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H E A L T H

u n d e r s t a n d i n g o u r n e e d s

Update
2012

THE CITY OF St. LOUIS DEPARTMENT OF HEALTH



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St. Louis City is the kind of great city that attracts residents and businesses from throughout the region. The Slay Administration and its public and private partners have received national and international recognition for a St. Louis renaissance over the past eight years.

It's also a place where residents, organizations, businesses and governmental entities work tirelessly to make St. Louis City a healthy St. Louis community every day, all of the time. And although we have work to do we are headed in the right direction.

There has been significant improvement in major health indicators such as overall mortality, heart disease, cancer, stroke, diabetes, infant mortality, lead poisoning, gonorrhea and asthma in the City of St. Louis over the past 10 years:

- Overall mortality rates have decreased 14%
- Heart disease mortality decreased 26%
- Incidence of the top four types of cancer has decreased by an average of almost 10%
- Deaths due to stroke have decreased 36%
- Diabetes deaths have decreased 11%
- Infant mortality is down 7%
- Childhood lead poisoning prevalence has fallen by 80%
- Incidence of gonorrhea is down 41%
- 6% fewer children with asthma on Medicaid are requiring acute care in a hospital setting

Mayor Slay has dedicated \$5.5 million annually to urgent and specialty care as part of a federal match guaranteeing \$25 million for these services. Between 2001 and 2010, St. Louis City and County safety net institutions provided over 3.6 million primary and 1.1 million specialty care visits and they have grown by 25% and 30% respectively, during this time.

Access to care has significantly improved in St. Louis over the past ten years:

- Between 2001 and 2010, more than 6 million outpatient visits were made by low-income residents to regional health care safety net institutions. In 2010 alone, more than 750,000 outpatient visits were made by the uninsured and Medicaid population to health care safety net sites in St. Louis. The funding provided through the Regional Health Commission (RHC) over this time represented 20-25% of all funding to community health centers.
- Safety net sites saw more than 175,000 more visits by uninsured and Medicaid patients in 2010 than in 2001, a 25% increase in volume, without a large increase in funding over this time.

- Use of emergency department services for non-emergencies decreased 12% (-20,000 visits) between 2001 and 2010. Notably, use of emergency department services for non-emergencies decreased 26% among the uninsured, in part due to the increase in access at community health centers over this time.

However, there is still much work to do. For example, despite overall improvement in health status over the past ten years in both the African American and Caucasian populations in St. Louis City, race- and gender-based disparities persist. And in some ZIP Codes where there are few cases the rates in comparison to federal and state rates are unacceptable.

The Community Health Assessment and Community Health Improvement Plan was ordered by me to help us better understand community needs and health disparities. It has been funded in part by the Missouri Foundation for Health. It was a dynamic and informative process led by REESSI. Ninety residents attended seven focus groups to help identify community priorities. Twenty-four representatives actively participated in analysis and planning from a diverse set of organizations including educational institutions, regional coalitions, service providers, government agencies, and businesses. Two City Aldermen were part of the group. And twenty-two individuals participated on a residents group representing a diverse set of neighborhoods and communities in the City of St. Louis.

This was a data-driven process utilizing the City DOH Understanding Our Needs City Health Assessment data, which is compiled from State data sources such as birth and death certificates and hospital discharge data.

Clear goals have been established through the CHA and the CHIP development process pertaining to mortality, violence, education, self destructive behavior and poverty.

Experience-On-Demand led the St. Louis City Board of Health and DOH managers through an in depth review of programs, essential services and core business.

Clear strategic initiatives have been established for the Department through the Strategic Plan development process pertaining to increasing regional collaboration and partnerships; actively engaging the community; improving accountability, quality and performance; improving communications; utilizing technology; increasing grant funding; and improving talent management.

The CHIP and the DOH Strategic Plan will be implemented and updated over the next 18 to 24 months.

The Understanding Our Needs City Health Assessment, Community Health Assessment, Community Health Improvement Plan and the City Department of Health Strategic Plan all reflect the commitment and the concern that residents, organizations, businesses and governmental agencies have to assure that St. Louis City is a viable city that is safe, clean and healthy.

Signed by

Pamela Rice Walker, MPA, CPHA,
Interim Health Director for the City of St. Louis

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Francis G. Slay
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Executive Summary

This is the fourth time in a little over a decade that the City of St. Louis Department of Health has published “Understanding Our Needs,” a ZIP Code by ZIP Code look at the health of our citizens. Our reports in 2001, 2004 and 2007 proved to be valuable resources for individuals and organizations working to improve conditions within St. Louis City. It has been a valuable data source for grant writers and for anyone conducting research and planning on specific health problems in our community.

This update of “Understanding Our Needs” presents data from 2006 to 2009. For a few indicators there are 2010 data. The first report worked with information from 1993 to 1998, the second reported data from 1999 to 2001 and the third from 2002 to 2005. This new edition contains indicators identical to the previous reports, including: infant mortality rates, heart disease and cancer mortality, homicides and accidents, lead poisoning and numerous other health indicators. This allows comparison of information between the different time periods to track progress.

We also look at socioeconomic concerns such as unemployment, poverty and income. Also included are indicators that look at access to health care as well as other factors that can affect health, including environmental issues. Nine new indicators with health implications have been added and are marked as new in the Table of Contents.

The data in this new report reveal a number of positive changes that can also be seen in regional ZIP Code level data published by the St. Louis Regional Health Commission. There is progress across a broad range of indicators. In the last ten years, overall mortality rates have decreased by 14%: down 26% for heart disease, 36% for strokes, and 11% for diabetes. The incidence of the top four types of cancer has decreased by an average of almost 10%. Infant mortality is down 7%. Childhood lead poisoning has fallen by more than 80%. Incidence of gonorrhea, is down 41%. Nearly 6% fewer children with asthma on Medicaid are requiring acute care in a hospital setting. These positive changes reflect the community’s steps taken to address recognized health challenges.

St. Louis is a city of neighborhoods. As we look at a wide range of health indicators and factors that affect health, some of these neighborhoods rank with the healthiest in the country. In this report the ZIP Codes of 63108, 63109 and 63139 rank as the healthiest areas in St. Louis City. The ZIP Codes of 63106, 63107 and 63113 emerge as the areas with the highest rates of health issues, as in the last report.

A disparity index comparing rates for blacks and whites in the various health indicators is included. Where data were available, trend charts are again introduced.

For some indicators, actual counts of the population affected are listed to help the reader grasp the impact of the rates.

We encourage those who used the previous reports for their programs and planning to take another look and continue the efforts they have already begun. And for those who are new to this report, welcome and good luck in your visions for a better St. Louis City.



Methodology

ZIP Code Level

This report presents data available by ZIP Code. The report presents information by the 18 ZIP Codes that are located within the city limits of St. Louis City. This unique approach makes it easier to identify the health concerns in specific areas of the city and therefore target programs, resources, and other interventions where they are most needed.

Fringe ZIP Codes

The City of St. Louis includes small portions of 11 ZIP Codes that are shared with, but primarily located in St. Louis County. This report has excluded the partial ZIP Codes because the populations and health events are too small for meaningful analysis. The partial ZIP Codes are: (north) 63130, 63133, 63136 63137 and 63138; (central) 63105 and (south) 63117, 63119, 63123, 63125 and 63143.

Rates

This report presents most of the information in the form of "rates", making it possible to compare different geographic areas and subpopulations. Rates are developed by dividing the number of events (such as TB cases, heart disease deaths, infant deaths) by the total number in a particular group (such as residents of a particular ZIP Code, or members of a race or gender). The report gives rates per 100, 1,000 and 100,000 population. The larger the population, the more reliable and meaningful the data. When there is a small population, or small denominator, the data are less reliable. Note that ZIP Codes 63101 and 63102 are asterisked throughout the report because of small populations and thus a small number of health events. Those small numbers may make any comparisons with other ZIP Codes misleading. **All ZIP Codes and rates with asterisks indicate that there is a small population and/or the number of health events is <20 and therefore should be viewed with caution.**

Data Counts

New to this edition, where appropriate, raw data counts will be provided in order to give the reader a sense of magnitude. These numbers will be provided for the City as a whole so that rates are in a frame of reference.

Descriptive Statistics

This report uses tables, graphs, maps and narrative to describe the factors that affect the health of people in the City of St. Louis. By looking at the City ZIP Code by ZIP Code, the report pinpoints areas of concern and of success and points out the differences among areas of the city. **The report is descriptive only and does not attempt to draw statistically significant conclusions.**

Time Period

Most of the data are presented are for the 2006 through 2008 time period. Where available, some more recent data is presented. The previous report covered the time span from 2002 through 2005.

Quartiles

This report places the ZIP Codes for each of the variables studied into one of four groups, or quartiles. Those ZIP Codes that fall in the top quartile represent the areas of with the highest rates of health issues and those ZIP Codes that fall in the bottom quartile represent the areas with the lowest rates. The map that is shown for each of the indicators displays the ZIP Codes by their assigned quartile.

Summary Statistic

For this report, each ZIP Code received a summary "overall rating" between 1 and 4, with "1" assigned to the zip codes with lower rates of health issues. The rating was reached by averaging the quartile assignments for each of the ZIP Code's variables that were ratable (fifty-seven of the seventy-two variables). The variables were not weighted.

Age-Adjusted Mortality Rates

This report provides age-adjusted mortality rates in all cases. This makes it possible to compare mortality rates across different geographic areas and subpopulations where the age distributions of citizens may be very different.

Comparative Data for U.S. and Missouri

Whenever possible, this report includes comparative data for Missouri and the United States. Generally this data also includes separate data for the black and white populations.

Disparity Ratio

A "disparity ratio" is again included in this update. For each appropriate indicator, the rate for the St. Louis City black population is divided by the rate for the St. Louis City white population. When the resulting ratio is greater than 1.0, it means that the rate for the black population for that indicator is that much greater than the St. Louis white population. When the ratio is lower than 1.0, it means that the rate for the St. Louis City black population is that much lower than the rate for the white population.

Trend Lines

Returning to this edition is the inclusion of trend lines for certain indicators where appropriate and where data are available. These charts allow the reader to discern a pattern and history of the indicator over time. They also serve to visually demonstrate areas in which improvement or deterioration has occurred over the last few years.

Community Quotes

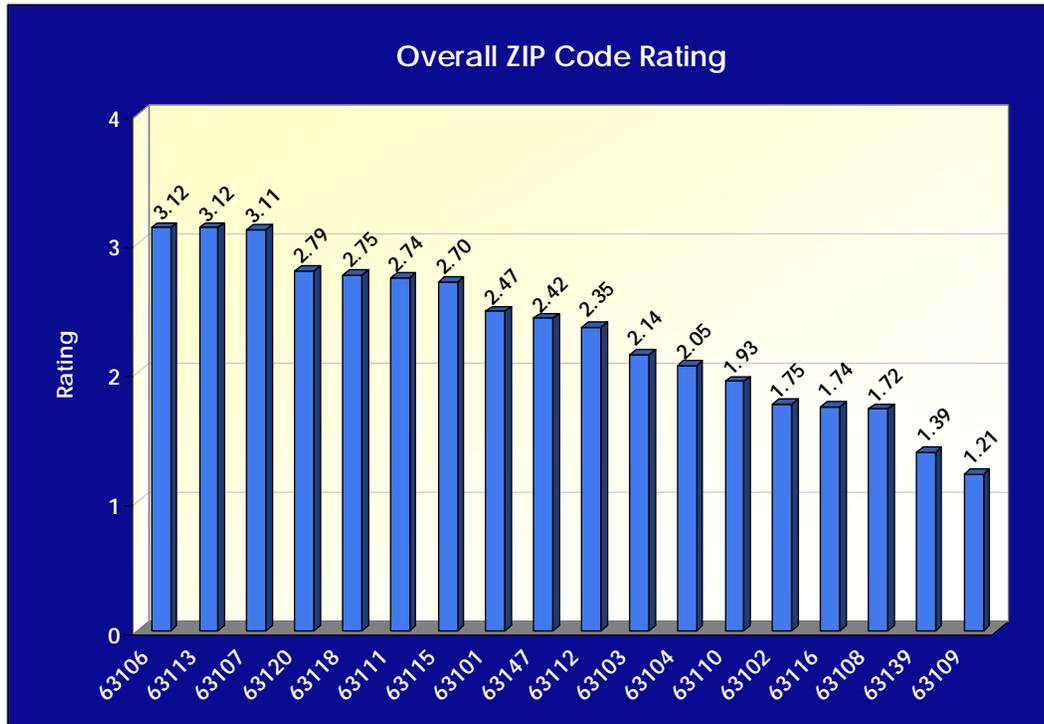
New to this edition is the inclusion of "community quotes". These quotes in the blue boxes are the product of focus groups with actual community members from all areas of the city and various community partners engaged with the particular indicator at hand.

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*Indicator is new to this edition of
Understanding Our Needs

Overall ZIP Code Rating



Definition

This needs assessment looks at 72 variables that give an indication of the health, and health needs, of a community in some way. They cover a wide range of topics and are grouped in the following categories: demographic, socioeconomic, access and quality, epidemics, environmental, injury and behavior related mortality. The assessment records the data by the 18 ZIP Codes in the City of St. Louis. There are 11 ZIP Codes that are shared with St. Louis County but only a very small portion of these ZIP Codes are contained within the City limits. Since the population and number of “events” are so small, these areas were not included in the assessment. Most of the information is given in the form of “rates”, making it possible to compare different geographic areas and subpopulations. Although this report is purely descriptive in nature, those who review it can readily determine the areas and populations of concern. 57 of the 72 variables have been collapsed into a single summary statistic for each ZIP Code and assigned a rating of 1 through 4 with “1” indicating lower rates of health issues and illness and “4” indicating the highest rates of health issues. See Appendix A for ZIP Code listing.

St. Louis Rates and Comparative Info

Where comparative data are available, the City of St. Louis health indicator rates are generally lower than those for the State of Missouri and the United States. When the variables are summarized, the ZIP Codes with the highest ratings (indicating higher rates of health problems) are 63106, 63113 and 63107. The ZIP Codes with the lowest rating (and the lower rates of health issues) are 63109, 63139 and 63108.

Black/White Disparity

The summary statistic shows that the black population in the City of St. Louis has a higher rate of almost all of the indicators than those with a larger white population. The white population showed higher rates of teen abortion, drinking alcohol during pregnancy, suicide, flu and pneumonia mortality, and COPD mortality. Where comparative data are available, the health indicator rates for the St. Louis City black population are generally higher than the U.S. black population. The ZIP Codes with the higher zip code rating (indicating greater rates of health issues) are predominately black. The ZIP Codes with the lowest summary statistics are predominately white.

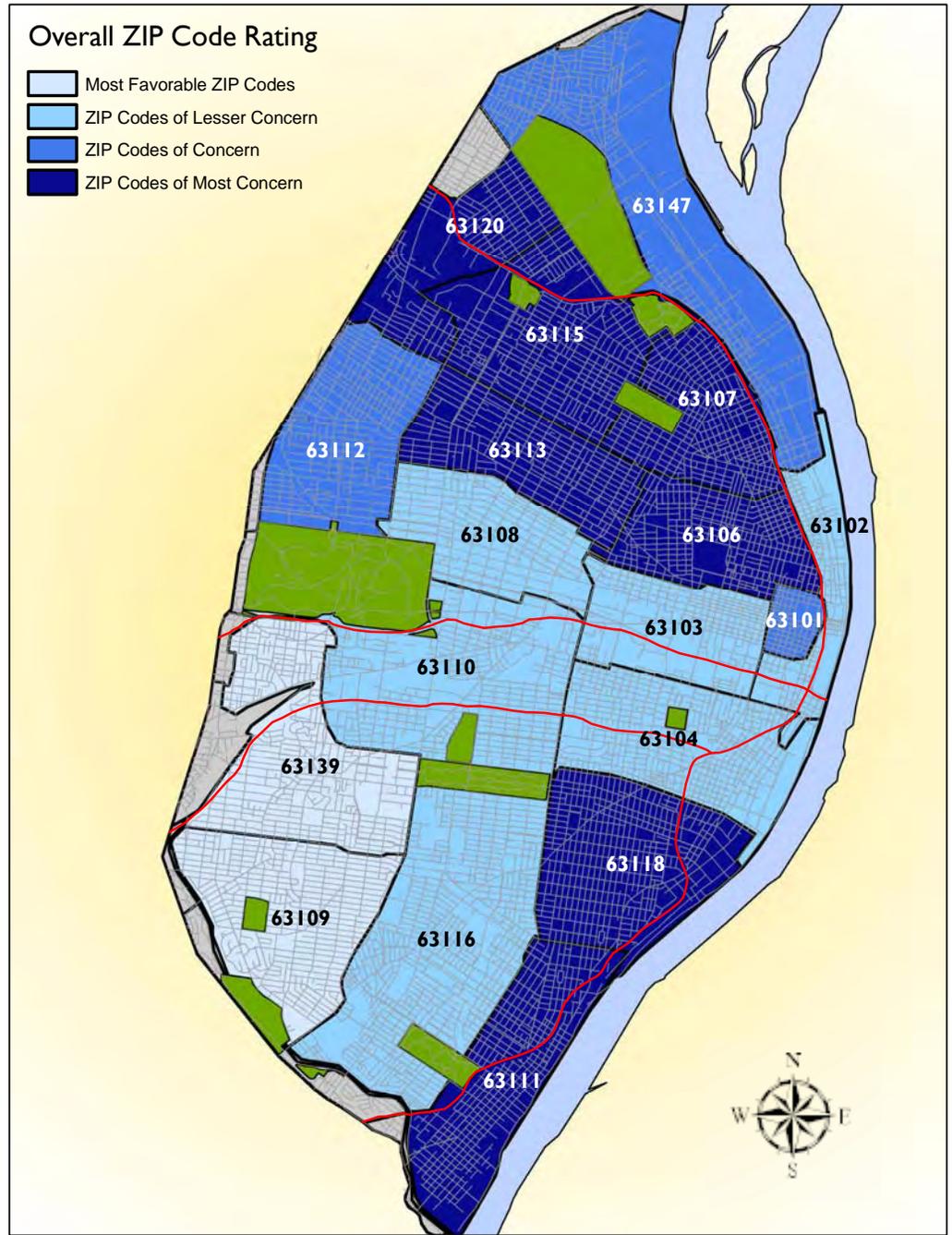
Potential Public Health Interventions

The possible interventions listed throughout this report are among some of the strategies and approaches that might address specific public health concerns in our community. They are not intended to be a complete list of all possible interventions that could be undertaken individually or collaboratively within the public health arena. It is also clear that the problems of public health are societal issues and must be addressed through an interdisciplinary community-wide collaborative effort. Some of the approaches include agency collaboration, ongoing community assessments, surveillance, education, planning, epidemiological studies, infrastructure development, policy development, program development and assurance that programs and services are provided.

