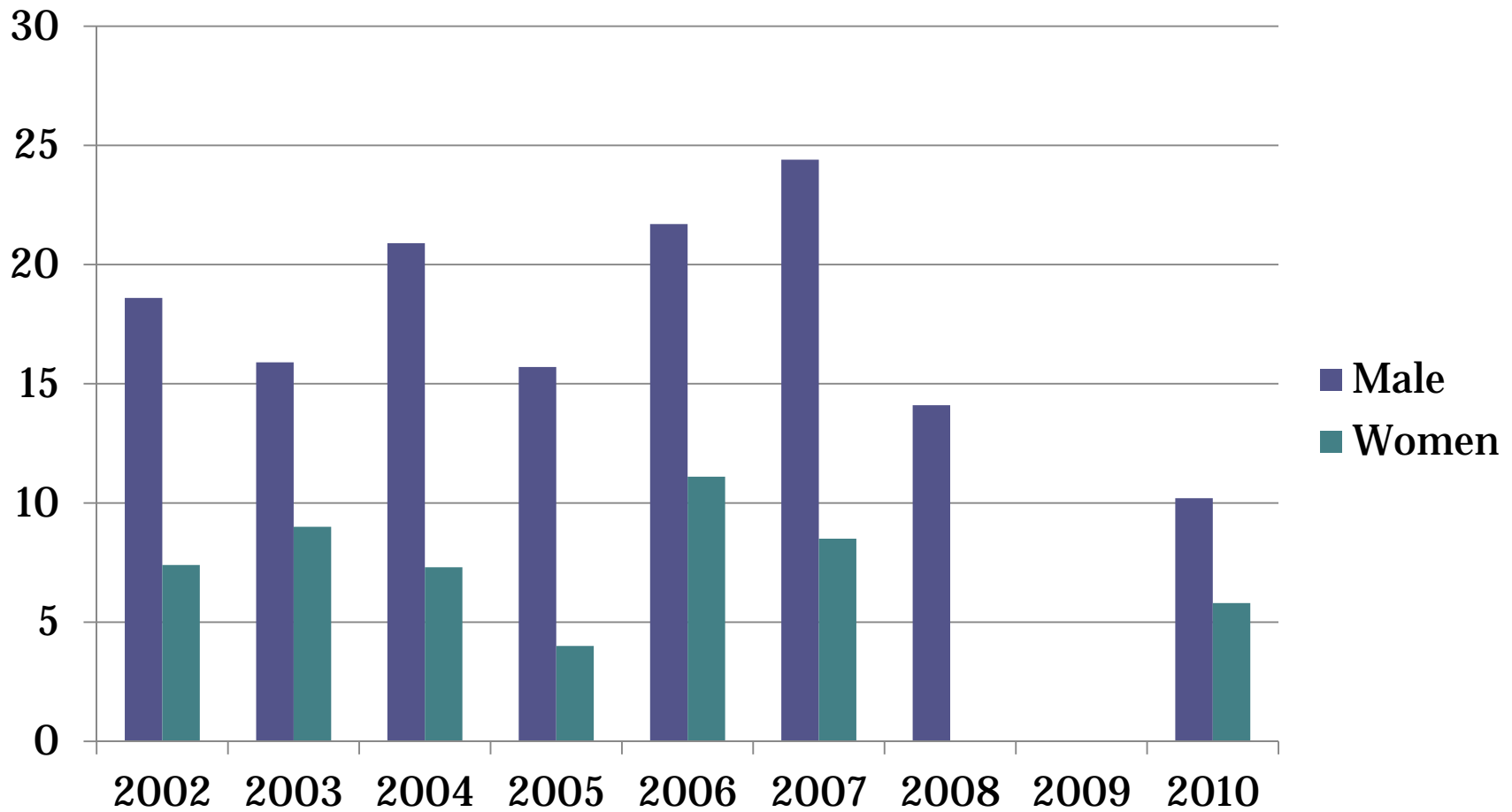
Rates are per 100,000 population

Mortality Rate of HIV by Race in Chatham County



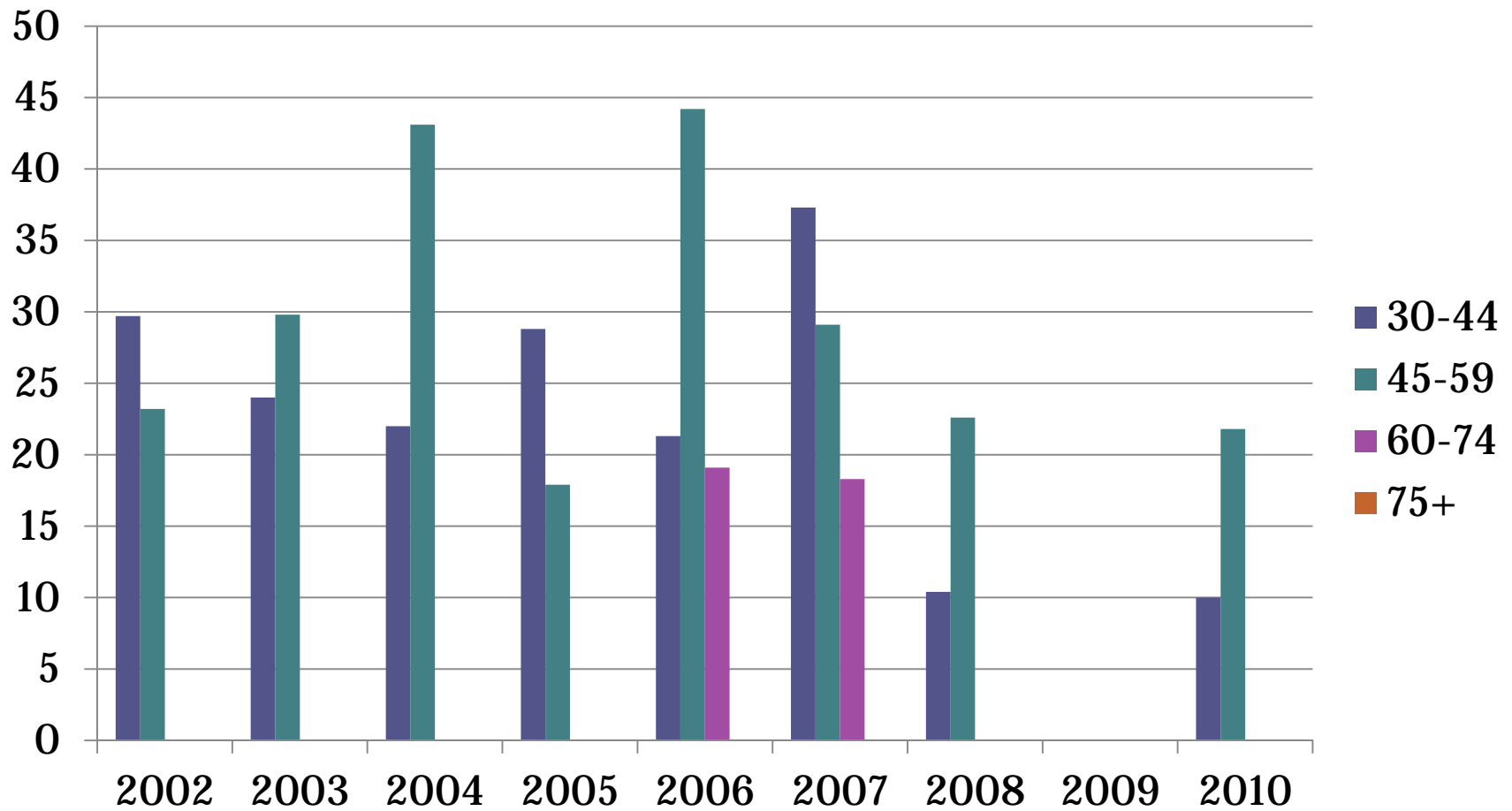
Rates are per 100,000 population

Mortality Rate of HIV by Gender in Chatham County



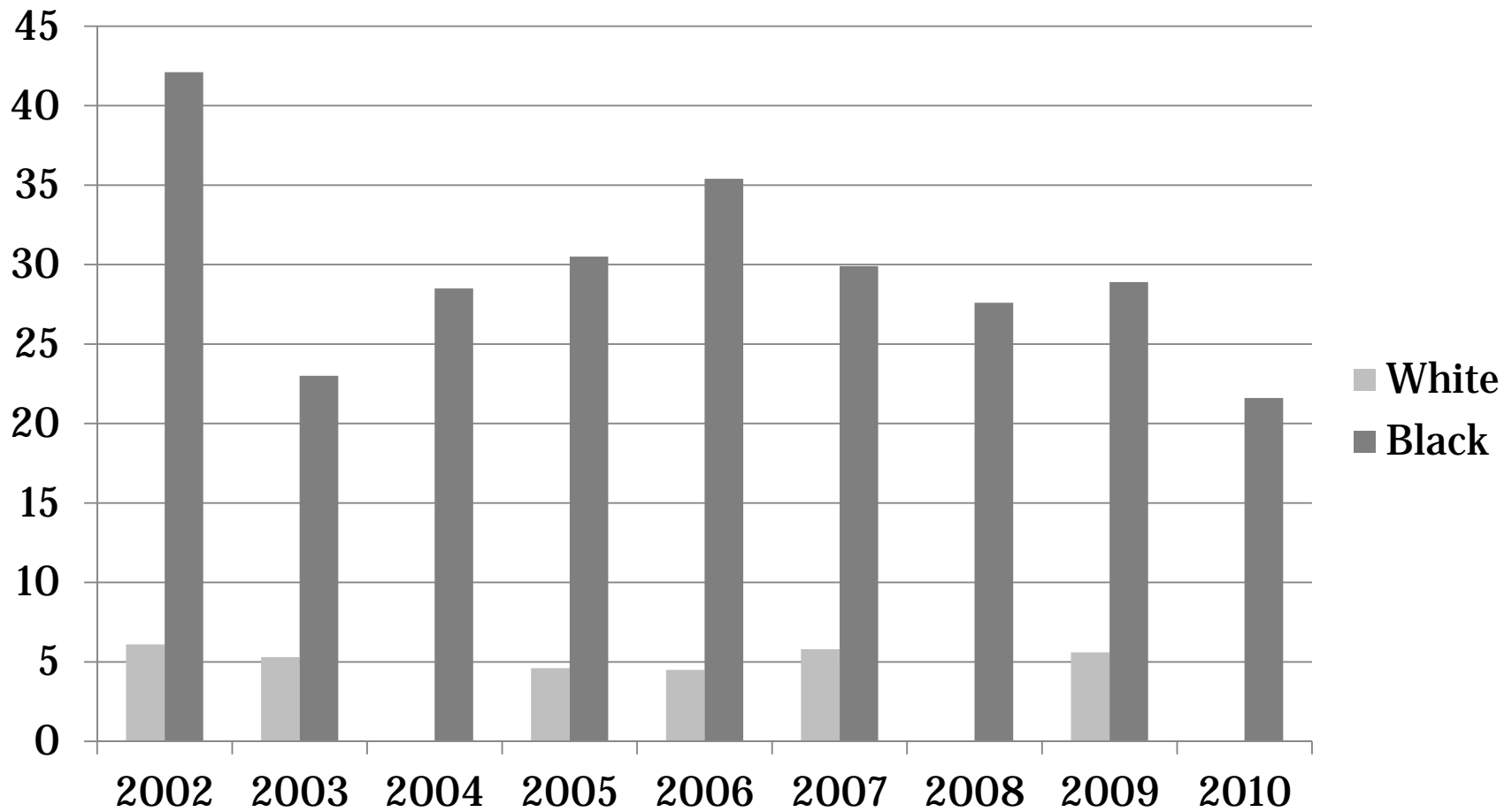
Rates are per 100,000 population

Mortality Rate of HIV by Age Group in Chatham County