Overall ZIP Code Rating

ZIP Code	Overall Rating	Map Quartile
63106	3.12	4
63113	3.12	4
63107	3.11	4
63120	2.79	4
63118	2.75	4
63111	2.74	4
63115	2.70	4
63101**	2.47	3
63147	2.42	3
63112	2.35	3
63103	2.14	2
63104	2.05	2
63110	1.93	2
63102**	1.75	2
63116	1.74	2
63108	1.72	2
63139	1.39	1
63109	1.21	1

**small population-interpret with caution

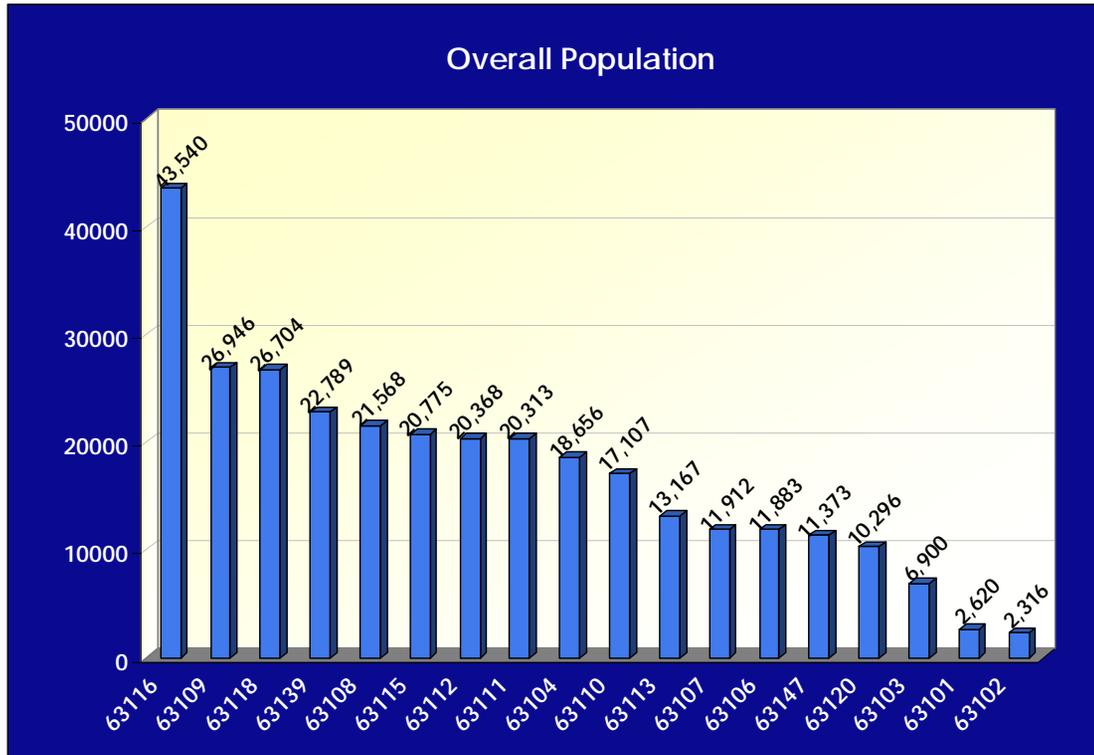


Overall ZIP Code Rating

DEMOGRAPHIC



Overall Population



“... the city of St. Louis has seen a rapid drop in its number of children, the city also had the largest decline in seniors, while making its strongest gains in young adults and empty nesters.”

-New census data show who lives where in St. Louis area, by the ages; St. Louis Post Dispatch, May 2011

Definition

Population is based on the 2010 United States Census. The 2010 estimate shows a total population of 319,294 for the City of St. Louis.

Public Health Implications

Public health issues result from the loss of population and the resulting growth of poverty. These issues include uninsured populations, violence, teen pregnancies, sexually transmitted diseases and lead poisoning, as well as environmental issues that result from abandoned buildings and vacant lots to name a few.

St. Louis Rates and Comparative Info

In St. Louis City, ZIP Code 63116 contains the largest overall population with over 43,500 people. 63102 is the least populated ZIP code with roughly 2,300 people.

Black/White Disparity

N/A

Disparity Ratio: N/A

Potential Public Health Interventions

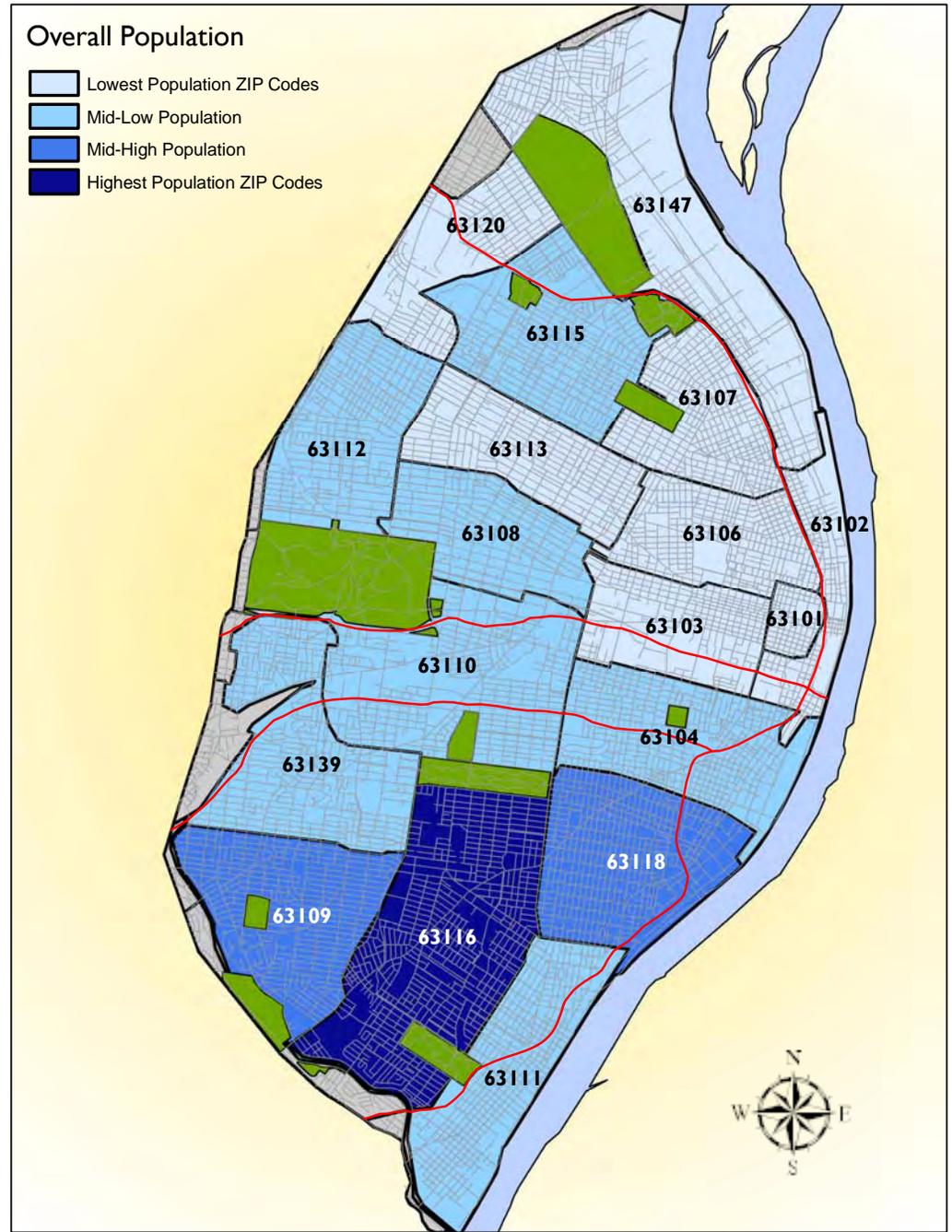
The Health Department must continue to enhance the data and information infrastructure to identify the problems and target populations and then develop programs and/or partner with other agencies and organizations to address the issues.

Data Source: 2010 U.S. Census

2010 Population

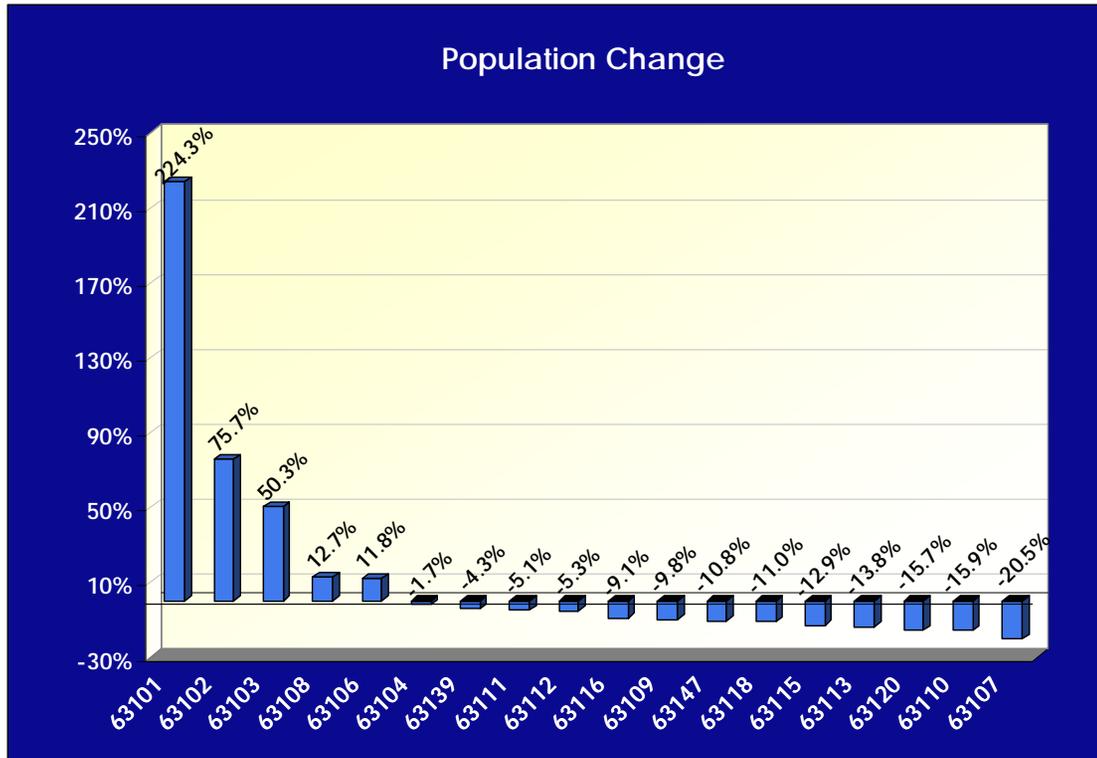
ZIP Code	Overall Pop	Map Quartile
63116	43,540	4
63109	26,946	3
63118	26,704	3
63139	22,789	2
63108	21,568	2
63115	20,775	2
63112	20,368	2
63111	20,313	2
63104	18,656	2
63110	17,107	2
63113	13,167	1
63107	11,912	1
63106	11,883	1
63147	11,373	1
63120	10,296	1
63103	6,900	1
63101	2,620	1
63102	2,316	1

STL City	319,294
STL Black	157,160
STL White	140,267
MO	5,988,927
MO Black	693,391
MO White	4,958,770
US	308,745,538
US Black	38,929,319
US White	223,553,265



Overall Population

Population Change



Definition

The percent changes in population were calculated by subtracting 2006 Claritas population estimates from 2010 U.S. Census population data. The City has experienced enormous decreases in population since the 1950's when the population exceeded 800,000; however, the population has increased over the last few years in some City ZIP codes, particularly downtown.

Public Health Implications

The increases and decreases in population are an indicator of the economic strength and stability of a city. A decreased tax base potentially contributes to the under funding of public health initiatives. Public health programs include lead paint remediation, immunizations, sanitation, education, assessment, surveillance, communicable disease, prevention and control and disease outbreaks and maternal and child health activities to name a few.

St. Louis Rates and Comparative Info

St. Louis City experienced a population decrease of 6.1% between 2006 and 2010. In the same time period, Missouri and the United States experienced increases of 3.1% and 3.6% respectively.

Black/White Disparity

N/A

Disparity Ratio: N/A

Potential Public Health Interventions

Within budget constraints, assess, determine and prioritize the most pressing public health needs in the City of St. Louis. Use the Public Health Accreditation Board requirements for community health assessment, community health improvement plans, and strategic planning to address how population change will impact community health.

"In the 2010 census, the overall population for St. Louis declined... While many neighborhoods lost population, that does not necessarily mean the neighborhood declined. In many cases, families are being replaced by single households or couples with no children. Many of these neighborhoods are experiencing population decline along with revitalization and reinvestment."

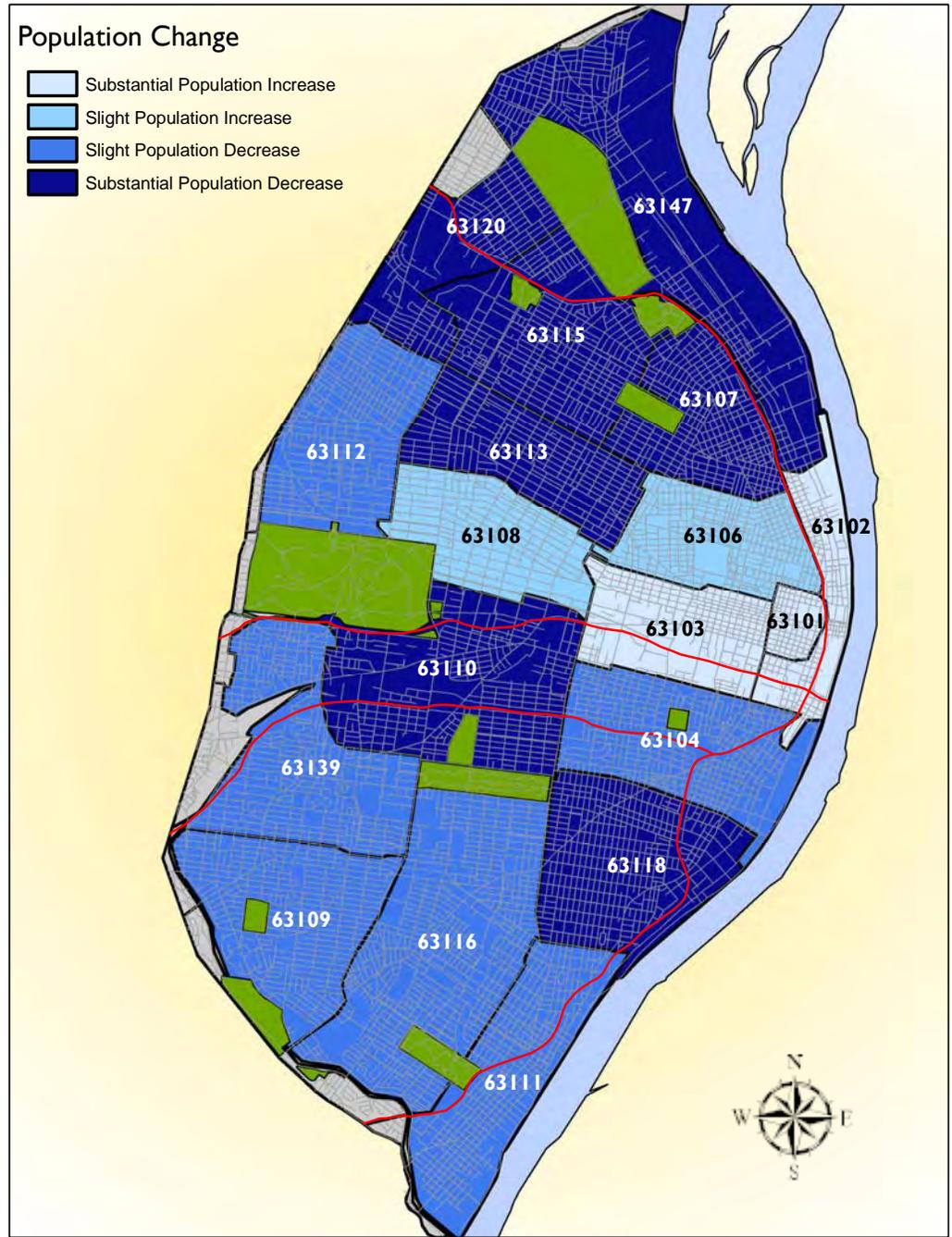
-Todd Swanstrom, Ph.D. Professor in Community Collaboration and Public Policy, UMSL

% Change, 2006-2010

ZIP Code	Pop Change	Map Quartile
63107	-20.5%	4
63110	-15.9%	4
63120	-15.7%	4
63113	-13.8%	4
63115	-12.9%	4
63118	-11.0%	4
63147	-10.8%	4
63109	-9.8%	3
63116	-9.1%	3
63112	-5.3%	3
63111	-5.1%	3
63139	-4.3%	3
63104	-1.7%	3
63106	11.8%	2
63108	12.7%	2
63103	50.3%	1
63102**	75.7%	1
63101**	224.3%	1

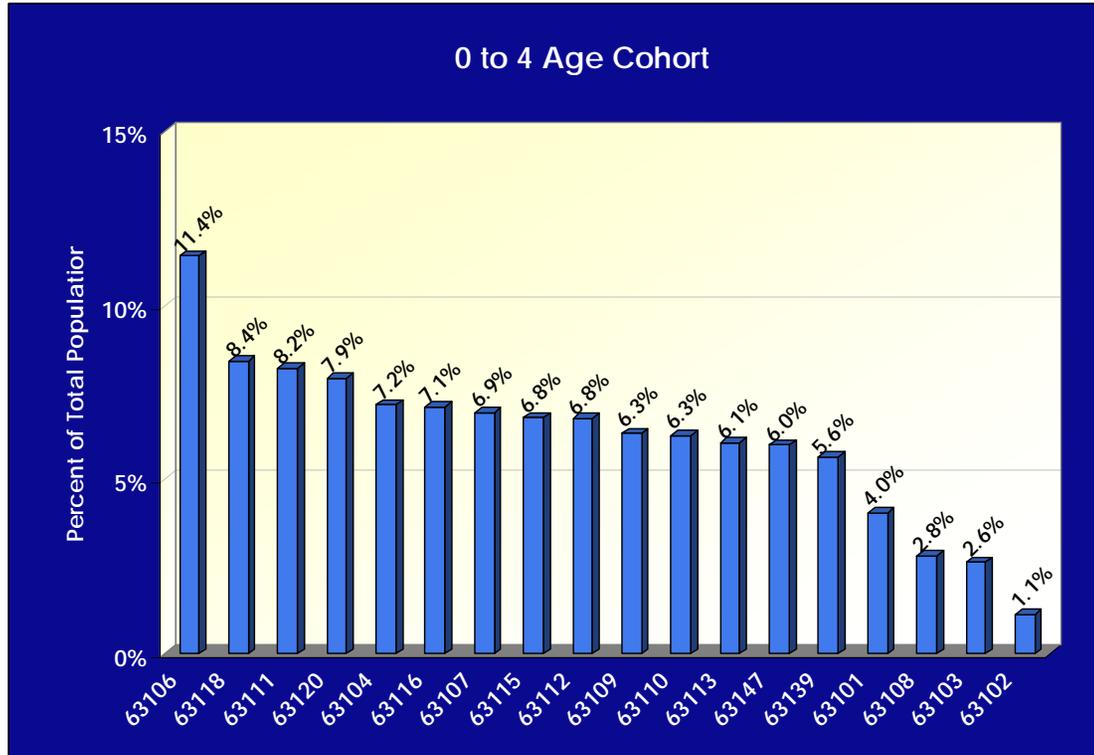
STL City	-6.1%
STL Black	-9.3%
STL White	-5.7%
MO	3.1%
MO Black	4.6%
MO White	1.5%
US	3.6%
US Black	5.3%
US White	2.3%

**small population-interpret with caution



Population Change

0 to 4 Age Cohort



Definition

This cohort consists of the 2010 population in St. Louis City from birth through 4 years of age. It is expressed as a percent of the total population of each zip code.