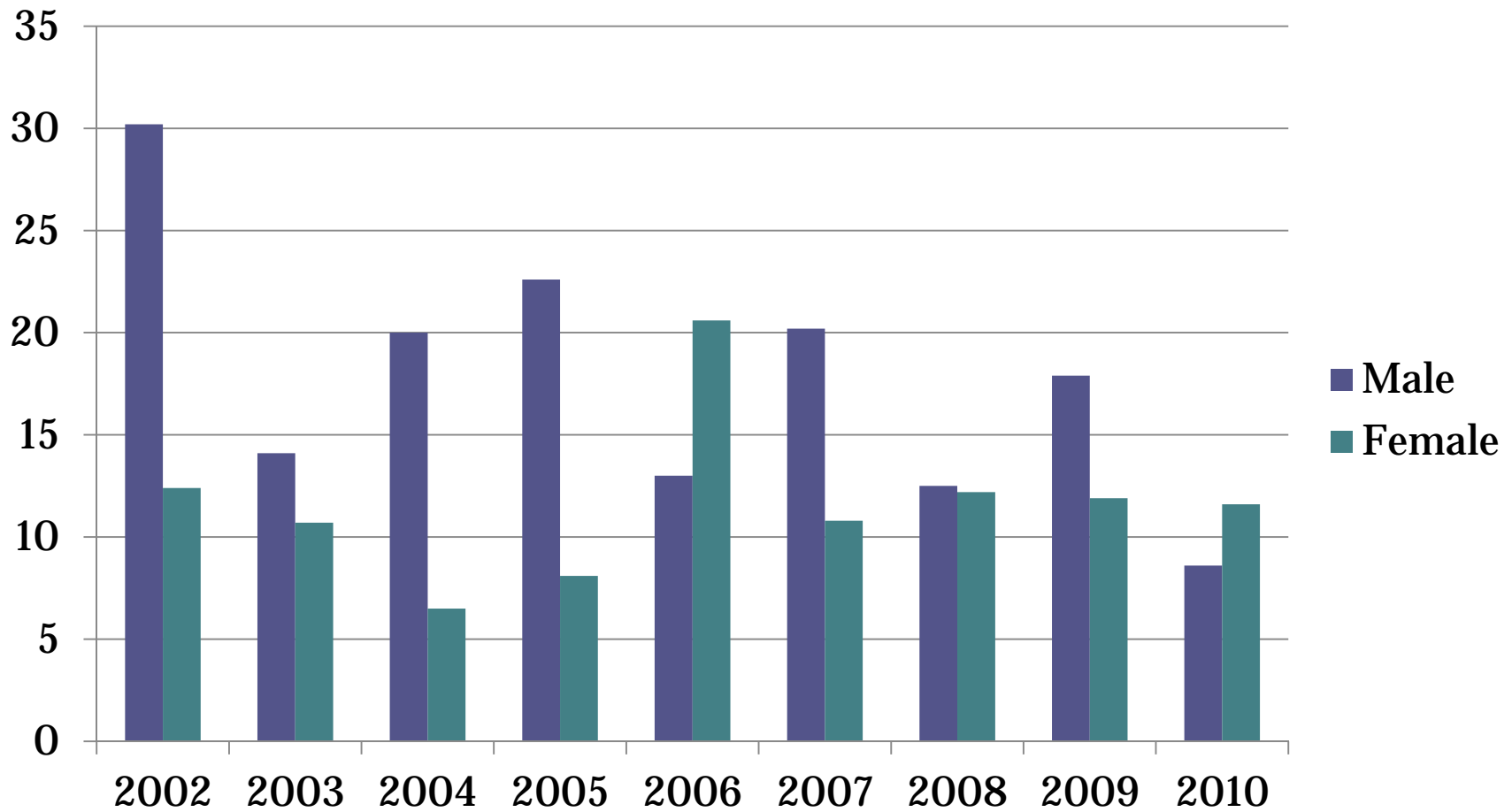
Rates are per 100,000 population

ER Visit by Race in Chatham County



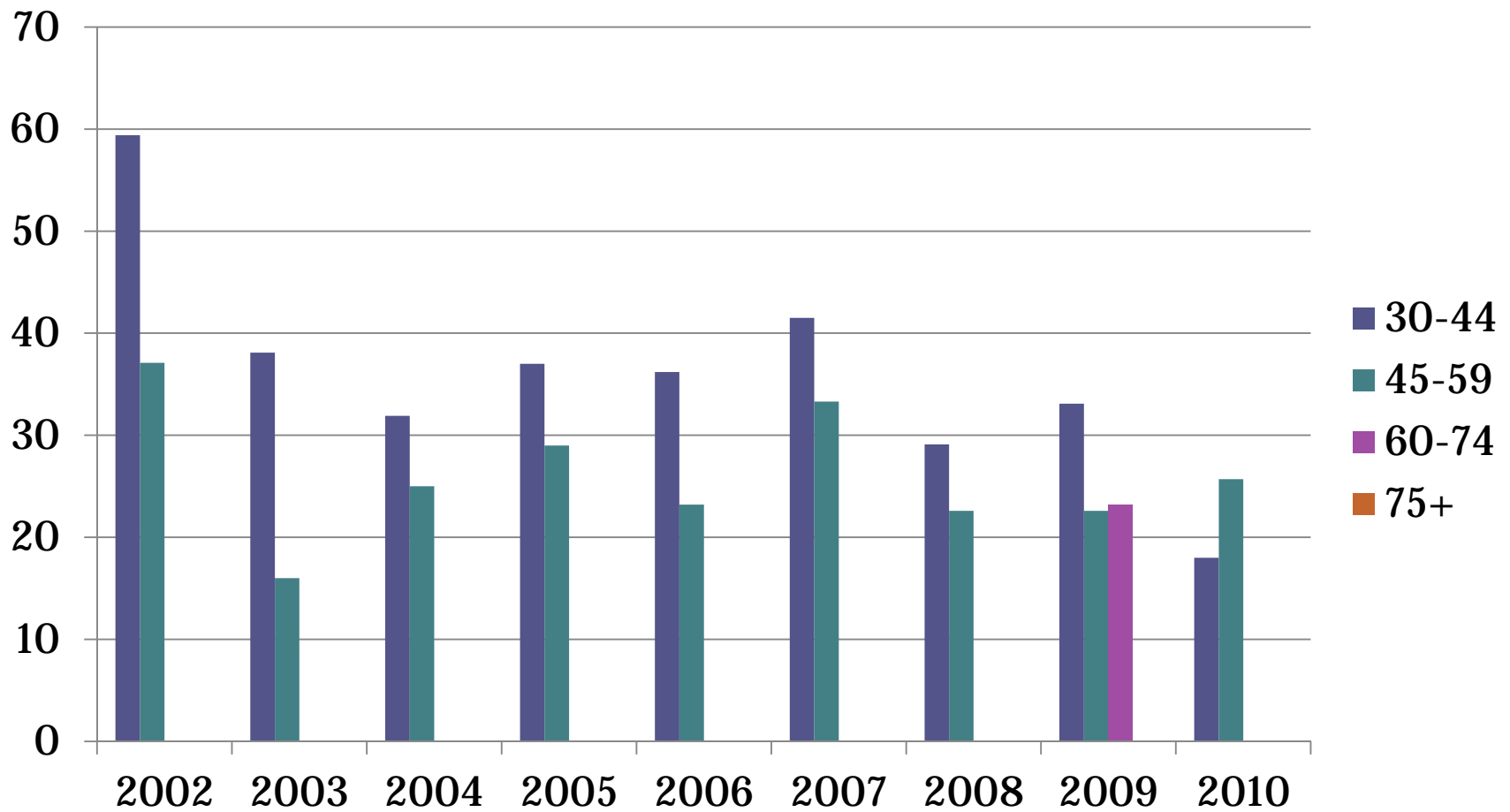
Rates are per 100,000 population

ER Visit of HIV by Gender in Chatham County



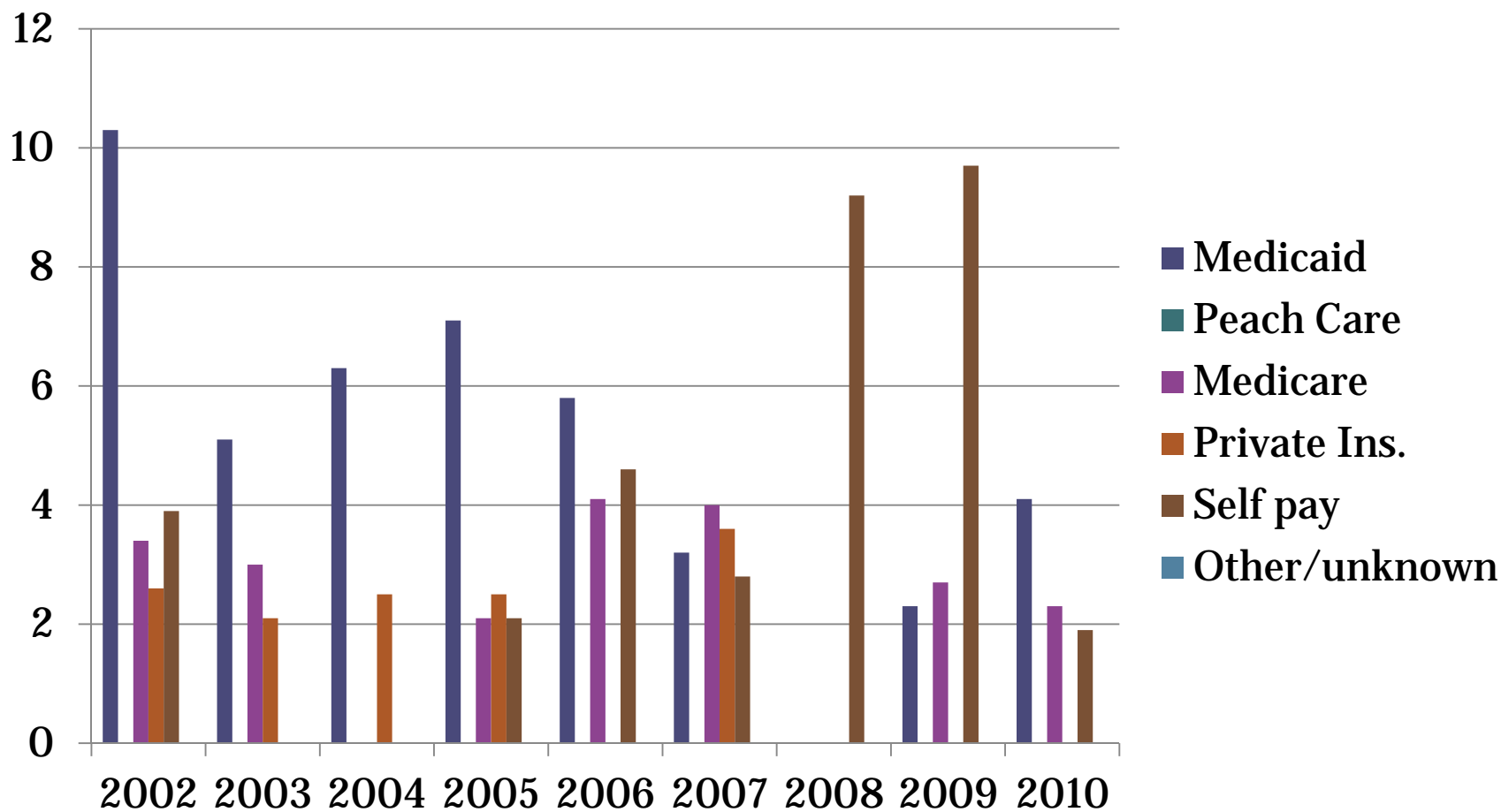
Rates are per 100,000 population

ER Visit of HIV by Age Group in Chatham County



Rates are per 100,000 population

ER Visit of HIV by Payor in Chatham County



Rates are per 100,000 population



Exploring the Relationship between Health Disparities and Characteristics of Neighborhoods: The Case of Cardiovascular Disease in Chatham County

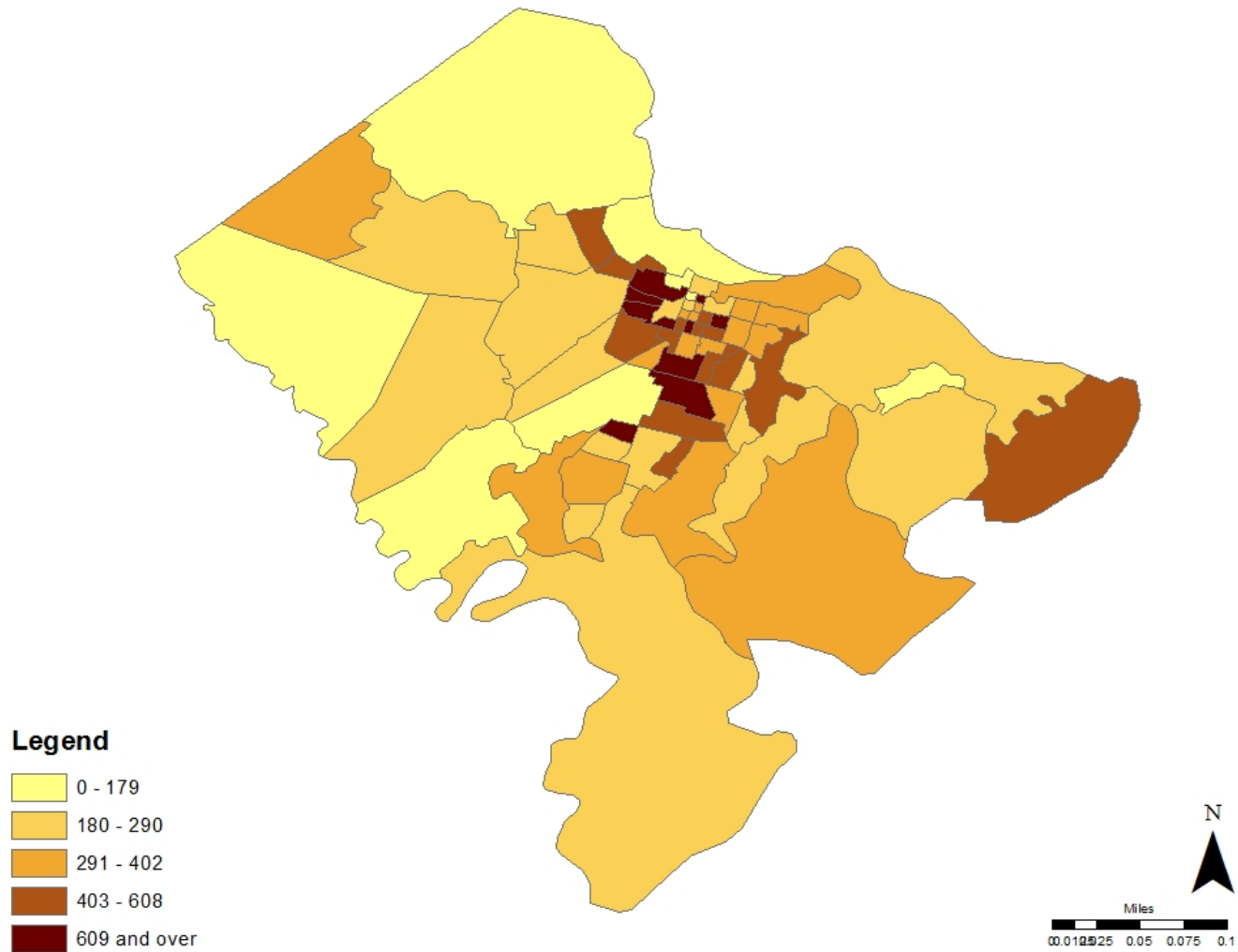
Purpose and Data

- This study is to map the incidence of cardiovascular diseases and identify the demographic and socioeconomic factors of neighborhoods associated with the distribution of cardiovascular disease incidences in Chatham County, GA
- Mortality data of cardiovascular diseases from 2001 to 2007 (GA Department of Public Health)
- 2006-2010 [American Community Survey](#)