Public Health Implications

This population is vulnerable to various public health problems such as lead poisoning, non-immunization, injuries and lack of access to care.

St. Louis Rates and Comparative Info

The City of St. Louis has about the same percentage of birth to 4 year olds as compared to Missouri or the U.S., 6.6% vs. 6.5% and 6.5% respectively. In 2010 there were an estimated 21,089 children in this birth through 4 years of age cohort in the City of St. Louis. The ZIP Codes with the highest percentages of 0-4 year olds are 63106 and 63118. The ZIP Codes with the lowest percentages are 63102, 63103 and 63108.

Black/White Disparity

The black population in the City of St. Louis is younger than the white population. Birth to 4 year olds comprise 7.8% of the black population while only 4.7% of the white population is under 5 years of age.

Disparity Ratio: 1.7

Potential Public Health Interventions

Lead poisoning prevention programs including lead remediation, immunizations, access to MO HealthNet (Medicaid) assistance, day care licensure and injury prevention programs. The Vaccines for Children program (VFC) is an entitlement program for eligible children age 18 and below. VFC helps families of children who may not otherwise have access to vaccines by providing routine immunizations with little to no out-of-pocket costs to the parents.

“Infants and children need vaccines to protect them from harmful diseases. These diseases can have serious complications, especially for very young children, and even cause death. Each year, the CDC sets the US childhood immunization schedule based on recommendations from the Advisory Committee on Immunization Practices (ACIP). Your doctor can guide you in determining what vaccines your baby needs and when she needs them. By the time your baby is 2 years old, she should get vaccines that will protect her from 14 vaccine-preventable diseases. For many of these vaccines, more than one dose is needed to build up immunity and provide the best protection for your baby.”

-Centers for Disease Control (CDC)

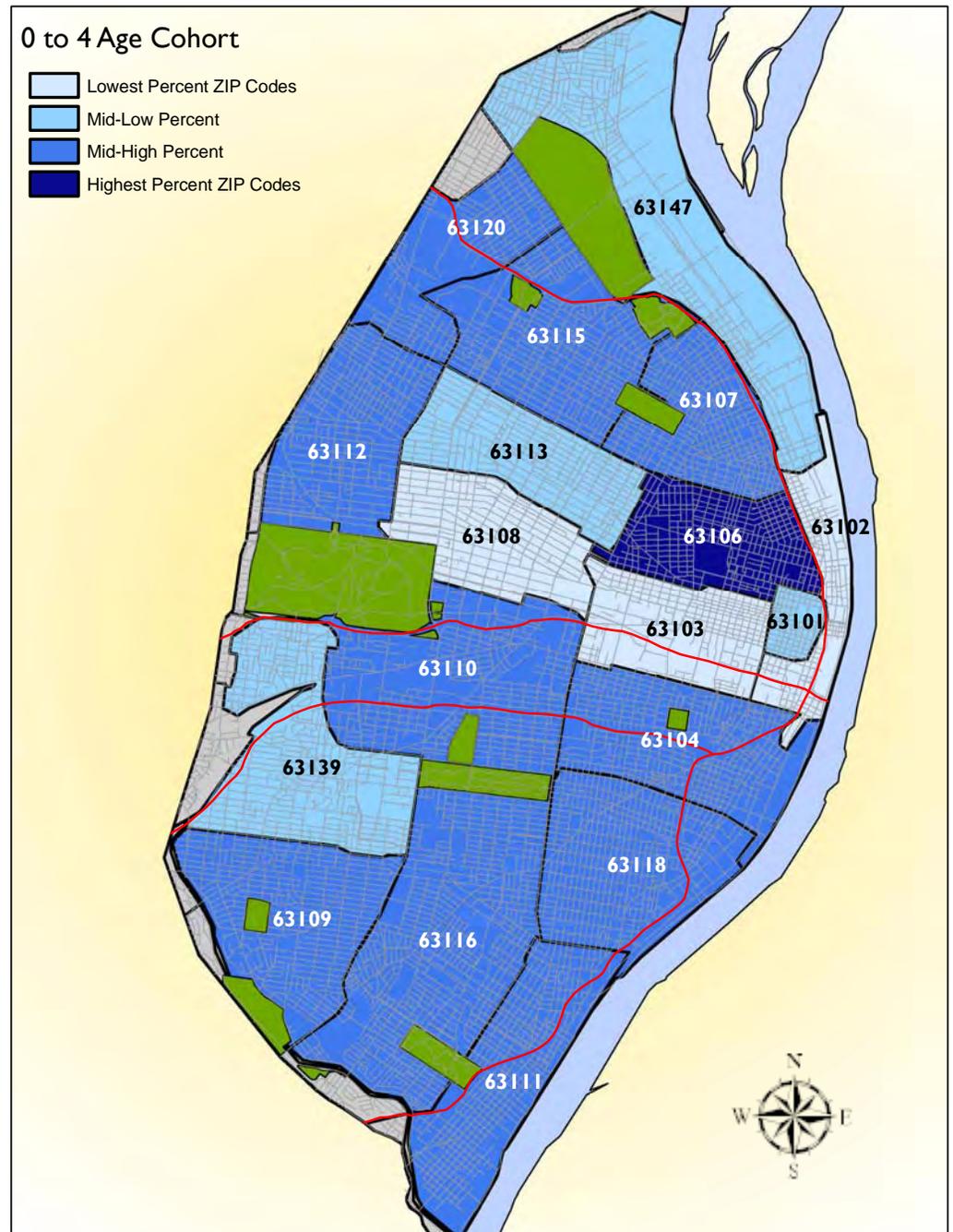
Data Source: 2010 U.S. Census

% of Total Population

ZIP Code	0 to 4 Age	Map Quartile
63106	11.4%	4
63118	8.4%	3
63111	8.2%	3
63120	7.9%	3
63104	7.2%	3
63116	7.1%	3
63107	6.9%	3
63115	6.8%	3
63112	6.8%	3
63109	6.3%	3
63110	6.3%	3
63113	6.1%	2
63147	6.0%	2
63139	5.6%	2
63101**	4.0%	2
63108	2.8%	1
63103	2.6%	1
63102**	1.1%	1

STL City	6.6%
STL Black	7.8%
STL White	4.7%
MO	6.5%
MO Black	8.0%
MO White	6.0%
US	6.5%
US Black	7.4%
US White	6.0%

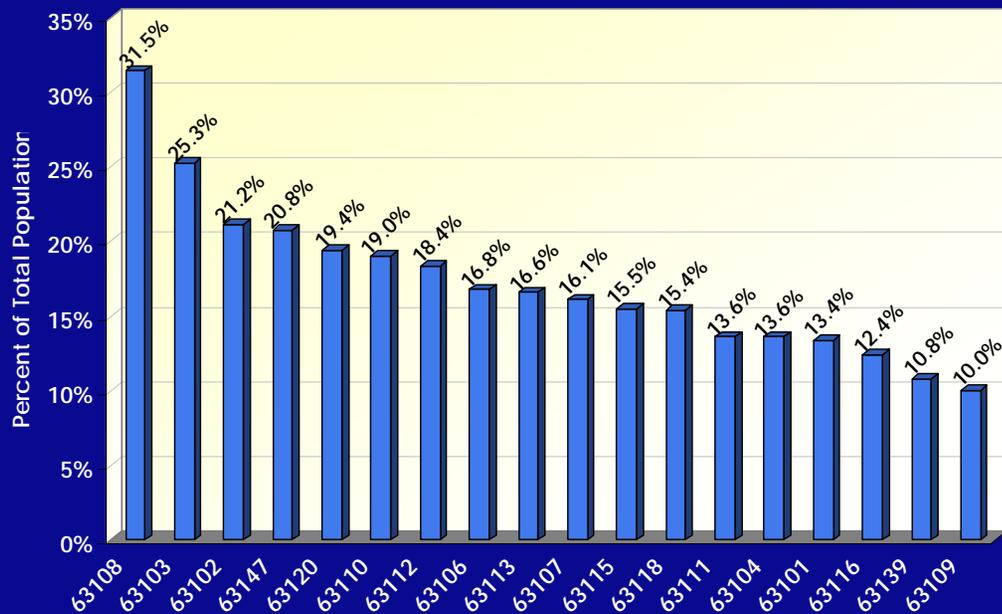
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0 to 4 Age Cohort

15 to 24 Age Cohort

15 to 24 Age Cohort



“The SPOT (Supporting Positive Opportunities with Teens) is a unique health center located in the Central West End that welcomes all youth ages 13-24. The center responds to their particular needs through a comprehensive model of health and social services. Youth can access health and preventative services, educational and vocational resources, and take part in leadership opportunities. Basic medical care, mental health counseling, and STD/HIV testing is available at The SPOT.”

-Dale Wrigley, Bureau Chief of Communicable Diseases at the Center for HIV/STD/Hepatitis A Services, City of St. Louis Department of Health

Definition

This category consists of the population 15 to 24 years of age in the City of St. Louis. It is expressed as a percent of the total population.

Public Health Implications

This age group shows vulnerability to violence, accidents, sexually transmitted diseases, HIV/AIDS, tobacco use, drug and alcohol abuse, teen pregnancy, as well as risk factors that lead to heart disease and cancer later on in life, such as inadequate physical activity, smoking and poor nutritional habits.

St. Louis Rates and Comparative Info

This age group makes up a larger percentage of the population of the City of St. Louis as compared to Missouri and the U.S., 16.1% vs. 14.0% and 14.2%, respectively. In 2010 there were 51,403 people in this age cohort in the City of St. Louis. The ZIP Codes with the highest percentages of 15-24 year olds are 63108, 63103 and 63102. The ZIP Codes with the lowest percentages are 63109, 63139 and 63116.

Black/White Disparity

The black population in St. Louis has a higher percentage of this cohort as compared to the white population, 17.1% vs. 14.1%.

Disparity Ratio: 1.2

Potential Public Health Interventions

Programs focusing on STD's, HIV/AIDS, drug and alcohol abuse, tobacco use, teen pregnancy and education regarding other risky behaviors.

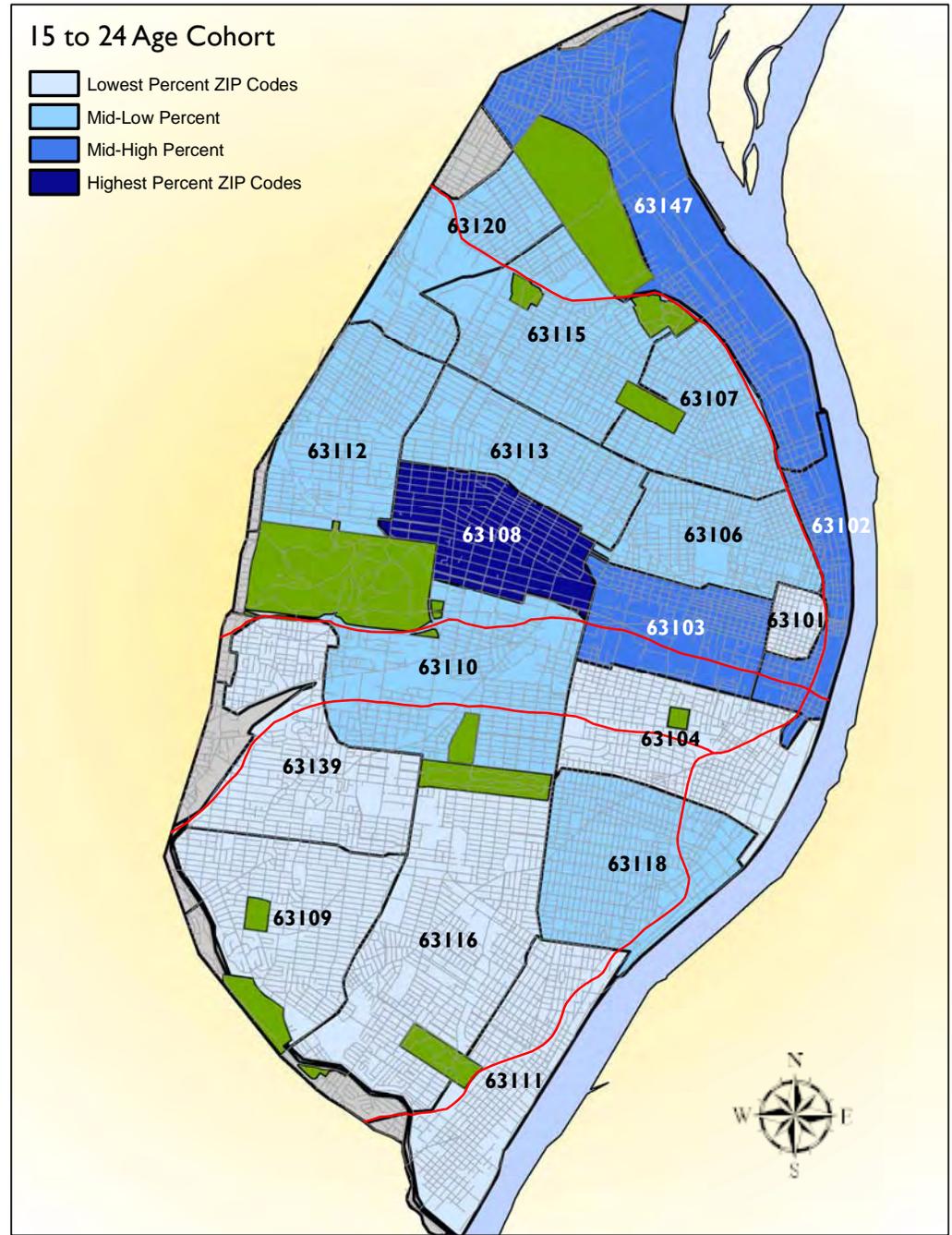
Data Source: 2010 U.S Census

% of Total Population

ZIP Code	15 to 24 Age	Map Quartile
63108	31.5%	4
63103	25.3%	3
63102**	21.2%	3
63147	20.8%	3
63120	19.4%	2
63110	19.0%	2
63112	18.4%	2
63106	16.8%	2
63113	16.6%	2
63107	16.1%	2
63115	15.5%	2
63118	15.4%	2
63111	13.6%	1
63104	13.6%	1
63101**	13.4%	1
63116	12.4%	1
63139	10.8%	1
63109	10.0%	1

STL City	16.1%
STL Black	17.1%
STL White	14.1%
MO	14.0%
MO Black	18.1%
MO White	13.3%
US	14.2%
US Black	16.9%
US White	13.6%

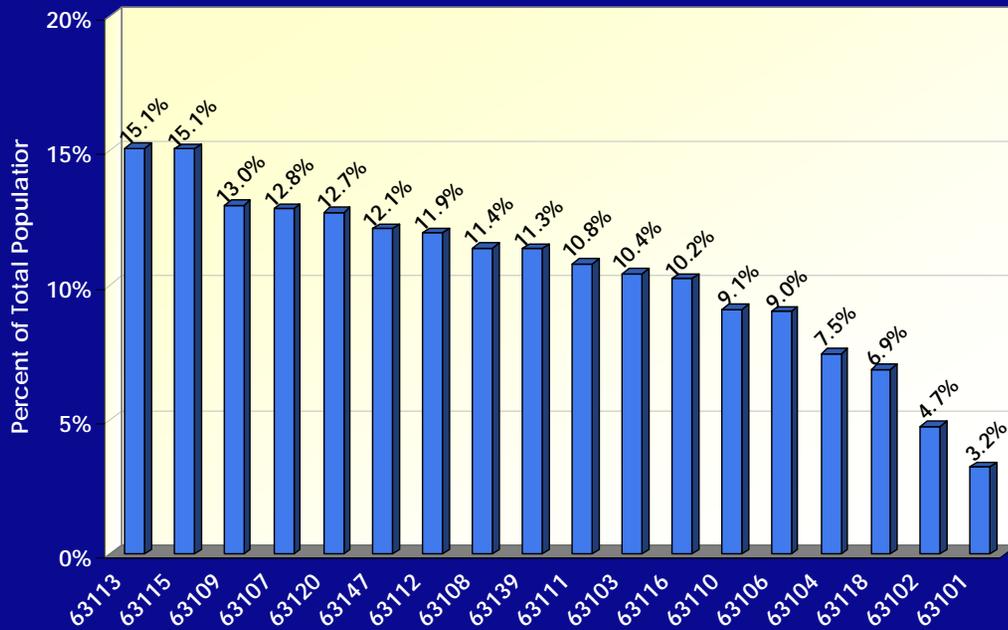
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15 to 24 Age Cohort

65+ Age Cohort

65+ Age Cohort



“There are many causes of declining function in old age, but in general, these can be divided into four major areas, namely cognitive problems, frailty, nutritional problems, and iatrogenesis. All of these occur on a backdrop of inadequate social support.”