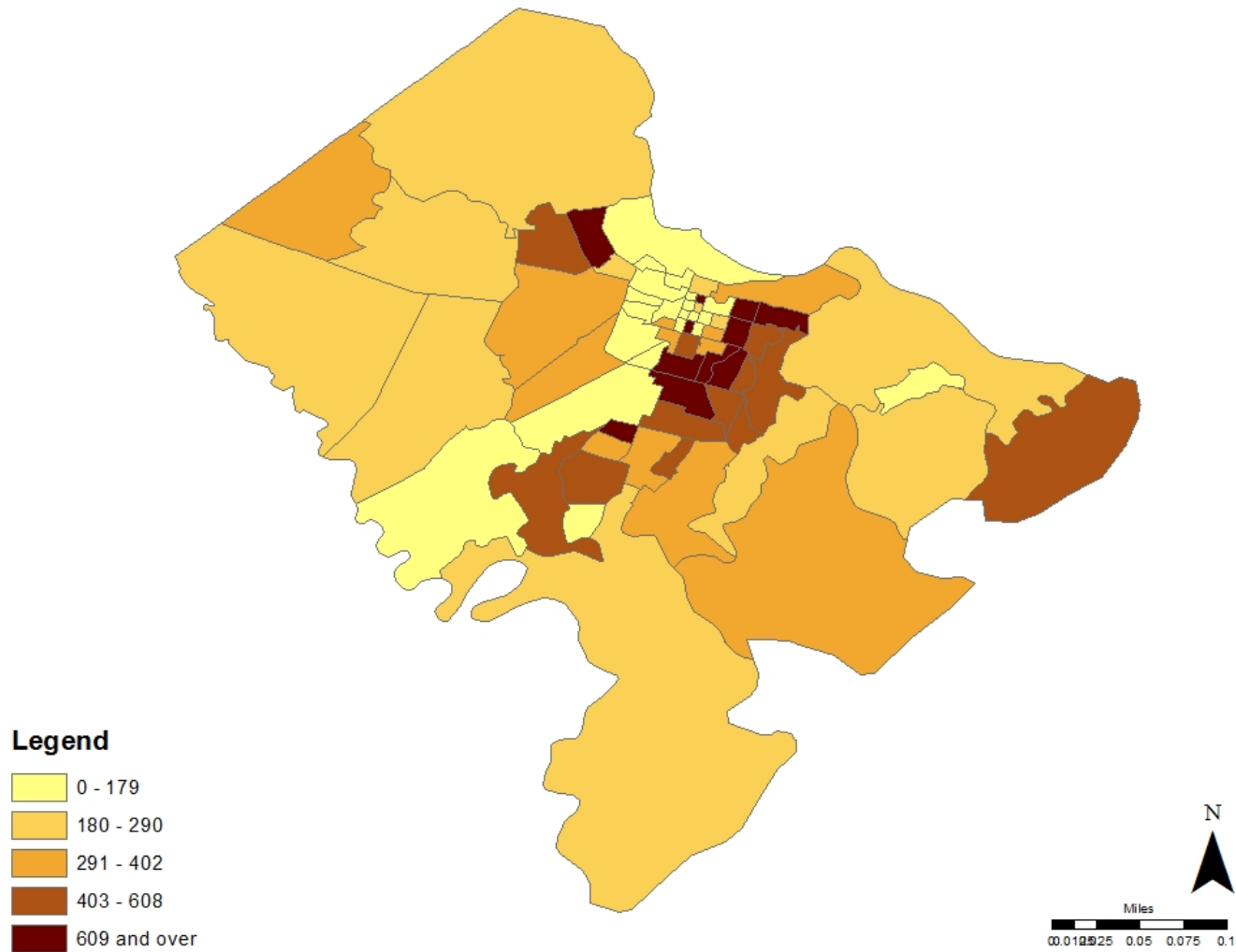
Neighborhood Variables

- Below poverty level
- Unemployed people
- 65 years and older
- Median age
- African American
- People without high school diploma
- Walk to work
- Median household income
- House built in 1979 or earlier
- Median housing value
- Lacking plumbing
- Lacking kitchen

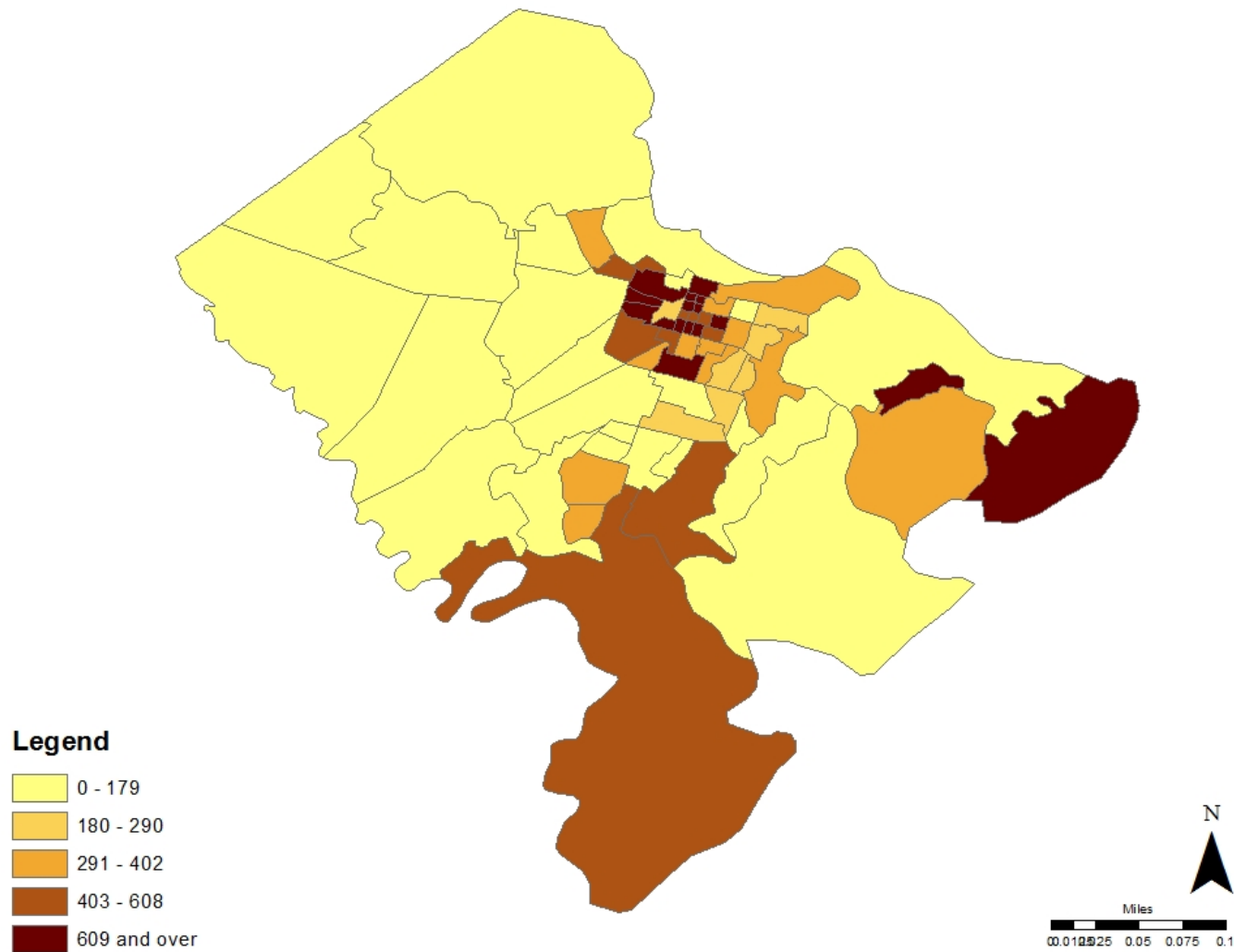
Mortality Rates of Cardiovascular Diseases