-What is Geriatrics; Aging Successfully, 2006

Data Source: 2010 U.S. Census

Definition

This cohort consists of the St. Louis City population that is 65 years of age and older. It is expressed as a percent of the total population.

Public Health Implications

Chronic disease issues, injuries, nutrition and illness, death due to extreme summer heat and influenza vulnerability are some issues that affect the older population.

St. Louis Rates and Comparative Info

The City of St. Louis has a slightly lower percentage of elderly population as compared to Missouri and the U.S., 11.0% vs. 14.1% and 13.1% respectively. According to the 2010 Census, there were over 35,175 people in the 65+ age cohort in the City of St. Louis. The ZIP Codes with the highest percentages of elderly are 63113 and 63115. The ZIP Codes with the lowest percentages are 63101 and 63102.

Black/White Disparity

In the City of St. Louis the white population has a higher percentage of elderly people as compared to the younger black population. The white elderly population comprises 12.5% of the white population whereas the elderly black population constitutes only 10.6% of the total black population.

Disparity Ratio: 0.85

Potential Public Health Interventions

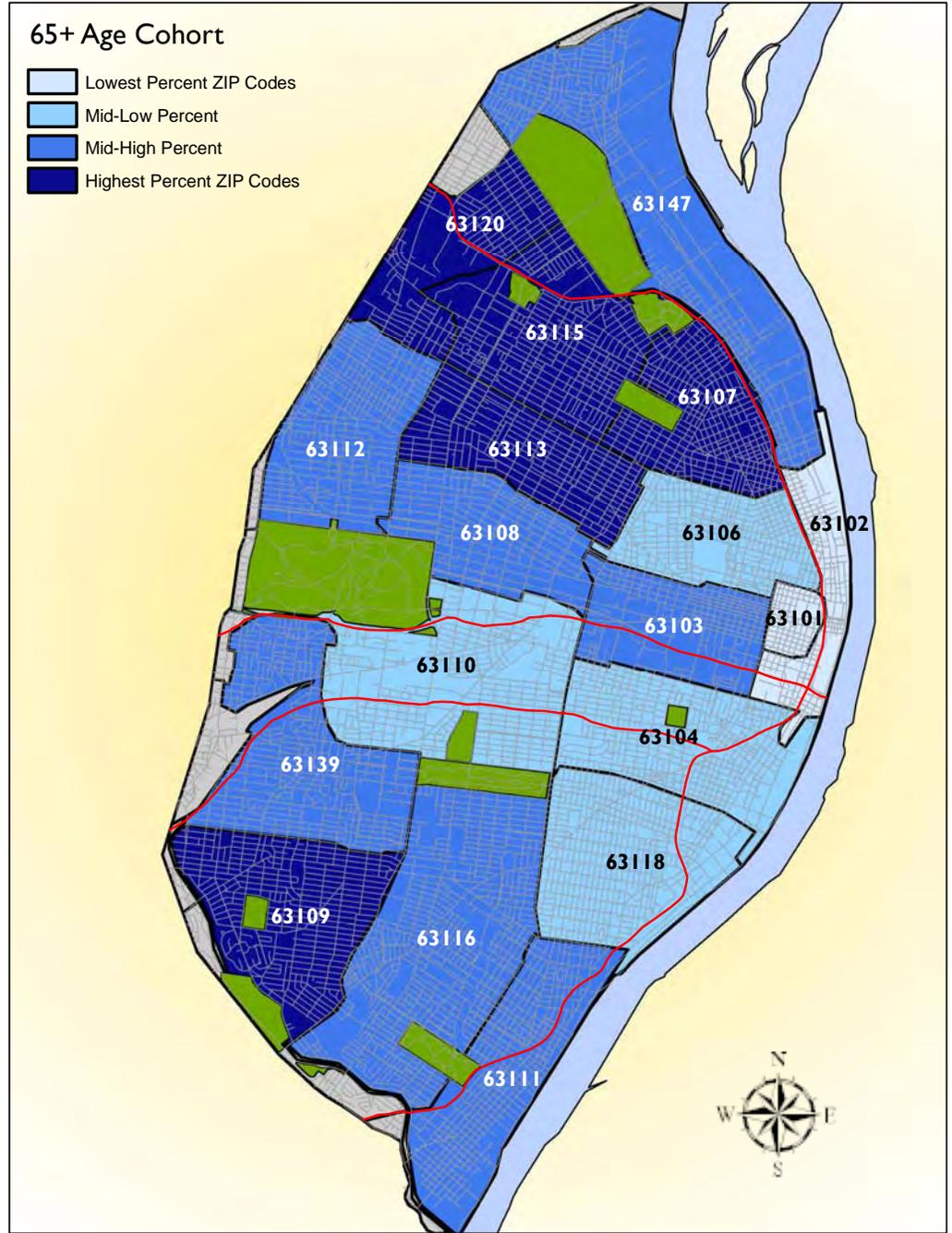
Surveys and epidemiological studies to determine the prevalence of various chronic disease conditions such as high blood pressure, diabetes, arthritis etc. Also, prevention programs and adult immunization programs.

% of Total Population

ZIP Code	65+ Age	Map Quartile
63113	15.1%	4
63115	15.1%	4
63109	13.0%	4
63107	12.8%	4
63120	12.7%	4
63147	12.1%	3
63112	11.9%	3
63108	11.4%	3
63139	11.3%	3
63111	10.8%	3
63103	10.4%	3
63116	10.2%	3
63110	9.1%	2
63106	9.0%	2
63104	7.5%	2
63118	6.9%	2
63102**	4.7%	1
63101**	3.2%	1

STL City	11.0%
STL Black	10.6%
STL White	12.5%
MO	14.1%
MO Black	9.0%
MO White	15.4%
US	13.1%
US Black	8.8%
US White	15.4%

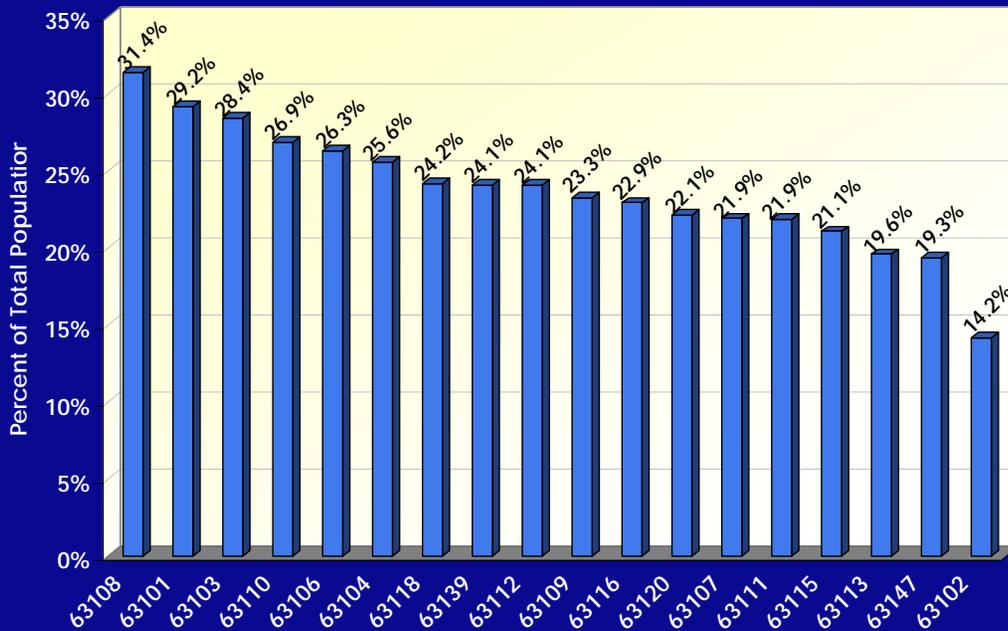
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65+ Age Cohort

15 to 44 Female Age Cohort

Age 15 to 44 Female Cohort



Definition

This cohort consists of females from 15 to 44 years of age. This age group is important because it represents the childbearing population. The cohort is presented as a percent of the total population.

Public Health Implications

Public health issues include reproductive health concerns such as prenatal care, nutrition and access to care as well as women's health issues such as breast and cervical cancer, sexually transmitted diseases, HIV/AIDS and tobacco use.

St. Louis Rates and Comparative Info

The City of St. Louis has a slightly higher percentage of females 15-44 years of age when compared to Missouri and the U.S., 23.8% vs. 19.8% and 20.2% respectively. According to the 2010 Census there were 75,901 females in this age cohort in the City of St. Louis. The ZIP Codes with the highest percentage of females 15 to 44 years of age are 63108, 63101 and 63103. The ZIP Code with the lowest percentage is 63102.

Black/White Disparity

The white population in the City of St. Louis has a slightly higher percentage than the black population, 24.3% vs. 22.8%.

Disparity Ratio: 0.94

Potential Public Health Interventions

Educational programs relating to maternal, child and family health, breast and cervical cancer screening, access to care assistance, HIV/AIDS, smoking cessation and sexually transmitted disease programs.

Data Source: 2010 U.S. Census

“National recommendations for reducing infant mortality, pre-term birth, low-birth weight and other adverse pregnancy outcomes now advise that women enter pregnancy with less health risk. This shift from an exclusive focus on pregnancy-related health services (prenatal care) to improved comprehensive primary care and prevention for all women of childbearing age is called “preconception care.” Preconception health, more broadly, is defined as beginning a pregnancy in a state of optimal physical, emotional, and social well-being.” – taken from ‘Women’s Health Before and Between Pregnancy’

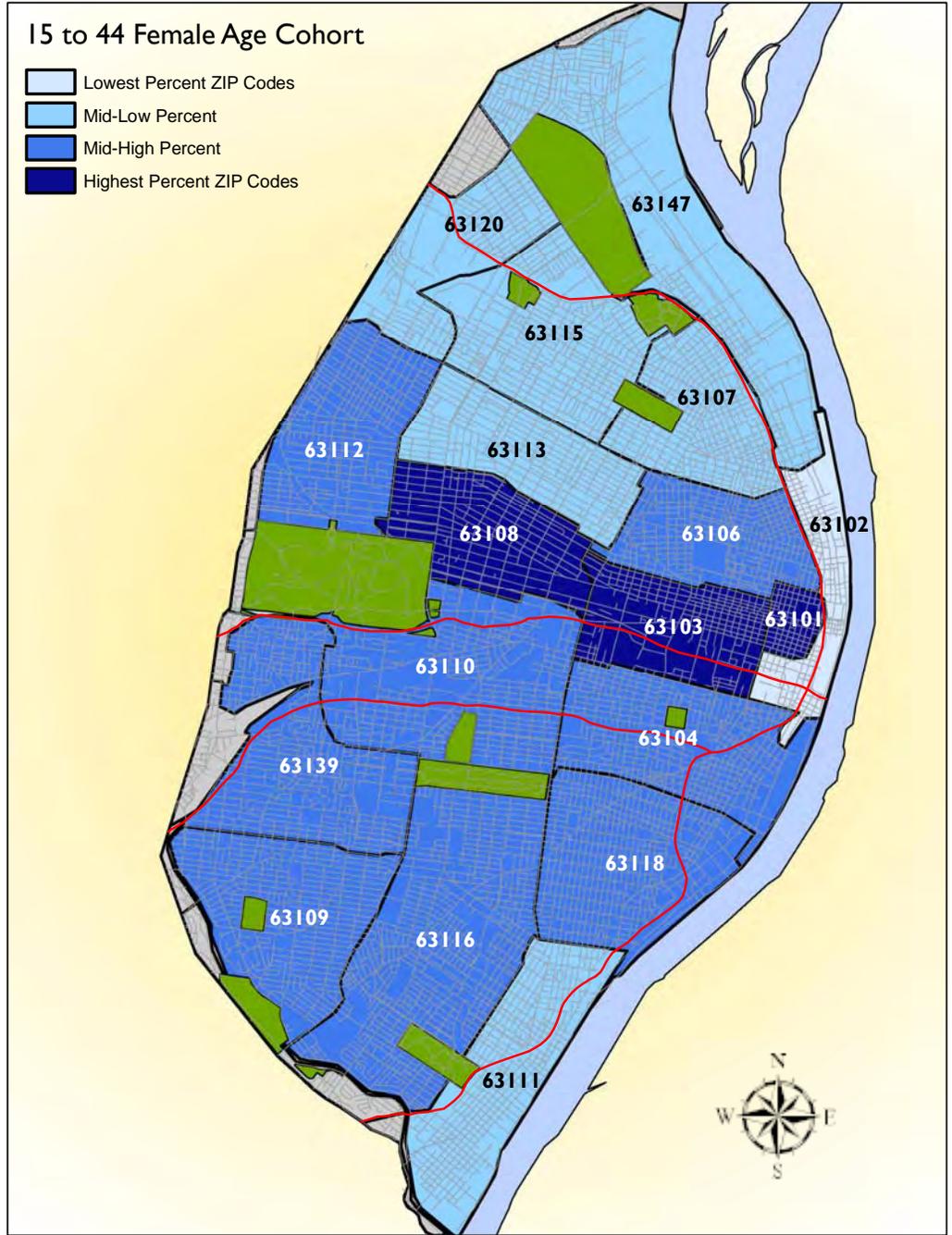
-The Maternal, Child, and Family Health Coalition

% of Total Population

ZIP Code	Female 15 to 44	Map Quartile
63108	31.4%	4
63101**	29.2%	4
63103	28.4%	4
63110	26.9%	3
63106	26.3%	3
63104	25.6%	3
63118	24.2%	3
63139	24.1%	3
63112	24.1%	3
63109	23.3%	3
63116	22.9%	3
63120	22.1%	2
63107	21.9%	2
63111	21.9%	2
63115	21.1%	2
63113	19.6%	2
63147	19.3%	2
63102**	14.2%	1

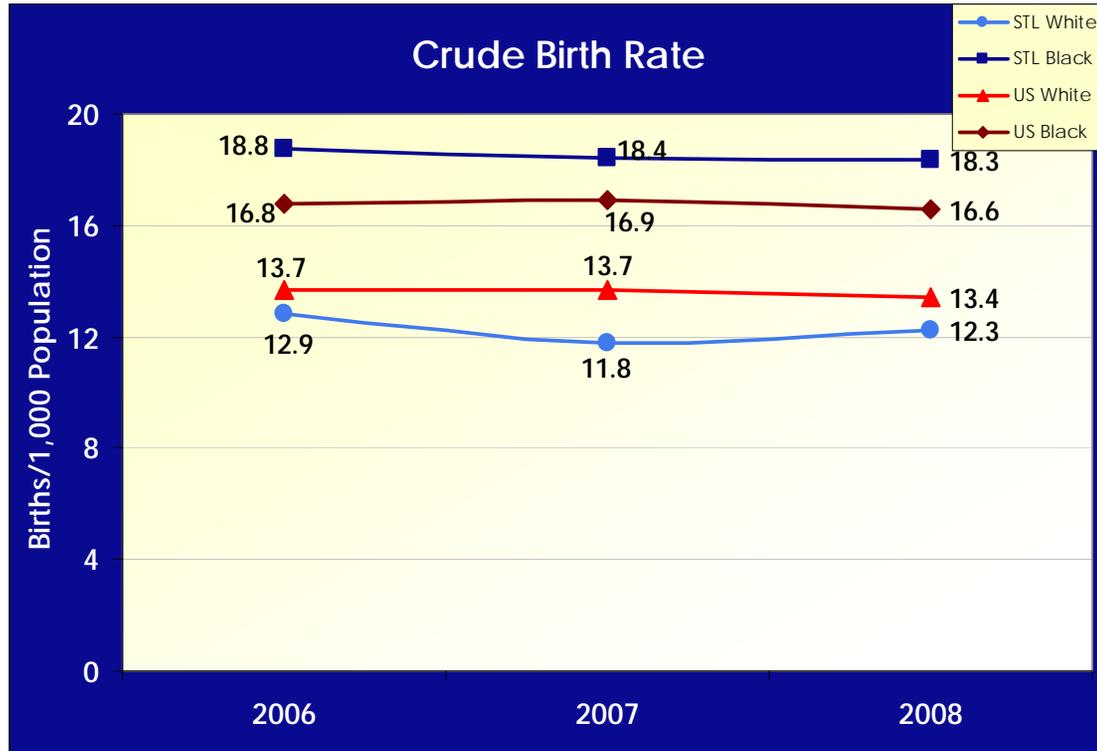
STL City	23.8%
STL Black	22.8%
STL White	24.3%
MO	19.8%
MO Black	23.4%
MO White	19.1%
US	20.2%
US Black	22.9%
US White	19.6%

**small population-interpret with caution



15 to 44 Female Age Cohort ¹⁷

Crude Birth Rate



Definition

Crude birth rate is the number of live births divided by the population multiplied by 1,000. It is useful as a crude measure of population growth due to natural causes. The rate is presented as live births per 1,000 population.