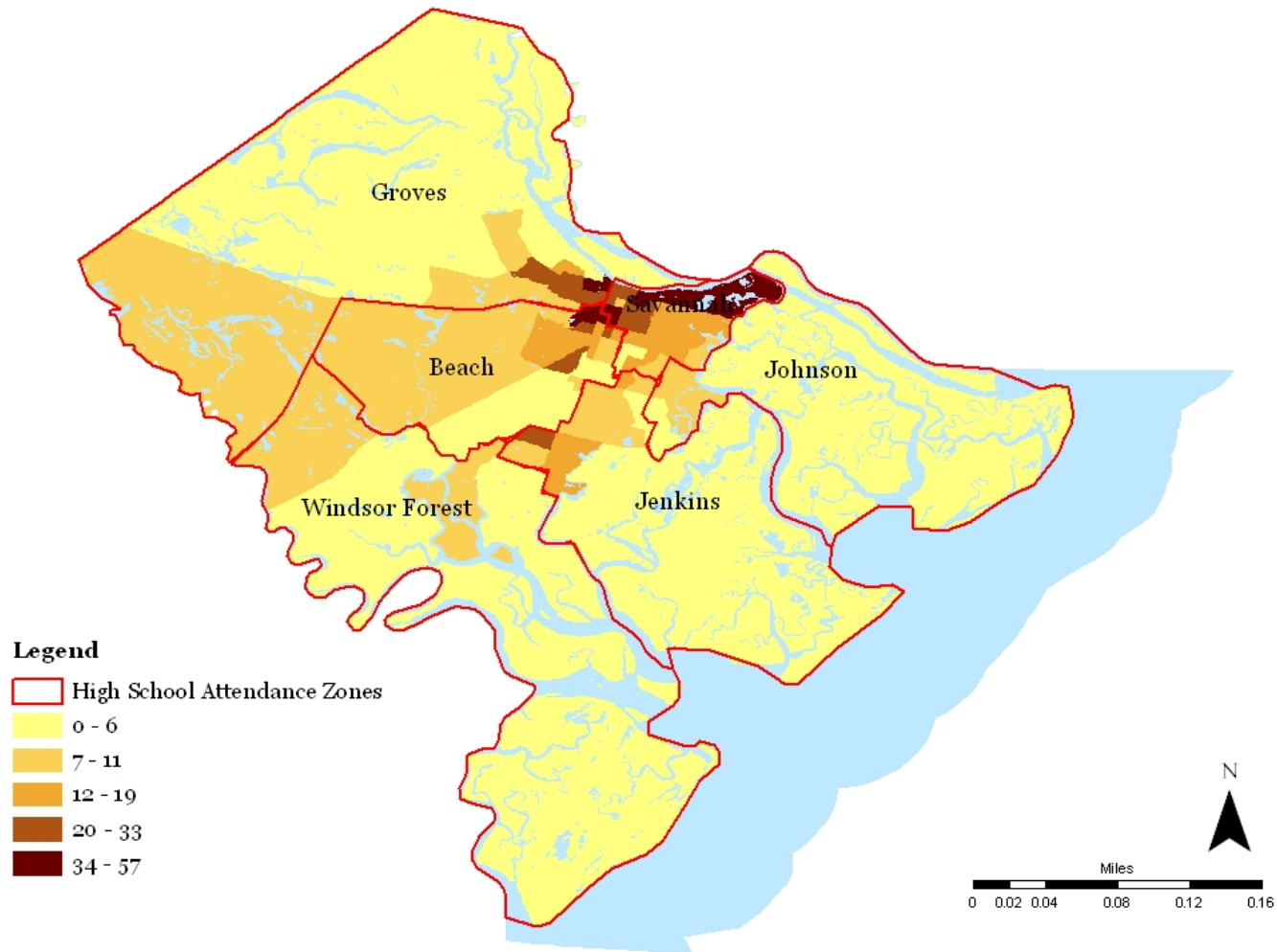
Mortality Rates of Cardiovascular Diseases: White