Public Health Implications

Crude birth rates indicate where the population may be growing naturally and what areas of the city may be home to more infants.

St. Louis Rates and Comparative Info

The 2006 through 2008 average crude birth rate in the City of St. Louis is slightly higher than the average rates in Missouri and the U.S. for the same time period, 15.3 vs. 13.8 and 14.2 respectively. In 2008 there were 5,408 births in the City of St. Louis. The ZIP Code with the highest average crude birth rate is 63106. The ZIP Codes with the lowest average rates are 63102, 63108 and 63103.

Black/White Disparity

For 2006 through 2008 the average crude birth rate was 21% higher in the black population in St. Louis City compared to the white population, 18.5 vs. 12.3 births per 1,000.

Disparity Ratio: 1.5

Potential Public Health Interventions

This rate is an indication of the natural increase in a population. Specific public health interventions are not indicated.

“Nearly one-in-five American women ends her childbearing years without having borne a child, compared with one-in-ten in the 1970s. While childlessness has risen for all racial and ethnic groups, and most education levels, it has fallen over the past decade for women with advanced degrees.”

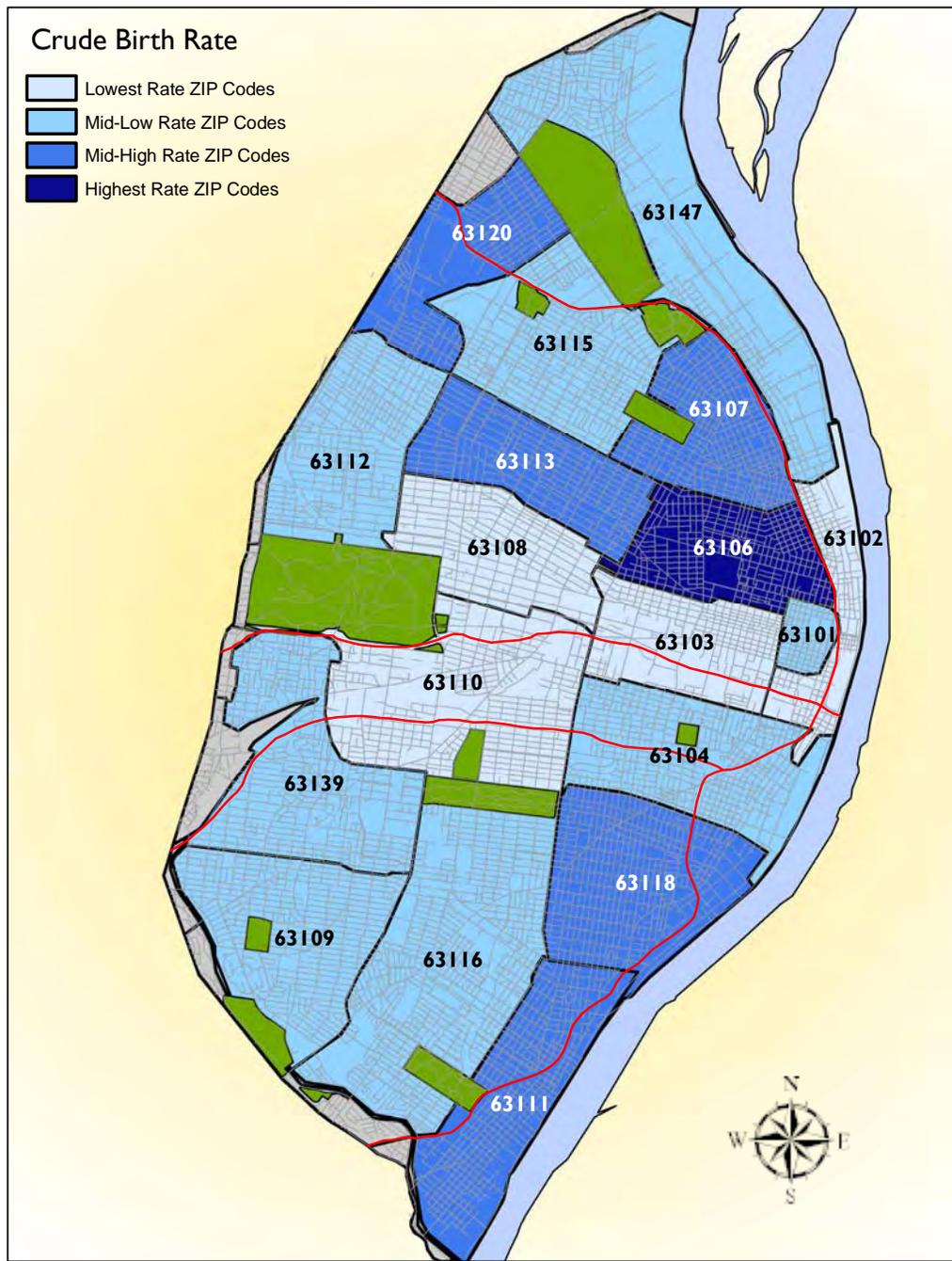
-Pew Research Center

Live Births/1000 Population

ZIP Code	Crude Birth	Map Quartile
63106	24.1	4
63111	19.1	3
63118	18.7	3
63107	17.4	3
63120	17.2	3
63113	16.8	3
63112	15.9	2
63115	15.7	2
63104	15.7	2
63116	15.2	2
63147	14.5	2
63101**	13.9	2
63109	13.4	2
63139	12.9	2
63110	12.2	1
63103	9.1	1
63108	8.6	1
63102**	5.9	1

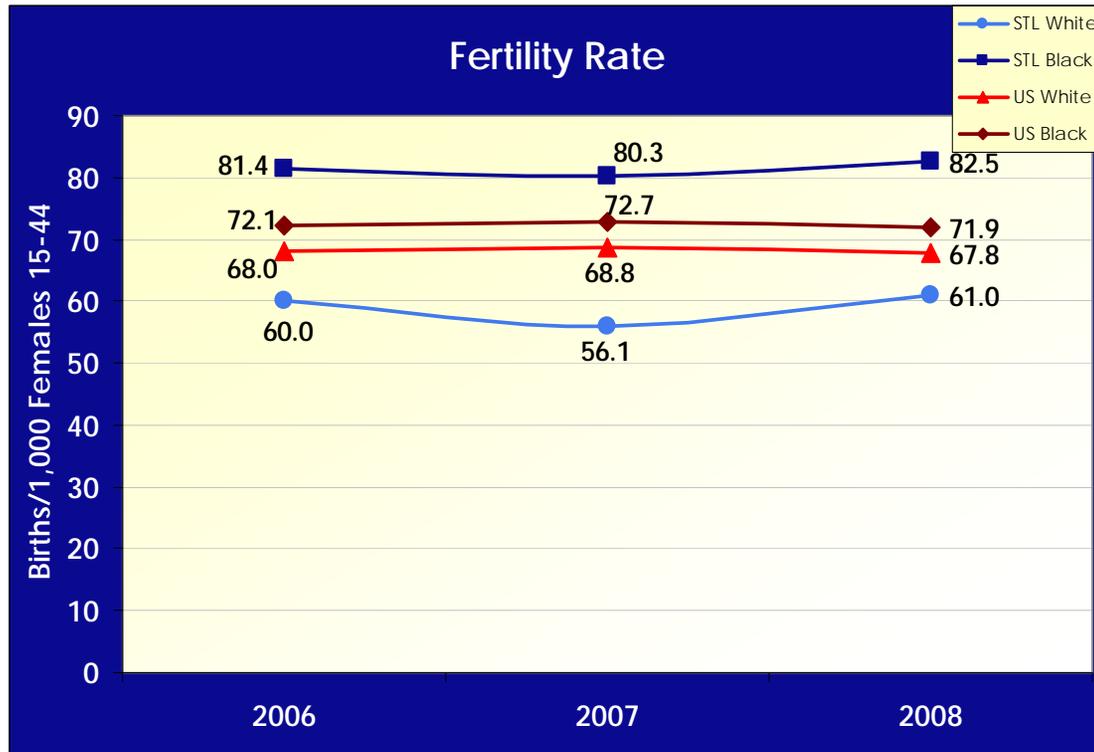
STL City	15.3
STL Black	18.5
STL White	12.3
MO	13.8
MO Black	17.9
MO White	13.0
US	14.2
US Black	16.8
US White	13.6

**small population-interpret with caution



Crude Birth Rate

Fertility Rate



“A sharp decline in fertility rates in the United States that started in 2008 is closely linked to the souring of the economy that began about the same time... The year 2007 marked a record high number of births in the U.S.-4,316,233. Since that time, births have been declining, even as the U.S. population continues to grow.”

-In a Down Economy, Fewer Births; Pew Research Center, Oct, 2011

Definition

Fertility rate is the number of live births divided by the estimated number of females aged 15 to 44 multiplied by 1,000. Because it is more specific, it is considered an improvement over the crude birth rate. This rate is also a measure of natural population growth due to natural causes.

Public Health Implications

Fertility rate, like crude birth rate, gives an indication of where the population may be growing naturally and what areas of the city may have more infants.

St. Louis Rates and Comparative Info

The 2006 through 2008 average fertility rate in the City of St. Louis is slightly higher than the average rates in Missouri and the U.S. for the same time period, 70.7 vs. 68.0 and 68.9 respectively. In 2008 there were 5,408 births in the City of St. Louis. The ZIP Codes with the highest average fertility rate for the time period 2006 through 2008 are 63106 and 63111. The ZIP Codes with the lowest rates are 63108, 63102, 63103.

Black/White Disparity

In St. Louis City the 2006 through 2008 average fertility rate is higher in the black community than in the white population, 81.4 vs. 59.0 or 62% higher.

Disparity Ratio: 1.4

Potential Public Health Interventions

This rate is an indication of the natural increase in a population. Specific public health interventions are not indicated.

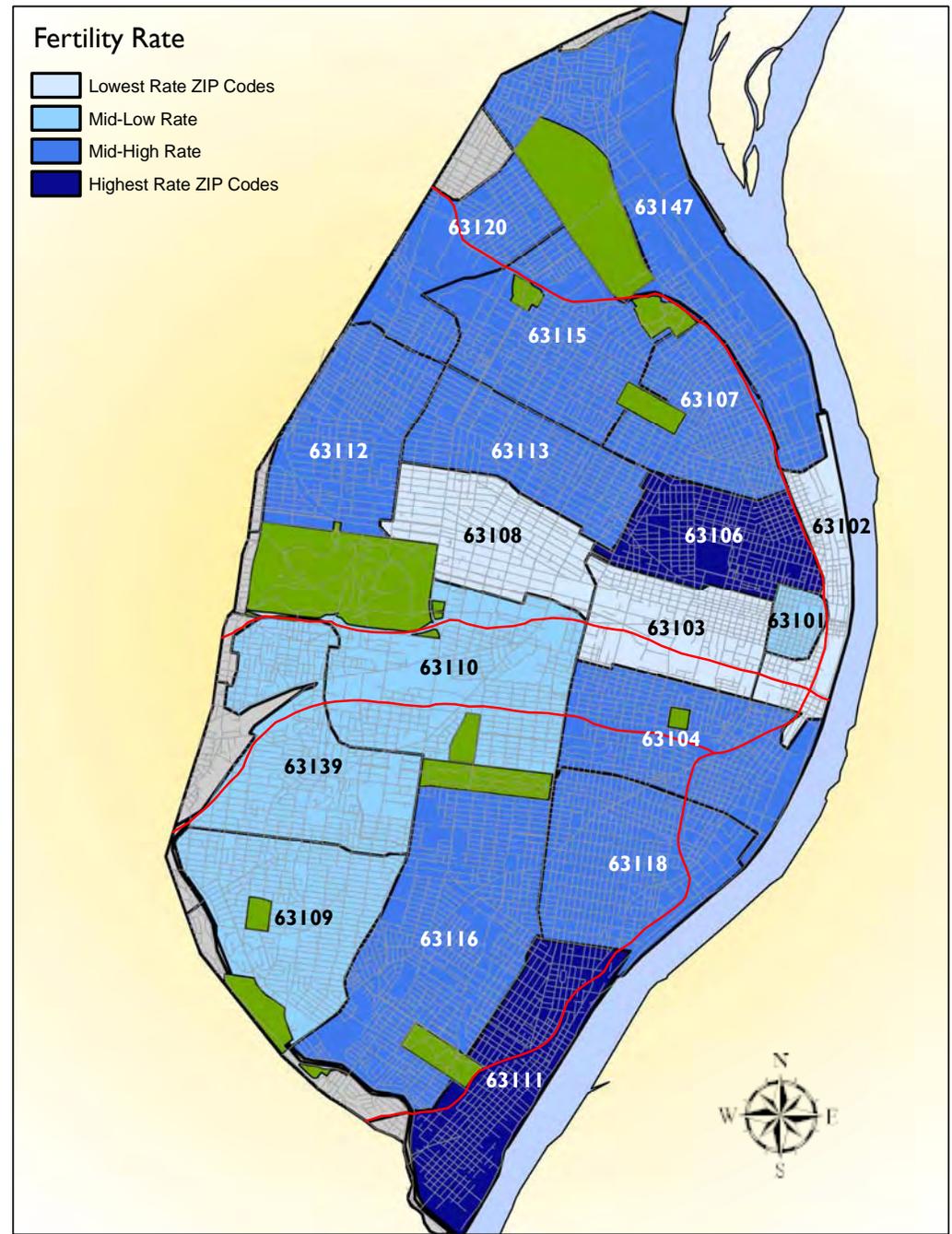
Data Source: Missouri Department of Health and Senior Services; Vital Records Data

Live Births/1000 Females Age 15-44

ZIP Code	Fertility Rate	Map Quartile
63106	103.0	4
63111	93.8	4
63113	83.8	3
63107	82.5	3
63118	80.8	3
63115	77.4	3
63120	77.3	3
63116	71.9	3
63147	71.3	3
63104	70.4	3
63112	69.0	3
63109	63.9	2
63139	60.8	2
63101**	59.2	2
63110	52.1	2
63103	41.6	1
63102**	40.4	1
63108	34.6	1

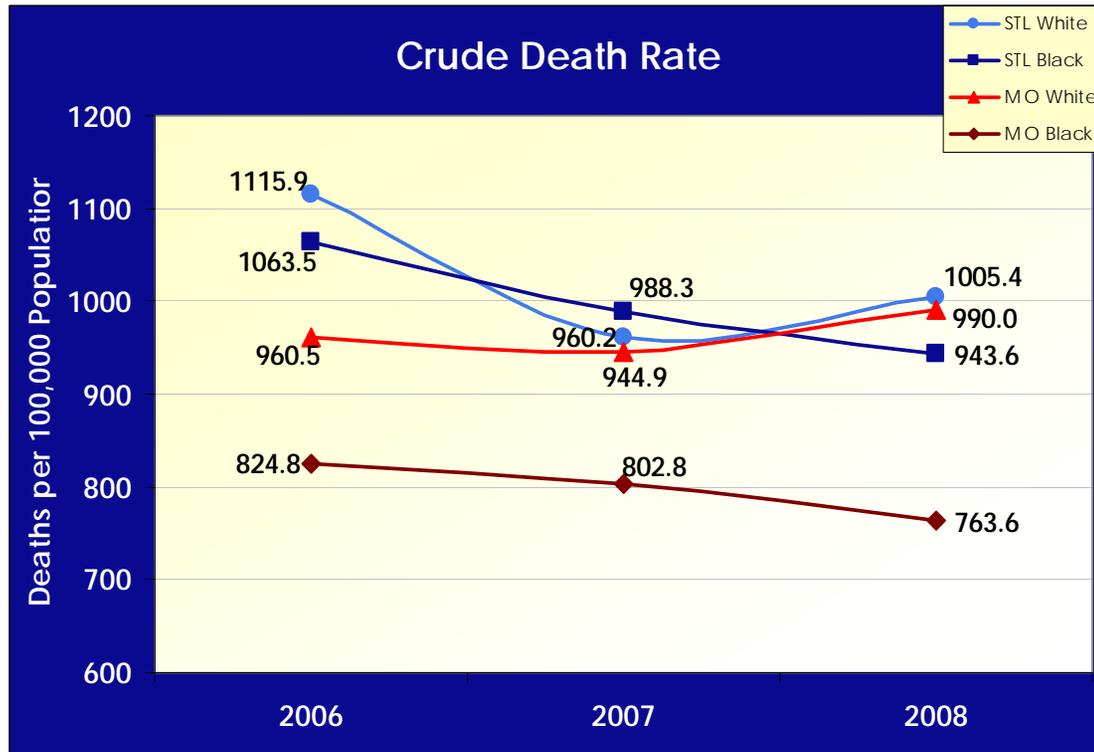
STL City	70.7
STL Black	81.4
STL White	59.0
MO	68.0
MO Black	76.7
MO White	65.6
US	68.9
US Black	72.2
US White	68.2

**small population-interpret with caution



Fertility Rate

Crude Death Rate



Data Source: Missouri Department of Health and Senior Services; Vital Records Data

Definition

Crude death rate is the number of deaths in a given year divided by the estimated population. The rate is expressed as deaths per 100,000 population. It is useful as a measure of population decrease due to natural causes, as opposed to “flight”.

Public Health Implications

Crude death rates are useful when allocating public health resources because it gives an indication of areas where larger numbers of deaths are occurring. However it is a very crude measure of risk because of the great variation of age. See age-adjusted overall mortality rates.

St. Louis Rates and Comparative Info

The 2006 through 2008 average crude death rate in St. Louis City is 3.5% higher than the average rate for Missouri and 18% higher than the average U.S. rate in the same time period. In 2008 there were 3,271 deaths in the City of St. Louis. The ZIP Codes with the highest average crude death rate are 63113, 63111 and 63115. The ZIP Codes with the lowest average rates are 63102, 63104 and 63118.

Black/White Disparity

The St. Louis City white population has an average crude death rate 3 percent higher than the average rate for the St. Louis City black community for the time period 2006 through 2008. This is most likely due to the higher percentage of those 65 years of age and older in the white population.

Disparity Ratio: 0.97

Potential Public Health Interventions

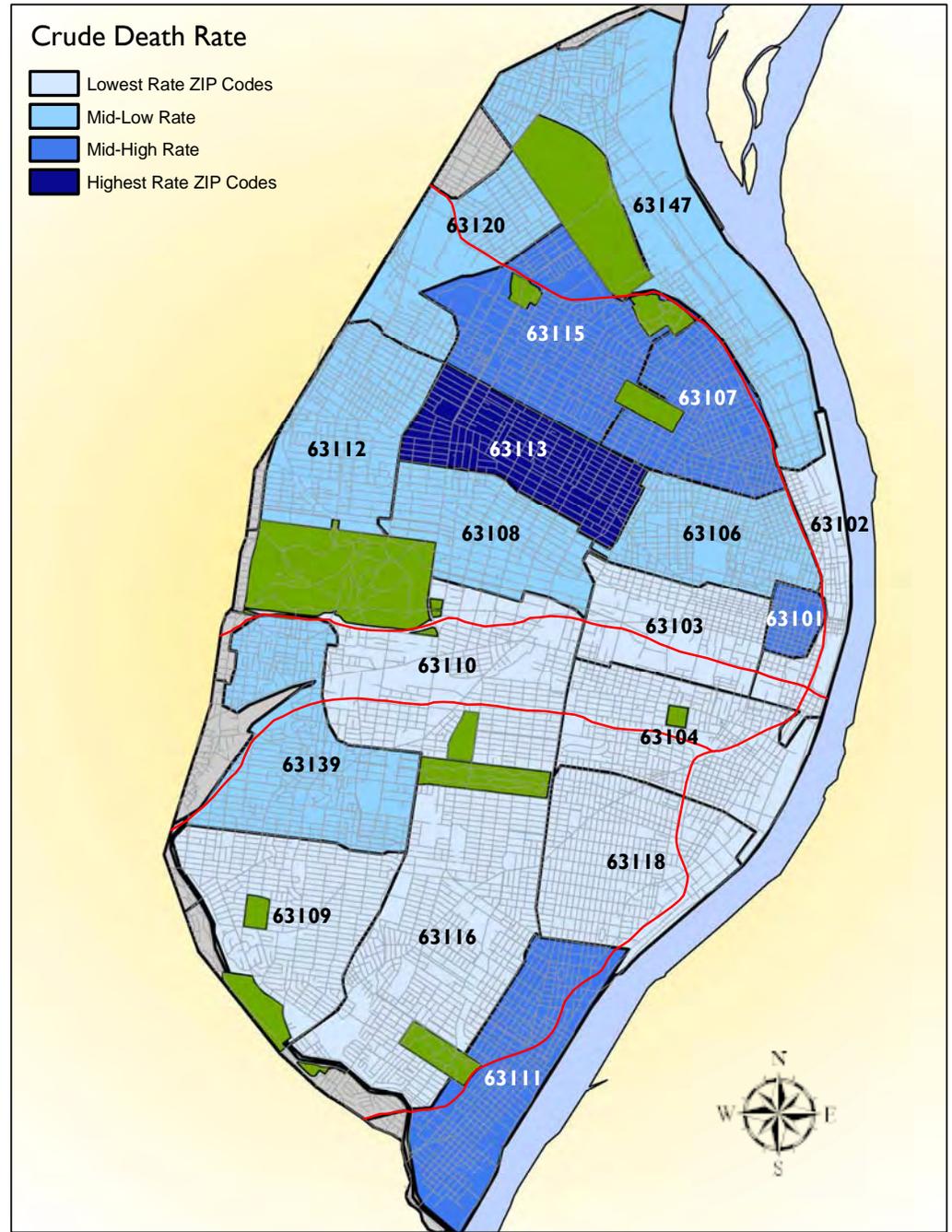
Public health activities include epidemiological studies to determine and then prioritize the most important areas for public health programming.

Deaths/100,000 Population

ZIP Code	Crude Death	Map Quartile
63113	1,459.3	4
63111	1,210.5	3
63115	1,186.3	3
63101**	1,126.5	3
63107	1,069.9	3
63106	1,058.7	2
63108	1,018.9	2
63112	969.7	2
63120	962.9	2
63147	892.3	2
63139	878.5	2
63116	855.9	1
63103	846.6	1
63109	793.4	1
63110	751.8	1
63118	700.7	1
63104	666.2	1
63102**	658.2	1

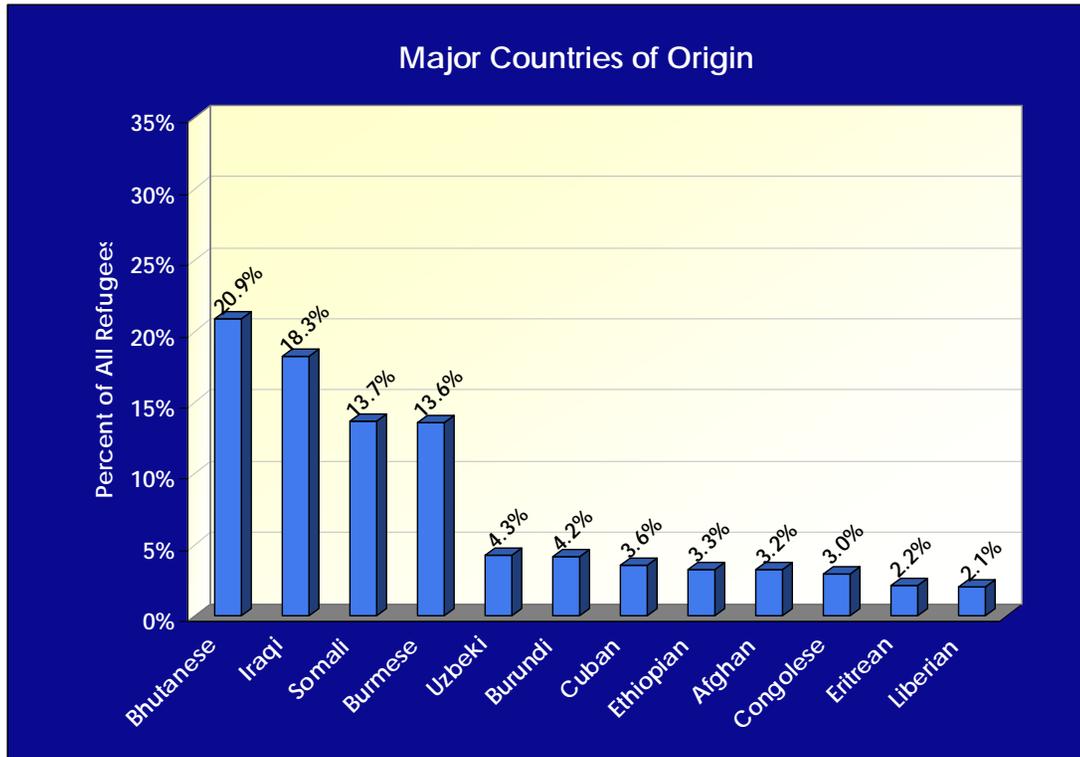
STL City	961.6
STL Black	997.9
STL White	1025.8
MO	929.0
MO Black	796.9
MO White	965.2
US	807.0
US Black	728.2
US White	854.8

**small population-interpret with caution



Crude Death Rate

Refugees Processed



Definition

A refugee is defined as “any person who is outside any country nationality of such person’s nationality or, in the case of a person having no nationality, is outside any country in which such person last habitually resided, and who is unable or willing to return to, and is unable or unwilling to avail himself or herself of the protection of, that country because of persecution or well-founded fear of persecution on account of race, religion, nationality, membership in a particular social group, or political opinion.” [Section 101(a)(42) of the Immigration and Nationality Act] Immigrants are not included in this definition.

Public Health Implications

“Though actual numbers of refugees in the city at any time may be relatively small, by definition, these new arrivals constitute a high-risk group from the standpoint of public health. A great number of refugees come from countries with standards of health care that are far different from the standards that are commonly promoted in our communities in the United States” (focus group facilitator)

St. Louis Rates and Comparative Info

The largest group of refugees processed in the City of St. Louis from 2006 through 2010 was Bhutanese (20.9%). The next three largest groups processed were Iraqi (18.3%), Somali (13.7%) and Burmese (13.6%).

Black/White Disparity

N/A

Disparity Ratio: N/A

Potential Public Health Interventions

Epidemiological and descriptive studies to determine additional unique needs of the immigrant/refugee populations in St. Louis City. Development of culturally sensitive educational materials. Collaboration with agencies that serve the refugee population.

“Many refugees had limited medical services when they first arrive in St. Louis. Public health services are important not only for their well-being of our community. Screening for communicable diseases can help ensure the health of the entire region, and immunizations can keep us all healthy.”

-Suzanne LeLaurin, LCSW Senior Vice-President for Individuals and Families at the International Institute, St. Louis

Data Source: International Institute, St. Louis

% of all Refugees Processed – 2006 - 2010

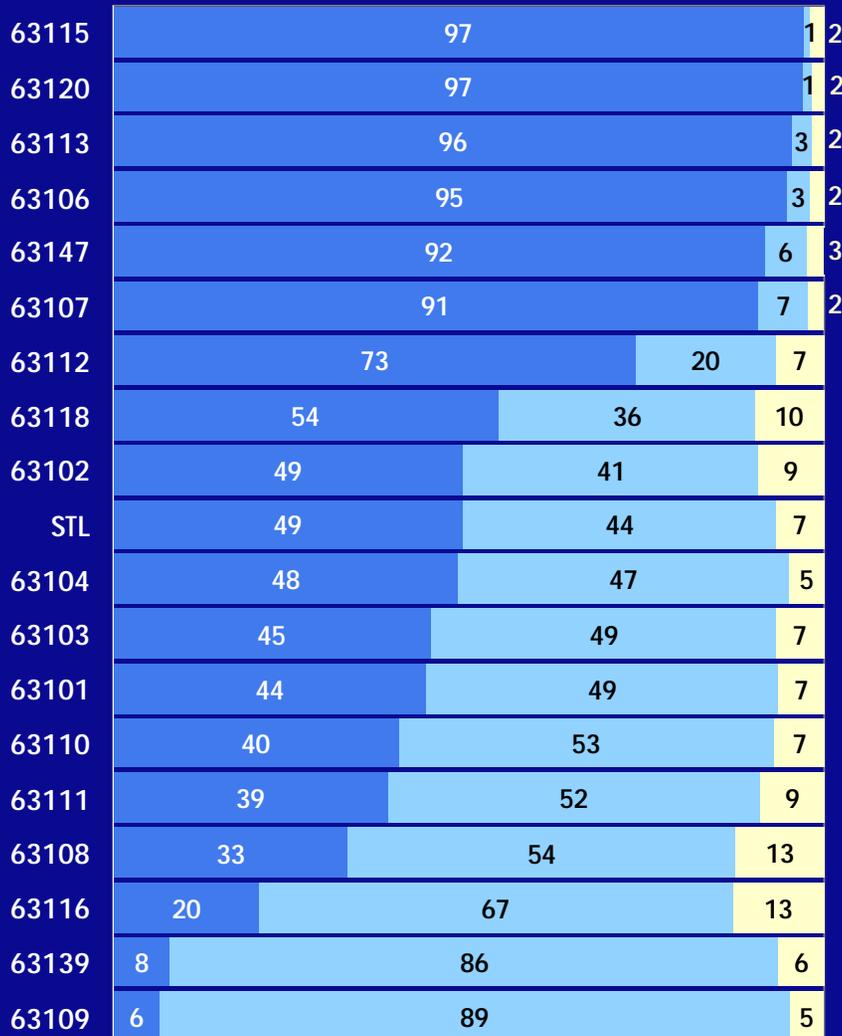
Nationality	% of Total
Bhutanese	20.88%
Iraqi	18.30%
Somali	13.69%
Burmese	13.64%
Uzbeki	4.33%
Burundi	4.19%
Cuban	3.62%
Ethiopian	3.29%
Afghan	3.25%
Congolese	2.96%
Eritrean	2.16%
Liberian	2.07%
Vietnamese	1.41%
Iranian	1.03%
Sudanese	0.85%
Russian	0.75%
Sierra Leonian	0.47%
Nepalese	0.33%
Tanzanian	0.33%
Togolese	0.33%
Georgian	0.28%
Cameroon	0.24%
Kyrgystani	0.24%
Rwandan	0.24%
Columbian	0.14%
Indian	0.14%
Moldovan	0.14%
Senegalese	0.14%
Cambodian	0.09%
Kazakhstani	0.09%
Yemeni	0.09%
Azerbaijani	0.05%
Bosnian	0.05%
Ghanian	0.05%
Kenyan	0.05%
Nigerian	0.05%
Thai	0.05%

Refugees Processed

Racial Polarization

Racial Polarization

■ %Black ■ %White ■ %Other



Data Source: 2010 Census

Definition

The demographic distribution in St. Louis shows extreme racial imbalance in several ZIP Codes. For purposes of this analysis, ZIP Codes were ranked based upon the level of racial diversity. 2010 Census data are used. The City of St. Louis has a history of being racially divided geographically.

Public Health Implications

The economic landscape is increasingly concentrating poverty and unemployment among racial minorities in the inner cities. Joblessness among black males, increasing teenage pregnancy and single-parent households, children in poverty and poor health, homelessness, welfare dependency, crime, drugs, gangs, and violence—these and related problems diminish the quality of life throughout metropolitan areas.

St. Louis Rates and Comparative Info

According to the 2010 estimates, the City of St. Louis is 49.2% black and 43.9% white. Nationally, blacks represent about 13% of the population and whites represents about 72% of the population.

Black/White Disparity

The percentage of blacks in individual ZIP Codes ranges from 97.1% to only 6.4%. The percentage of whites range from 88.9% to 0.9%. The ZIP codes that are the most racially isolated in the City of St. Louis are 63115, 63120, 63113, 63106, 63147, 63107, 63109 and 63139.

Potential Public Health Interventions

Areas of the City that are identified as racially isolated can be assessed and targeted with interventions and appropriate programs addressing issues germane to the dominant population.

“Delmar Boulevard, which spans the city from east to west, features million-dollar mansions directly to the south, and poverty-stricken areas to its north. What separates rich and poor is sometimes just one street block.”

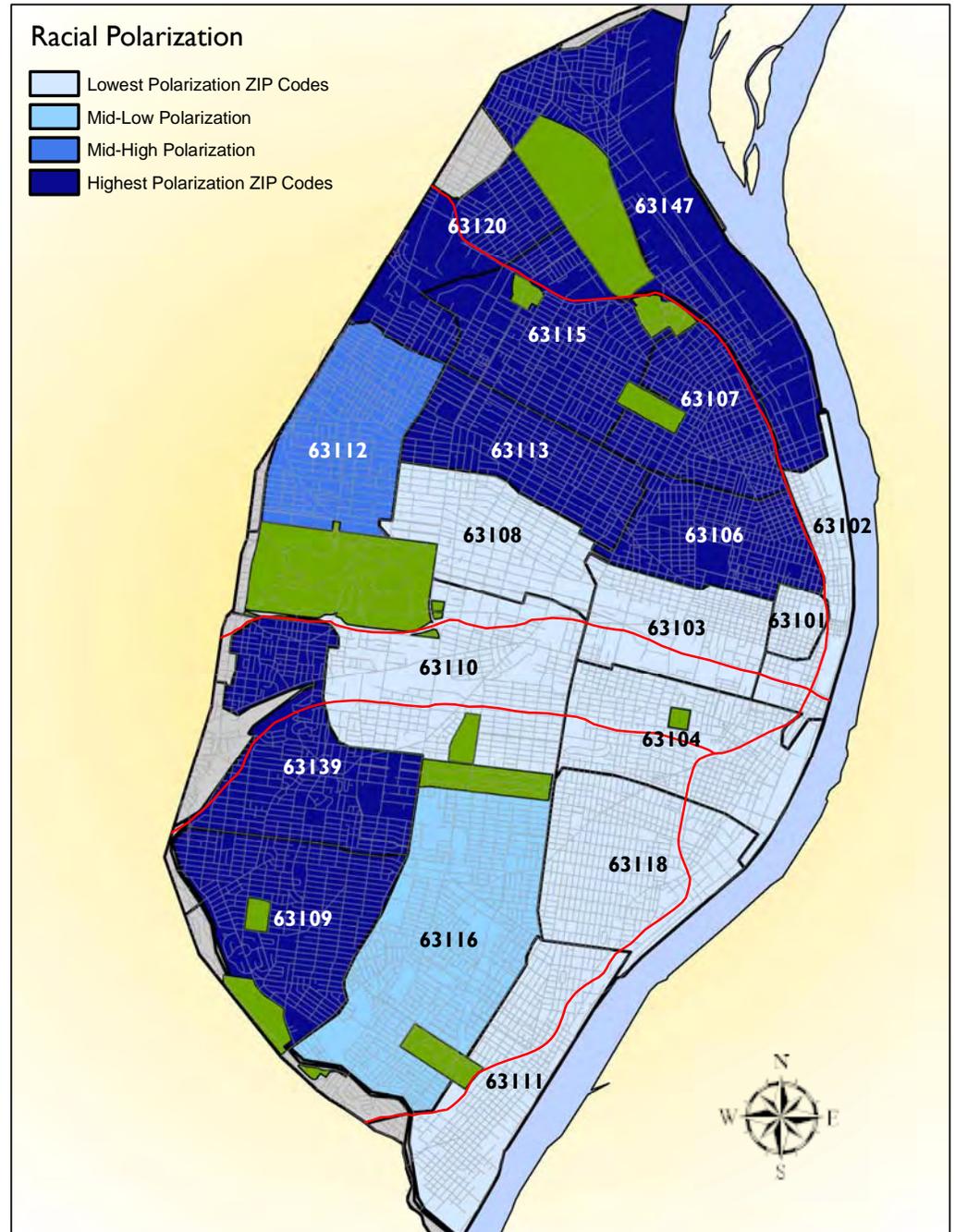
-BBC News video focuses on Delmar Boulevard as the area’s ‘dividing line’; St. Louis Post Dispatch, March, 2012

% Racial Makeup

ZIP Code	%Black	%White	%Other	Map Quartile
63115	97.1	0.9	1.9	4
63120	96.9	1.2	1.9	4
63113	95.5	2.7	1.8	4
63106	94.8	3.3	1.9	4
63147	91.8	5.6	2.6	4
63107	90.7	7.1	2.2	4
63109	6.4	88.9	4.7	4
63139	8.1	85.5	6.4	4
63112	73.4	19.8	6.8	3
63116	20.4	66.9	12.7	2
63108	33.1	54.3	12.6	1
63118	54.2	36.1	9.8	1
63110	40.3	52.8	6.9	1
63111	38.8	52.2	9.0	1
63102	49.4	41.4	9.3	1
63101	44.1	49.4	6.6	1
63103	44.6	48.7	6.7	1
63104	48.4	46.7	4.9	1

STL	49.2	43.9	6.8
MO	11.6	82.8	5.6
US	12.6	72.4	15.0

*Asian, Native Hawaiian and Pacific Islander, American Indian and Alaska Native, two or more races. Hispanic is an ethnicity not a race.