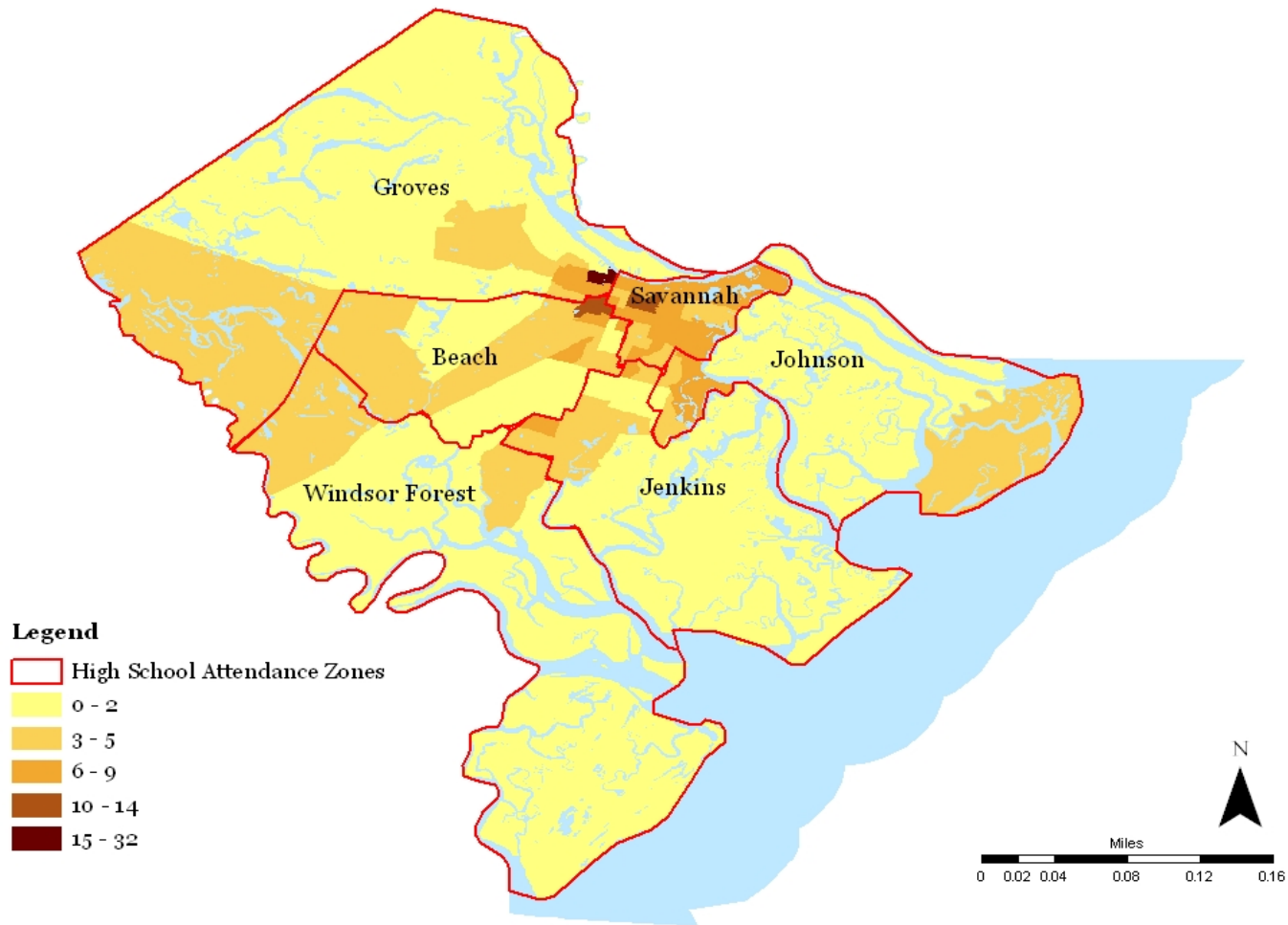
Mortality Rates of Cardiovascular Diseases: African American



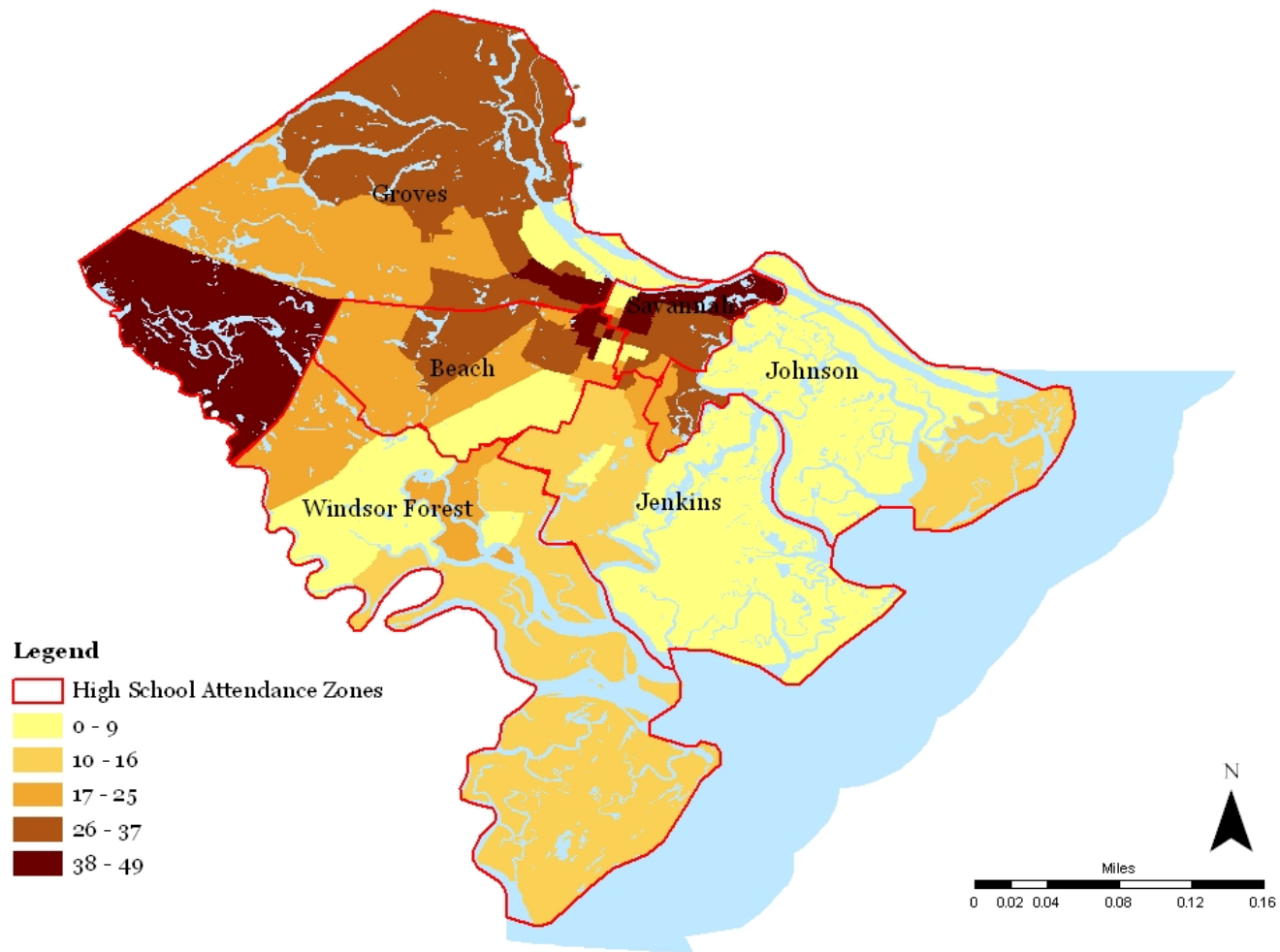
Proportion of people living below poverty level



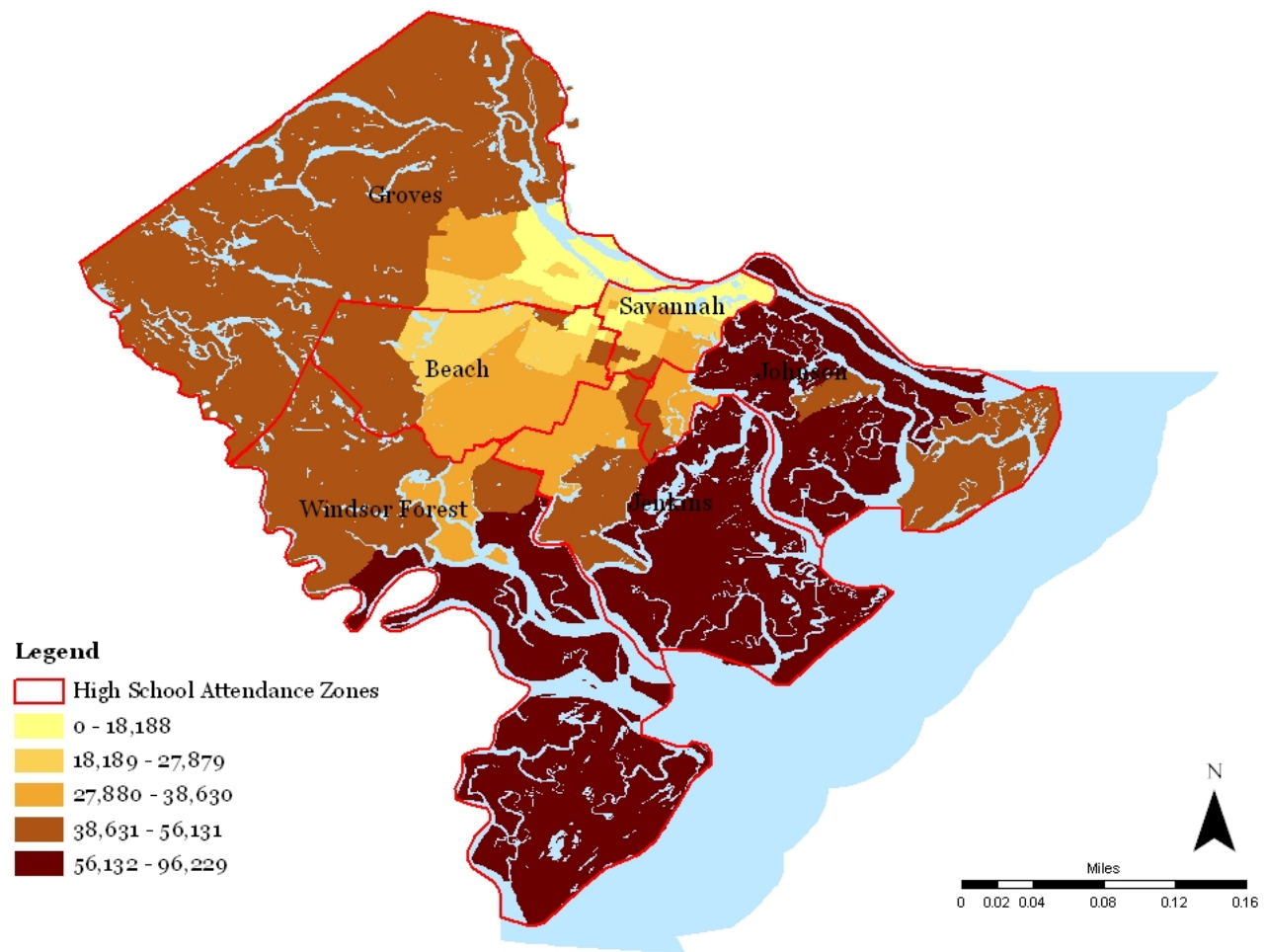
Proportion of unemployed people



Proportion of people without high school diploma



Median Household Income



Results of Correlation Analysis

No.	Variables	MTOTAL	MWHITE	MBLACK
1.	Proportion of people living below poverty level	.154	-.106	.241*
2.	Median Household Income	-.283**	-.038	-.220
3.	Proportion of unemployed people	.220	-.108	.082
4.	Proportion of African American	.407***	.067	.058
5.	Proportion of people without high school diploma	.357**	-.026	.134
6.	Median age	.166	.139	-.049

* p<0.05; ** p<0.01; *** p<0.001

Results of Correlation Analysis

No.	Variables	MTOTAL	MWHITE	MBLACK
7.	Proportion of people 65 years and older	.400***	.192	.060
8.	Proportion of people walking to work	-.003	-.085	.519***
9.	House built in 1979 or earlier	.591***	.136	.484***
10.	Median housing value	.034	-.032	.232
11.	Proportion of housing units with lacking complete plumbing facilities	.393***	-.318**	.254*
12.	Proportion of housing units with lacking complete kitchen facilities	.295**	.176	.144

* p<0.05; ** p<0.01; *** p<0.001

Conclusion

- **Socioeconomic factors are associated with the incidence of cardiovascular disease particularly among African American**
- **Housing factors are significantly associated with the incidence of cardiovascular disease including housing units built before 1979 and housing unit with lacking plumbing facilities**



Website (in progress)

<http://linux.savannahstate.edu/rimiresearch/index.html>

[Health Disparities by Race](#)

[Health Disparities Georgia by Gender](#)

[Health Disparities by Age Group](#)

[Health Disparities by Payor](#)

[Blood Poisoning](#)

[Cancer](#)

[Breast Cancer](#)

[Colon Cancer](#)

[Lung Cancer](#)

[Prostate Cancer](#)

[Diabetes](#)

[HIV](#)

[Major Cardiovascular Diseases](#)

[High Blood Pressure](#)

[Obstructive Heart Disease](#)

[Stroke](#)

[Respiratory Diseases](#)

[Asthma](#)

[Bronchitis](#)

[Emphysema](#)

Overview

The RIMI program is envisioned as a sustained effort leading to the establishment of a long-term health disparity research center at SSU. One of the activities in the RIMI program is to develop a health disparity database for Savannah region. The development of health disparity database is to support on-going research efforts on health disparities by a growing number of faculty and students at Savannah State University. The health disparity database was collected and compiled from OASIS, a web-based tool for public health and public policy data analysis and available at <http://oasis.state.ga.us/>, for death rates, deduplicated discharges rates and Emergency Room visit for various causes in four categories including gender (male and female); race (White and Black); and age groups (30-44 years old; 45-59 years old; 60-74 years old; and 75 years old and older); and payor (Medicaid, PeachCare, Medicare, Private Insurance and Self-pay) in Chatham County and the state of Georgia. All data are collected from 2002 to the most recent year. The longitudinal collected data allow us to compare the changes of death rates, deduplicated discharges rates and Emergency Room visit by gender, race, age groups and payor.

Measures

Mortality measures use the death rate with the formula = $[\text{Number of Deaths} / \text{Population}] * 100,000$.

Morbidity measures use the deduplicated discharges rate. The OASIS defines deduplicated discharges rate as the number of persons discharged live from non-Federal acute-care inpatient facilities (Hospitals) for illness. Only discharges of Georgia residents who were seen in a Georgia facility are included. Persons are counted only once if readmitted for the same chronic condition during a calendar year. Causes are based on the principal diagnosis, except in cases where an External (E-code) cause supersedes the principal diagnosis. Deduplicated Discharges also excludes people discharged dead, healthy newborn infants, and healthy mothers giving birth to newborn infants. Since the number and rate are derived only from hospitalizations, they do not

Google

Savannah State University



Savannah Region Health Disparities

[Obesity Data](#)

[Lead Exposure Data](#)

[Teen Births](#)