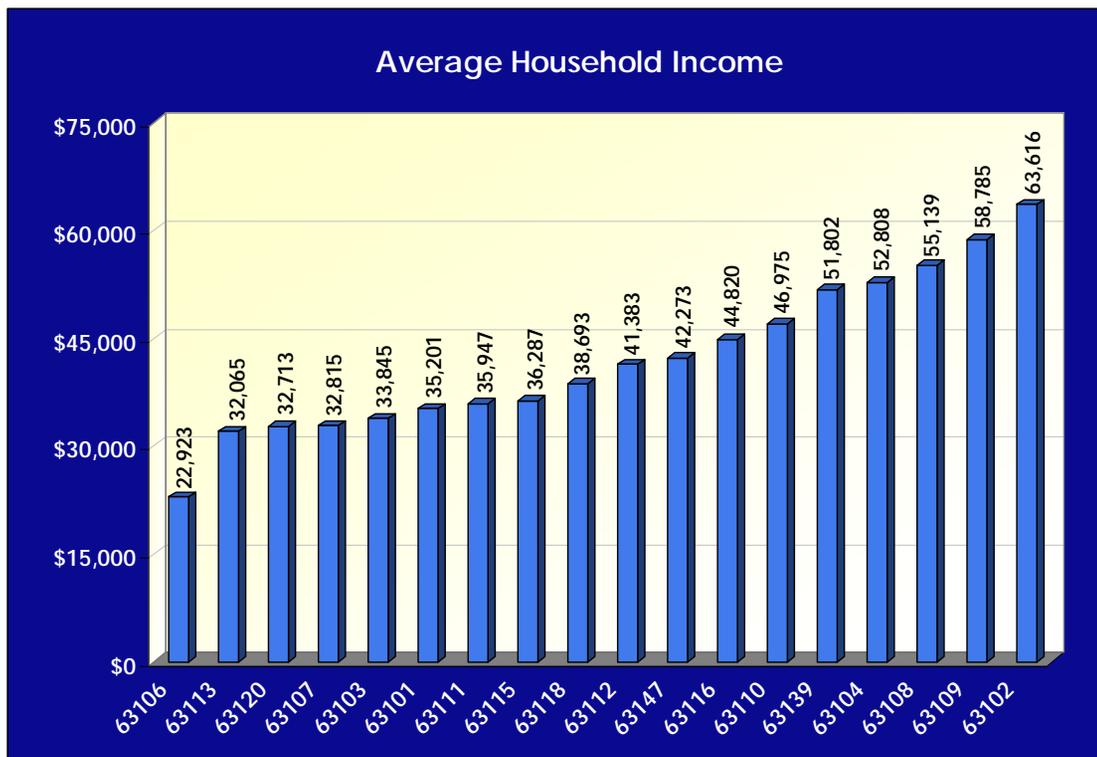


Racial Polarization

SOCIO-ECONOMIC



Average Household Income



Definition

Average household income is defined as the total money received in a calendar year by all household members 15 years old and over. It is a measure of the economic strength of a community.

Public Health Implications

Average household income is a proxy to determine poorer areas of the city. Lower economic strength is correlated with negative public health and health outcomes related to indicators such as lead poisoning, infant mortality, sexually transmitted diseases, mortality and morbidity rates and environmental conditions.

St. Louis Rates and Comparative Info

According to the 2011 Claritas estimates, the average household income in the U.S. is 51% higher than that in the City of St. Louis. The ZIP Code with the lowest average household income is 63106. Those with the highest average household income are 63102, 63109 and 63108.

Black/White Disparity

According to the 2011 estimates, the average household income in the white community is 49% higher than the average household income in the black community, \$51,084 vs. \$34,375.

Disparity Ratio: 0.67

Potential Public Health Interventions

Epidemiological studies to determine target populations and areas of the city for public health policy and program development

“Nearly one in four people in St. Louis live below the poverty level, making it the 13th poorest city in America.”

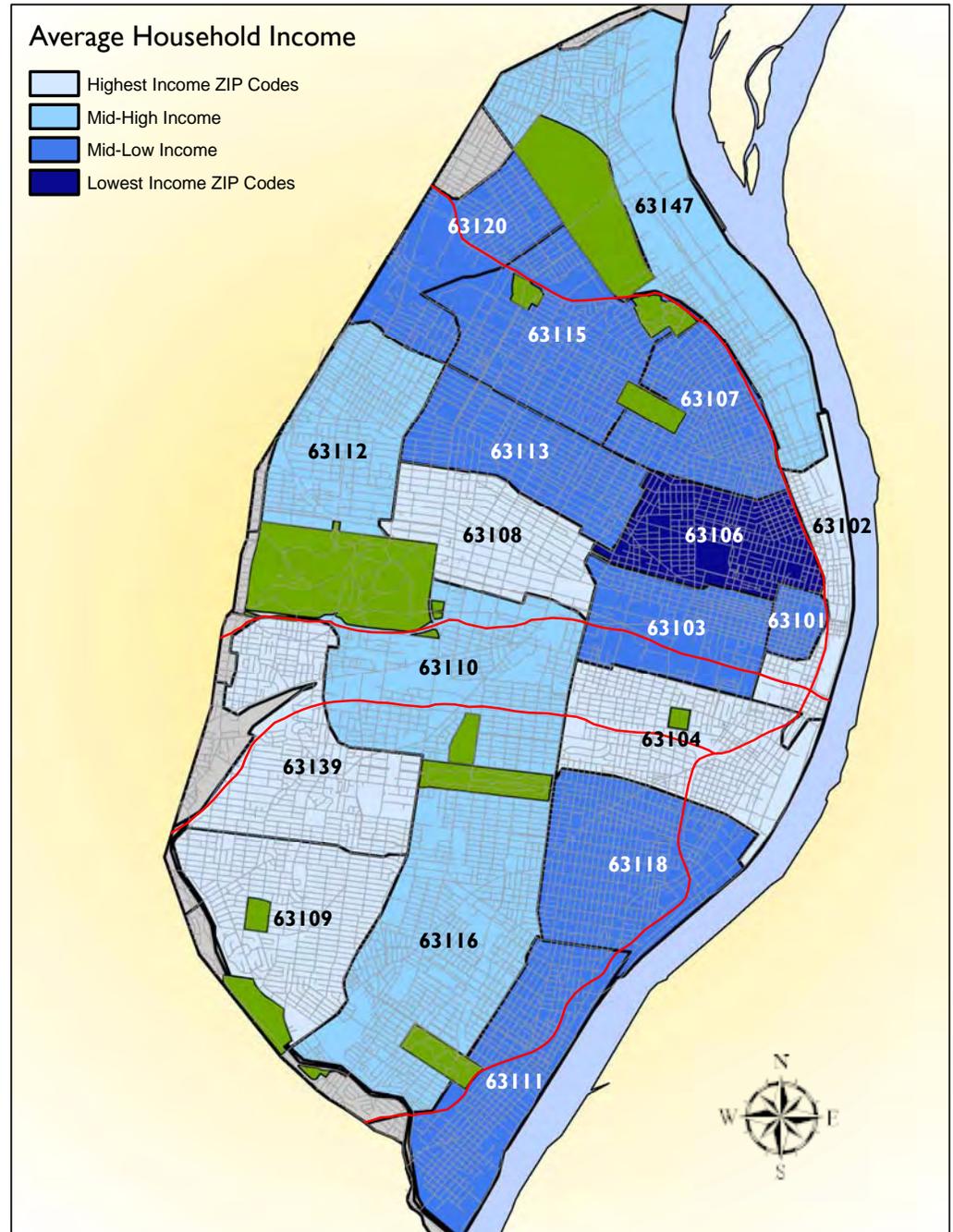
-Those We Serve; St. Patrick Center, Sept 2012

Data Source: Claritas, Inc. 2011 estimate

Average \$ Earned/Household

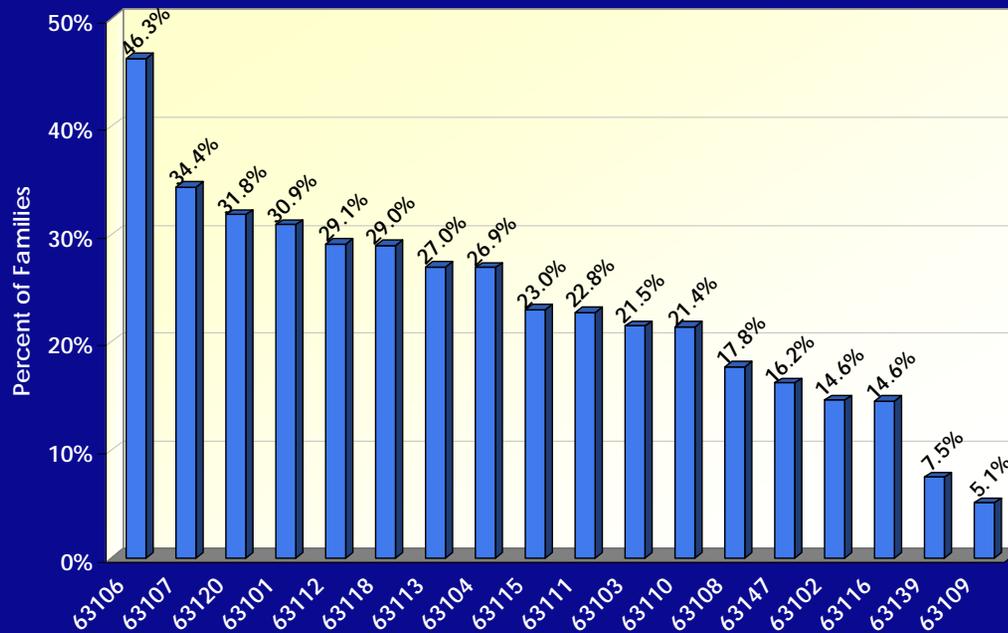
ZIP Code	Avg Income	Map Quartile
63106	\$22,923	4
63113	\$32,065	3
63120	\$32,713	3
63107	\$32,815	3
63103	\$33,845	3
63101	\$35,201	3
63111	\$35,947	3
63115	\$36,287	3
63118	\$38,693	3
63112	\$41,383	2
63147	\$42,273	2
63116	\$44,820	2
63110	\$46,975	2
63139	\$51,802	1
63104	\$52,808	1
63108	\$55,139	1
63109	\$58,785	1
63102	\$63,616	1

STL City	\$44,675
STL Black	\$34,375
STL White	\$51,084
MO	\$58,796
MO Black	NAV
MO White	NAV
US	\$67,529
US Black	NAV
US White	NAV



Families Below Poverty

Families Below Poverty



“Approximately 85% of clients assisted by St. Patrick Center are below the national poverty threshold. In Fiscal Year 2010, the average income of clients assisted by St. Patrick Center was \$7,550.”

-Those We Serve; St. Patrick Center, Sept 2012

Data Source: Claritas, Inc. 2009 estimate

Definition

2009 Claritas estimates were used to determine the percentage of families that live below the poverty line. This indicator cannot be compared to the 2007 Understanding Our Needs report since the 2007 report presented “households” below poverty.

Public Health Implications

Children living below the poverty line are more likely to suffer from poor general health, to have high levels of blood lead and to have no consistent source of health care. They are also more likely to experience housing problems and hunger, less likely to be enrolled in early childhood education and less likely to have a parent working full-time all year.

St. Louis Rates and Comparative Info

According to the 2009 estimates, the percentage of families below poverty in St. Louis City was over two times that for the US and Missouri. The ZIP Codes with the highest percentage of families below poverty were 63106, 63107 and 63120. Those ZIPs with the lowest percentages of families living below poverty are 63109 and 63139.

Black/White Disparity

Data not available

Disparity Ratio: N/A

Potential Public Health Interventions

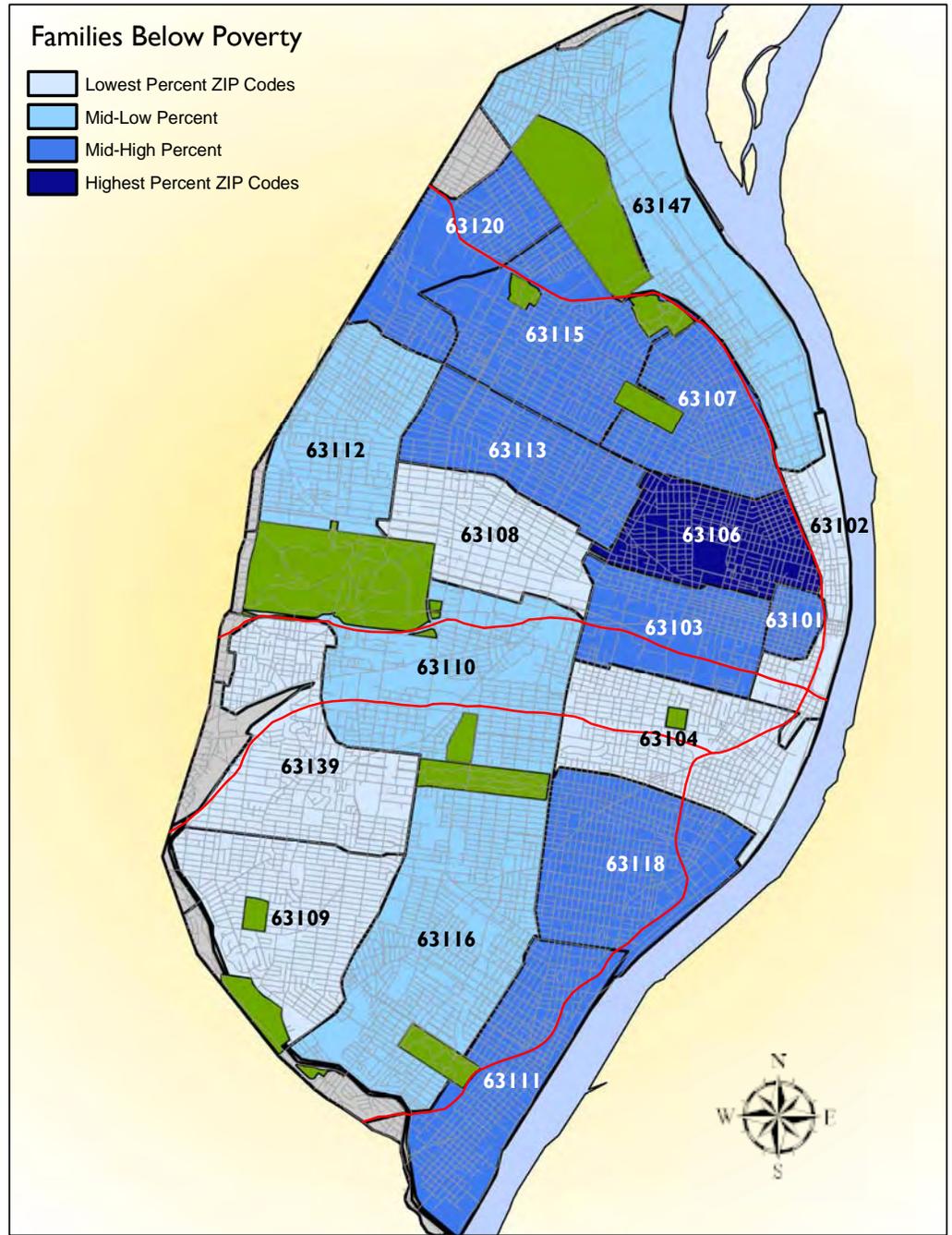
Identification of areas with high rates of poverty and targeting populations with appropriate programs such as immunization and lead poisoning prevention.

% of Total Households

ZIP Code	Below Poverty	Map Quartile
63106	46.3%	4
63107	34.4%	3
63120	31.8%	3
63101**	30.9%	3
63112	29.1%	3
63118	29.0%	3
63113	27.0%	3
63104	26.9%	3
63115	23.0%	2
63111	22.8%	2
63103	21.5%	2
63110	21.4%	2
63108	17.8%	2
63147	16.2%	2
63102**	14.6%	1
63116	14.6%	1
63139	7.5%	1
63109	5.1%	1

STL City	21.0%
STL Black	NAV
STL White	NAV
MO	8.7%
MO Black	NAV
MO White	NAV
US	9.2%
US Black	NAV
US White	NAV

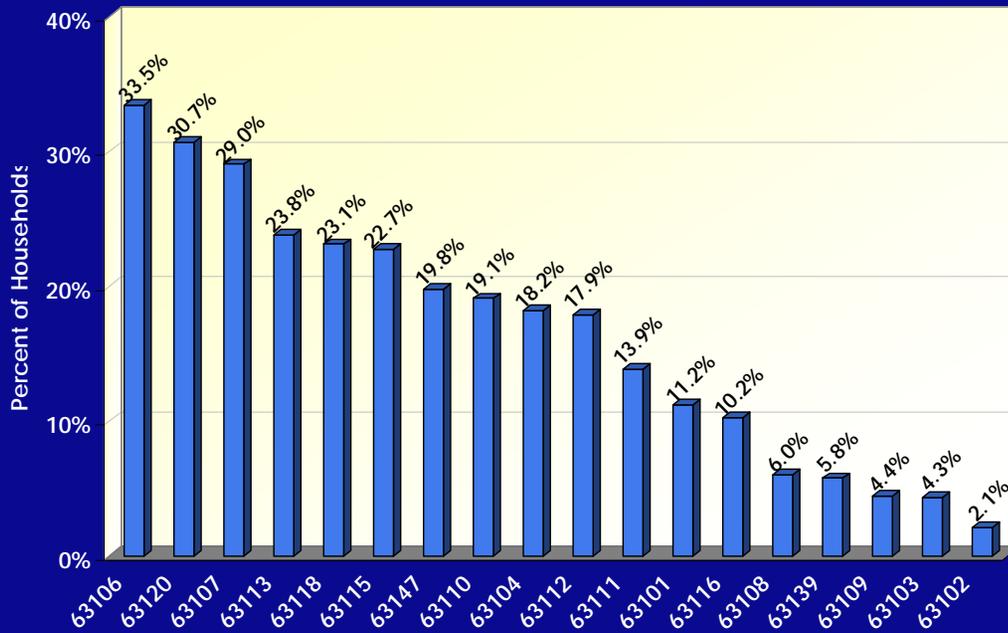
**small population-interpret with caution



Families Below Poverty

Female Head of Household

Female Head of Household



“In 2009, poverty rates were highest among women who were heads of their households with no spouse present (27.1 percent).”

-U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. Women’s Health USA 2011.

Data Source: Claritas, Inc. 2009 estimate

Definition

This represents the percent of households with children that are headed by a female. Data are from the 2009 Claritas estimates.

Public Health Implications

Female headed households are associated with lower socioeconomic status and the associated health and public health issues and concerns.

St. Louis Rates and Comparative Info

According to the 2009 estimates, the percent of households headed by a female in St. Louis City is 88 percent higher than the percent for Missouri and 84 percent higher than the U.S., 15.1% vs. 8.0% and 8.2% for both Missouri and the U.S. respectively. ZIP Codes with the highest percentage of female headed households are 63106, 63120 and 63107. The ZIP Codes with the lowest percent are 63102, 63103, 63109, 63139 and 63108.

Black/White Disparity

Data not available.

Disparity Ratio: N/A

Potential Public Health Interventions

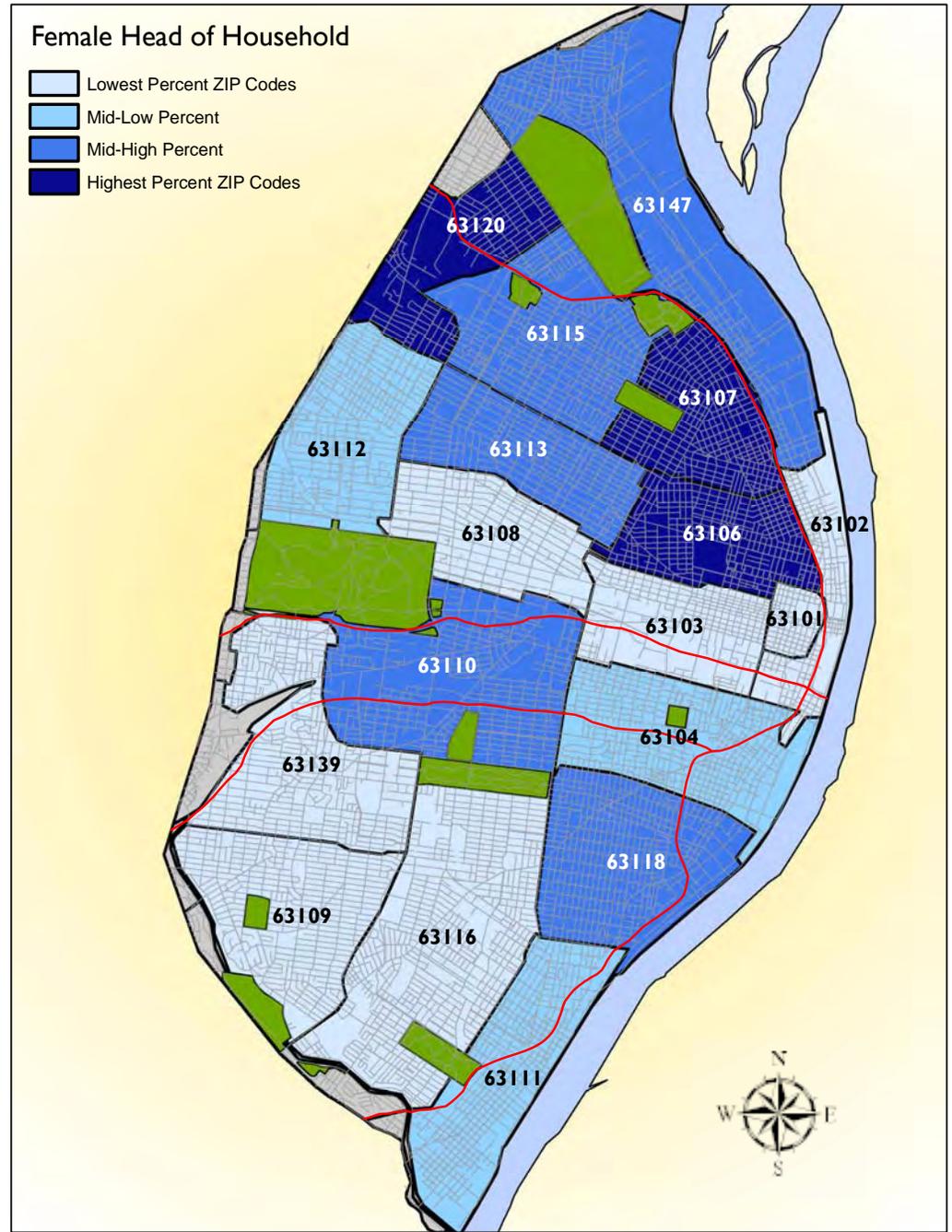
Community surveys to determine needs and maternal, child and family health programs.

% of Total Households

ZIP Code	Female HOH	Map Quartile
63106	33.5%	4
63120	30.7%	4
63107	29.0%	4
63113	23.8%	3
63118	23.1%	3
63115	22.7%	3
63147	19.8%	3
63110	19.1%	3
63104	18.2%	2
63112	17.9%	2
63111	13.9%	2
63101**	11.2%	1
63116	10.2%	1
63108	6.0%	1
63139	5.8%	1
63109	4.4%	1
63103	4.3%	1
63102**	2.1%	1

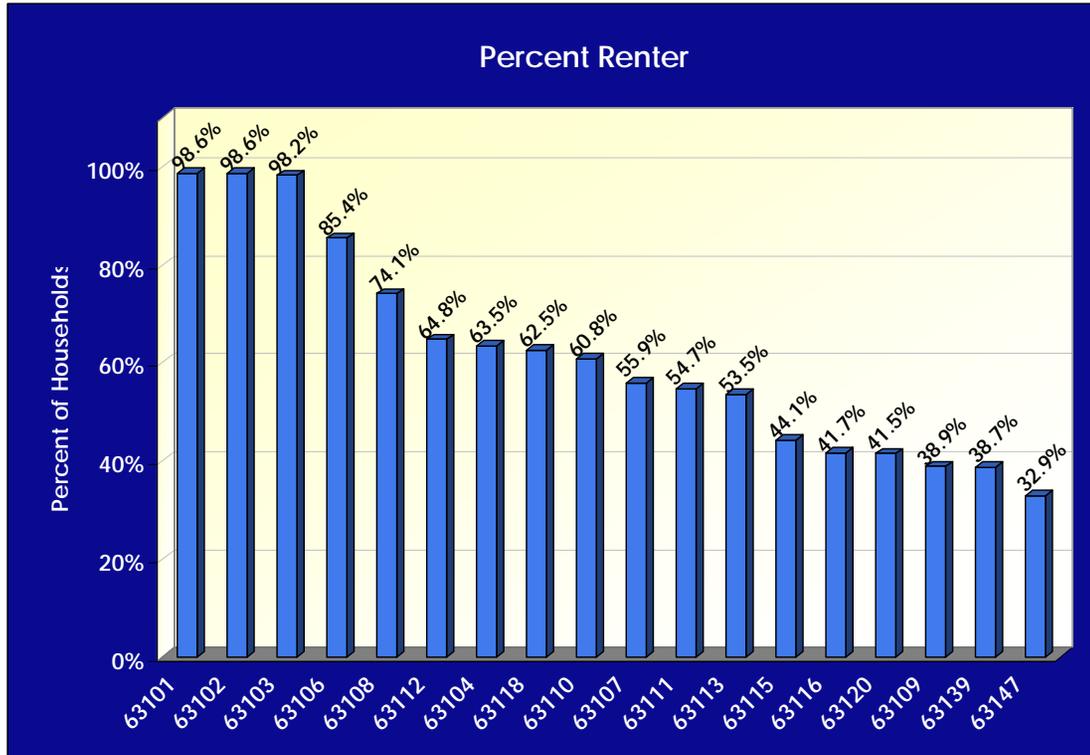
STL City	15.1%
STL Black	NAV
STL White	NAV
MO	8.0%
MO Black	NAV
MO White	NAV
US	8.2%
US Black	NAV
US White	NAV

**small population-interpret with caution



Female Head of Household

Owner/Renter



“... the rental market is volatile because a lot of homeowners can’t sell their homes and are renting them. There are a lot of people to fill those homes, because people who are in foreclosure have to go rent.”

-St. Louis Business Journal; Apartments fill up but rental rates remain flat, April 2011

Data Source: Claritas, Inc. 2009 estimate

Definition

A housing unit is owner occupied if someone whose name is on the deed, mortgage, or contract to purchase lives in the unit. All other occupied housing units are classified as renter occupied units, including units rented for cash, if occupants or others pay some rent and/or occupied without payment of cash rent, such as a life tenancy or a unit that comes free with a job. Households who do not pay cash rent may still pay utilities.

Public Health Implications

Where a person lives is recognized to be a factor in health outcomes. In a rental property, the resident is often dependent on the landlord to make repairs that may impact health. It has been found that homeowners are more likely to make the repairs that improve health than a renter is. However, in St. Louis, there are families who have inherited large, older homes, so deferred housing maintenance impacts the health of both owners and renters.

St. Louis Rates and Comparative Info

The ZIP Codes with the highest rates of renters are downtown and to the near north of downtown: 63101, 63012, 63103 and 63106. These ZIP Codes are also among those with population increase (See Population Change) and could be attributed to focus on the development of urban dwelling units in the last decade. Even the ZIP Codes with the lowest rates, 63109, 63139 and 63147 have rental rates that exceed or are close to the Missouri and U.S. rates.

Black/White Disparity

The rate of black renters (62.2%) is 33.5% higher in St. Louis City than for white renters (46.6%).

Disparity Ratio: 1.3

Potential Public Health Interventions

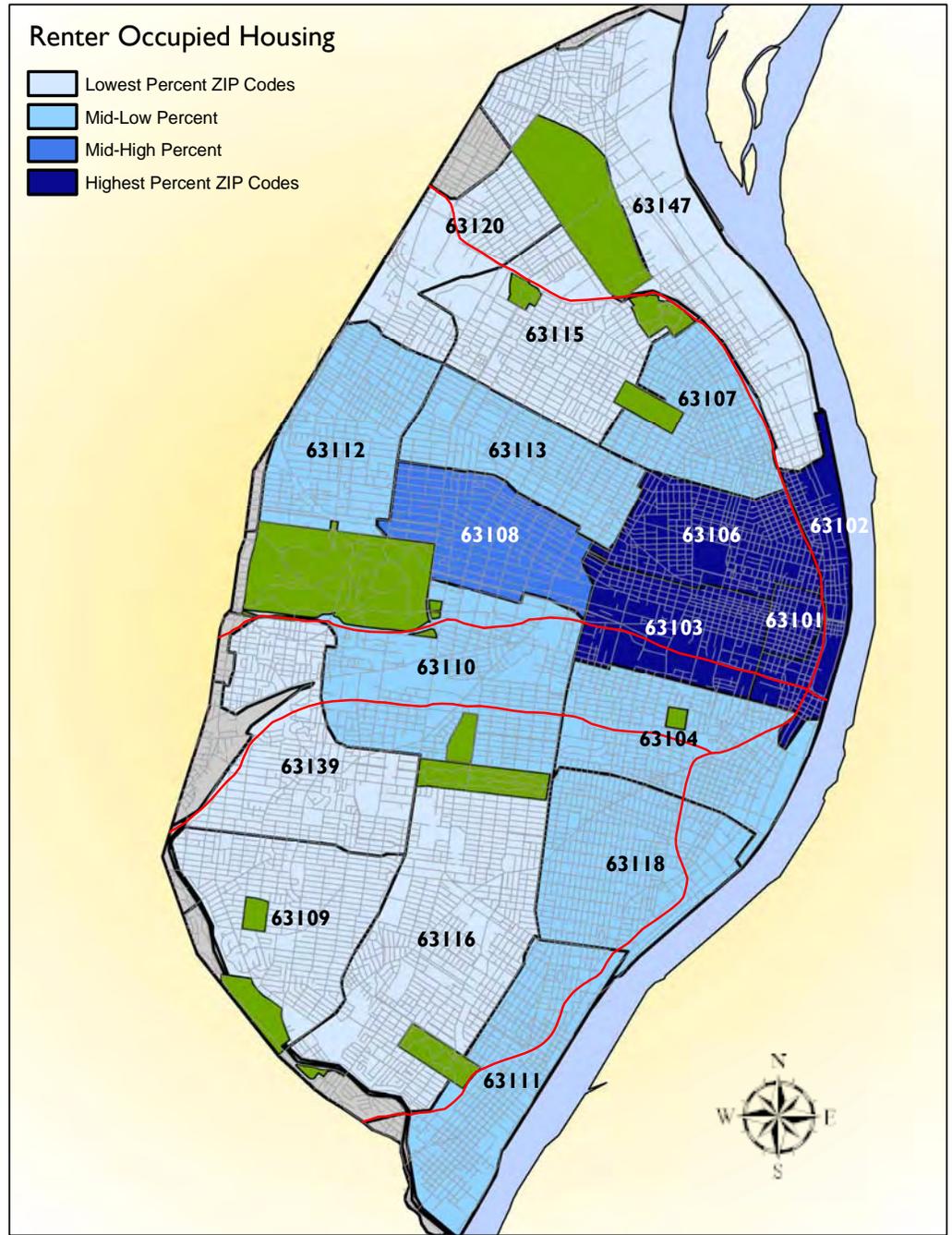
Healthy homes interventions that emphasize simple do-it-yourself techniques. Collaborations with home repair programs. Policies that clarify and hold accountable owner versus tenant responsibilities for rental properties.

% of Total Households

ZIP Code	Percent Renter	Map Quartile
63101**	98.6%	4
63102**	98.6%	4
63103	98.2%	4
63106	85.4%	4
63108	74.1%	3
63112	64.8%	2
63104	63.5%	2
63118	62.5%	2
63110	60.8%	2
63107	55.9%	2
63111	54.7%	2
63113	53.5%	2
63115	44.1%	1
63116	41.7%	1
63120	41.5%	1
63109	38.9%	1
63139	38.7%	1
63147	32.9%	1

STL City	54.3%
STL Black	62.2%
STL White	46.6%
MO	30.0%
MO Black	NAV
MO White	NAV
US	33.0%
US Black	NAV
US White	NAV

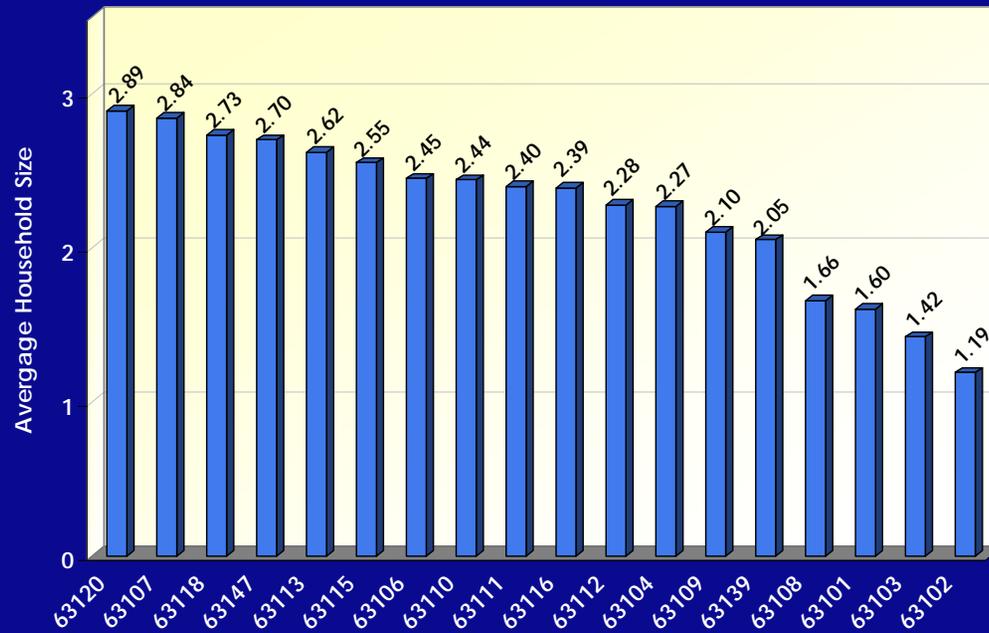
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Owner/Renter

Household Size

Number of People per Household



“The average size of U.S. households has been declining for decades, but may have grown in recent years, at least in part because of an increase in multi-generational households.”

- Pew Research Center; Census 2010: Household Size Trends, April, 2011

Definition

The average number of people per household is calculated as the total population divided by the number of households in a ZIP Code.

Public Health Implications

The number of people per household can reflect differences in family structure. These differences can be related to both economic and demographic patterns. There is evidence that overcrowding is related to the physical health of both children and adults. In particular, some adult respiratory conditions have been linked to overcrowded conditions during childhood.

St. Louis Rates and Comparative Info

St. Louis has a relatively small number of people per household with an overall average household size of 2.31 people. The ZIP Codes with the greatest number of people per household are mostly in the northern part of St. Louis City.

Black/White Disparity

N/A

Disparity Ratio:

N/A

Potential Public Health Interventions

Epidemiological studies to ensure that areas with higher numbers of people per households are not being affected by overcrowding and associated health issues.

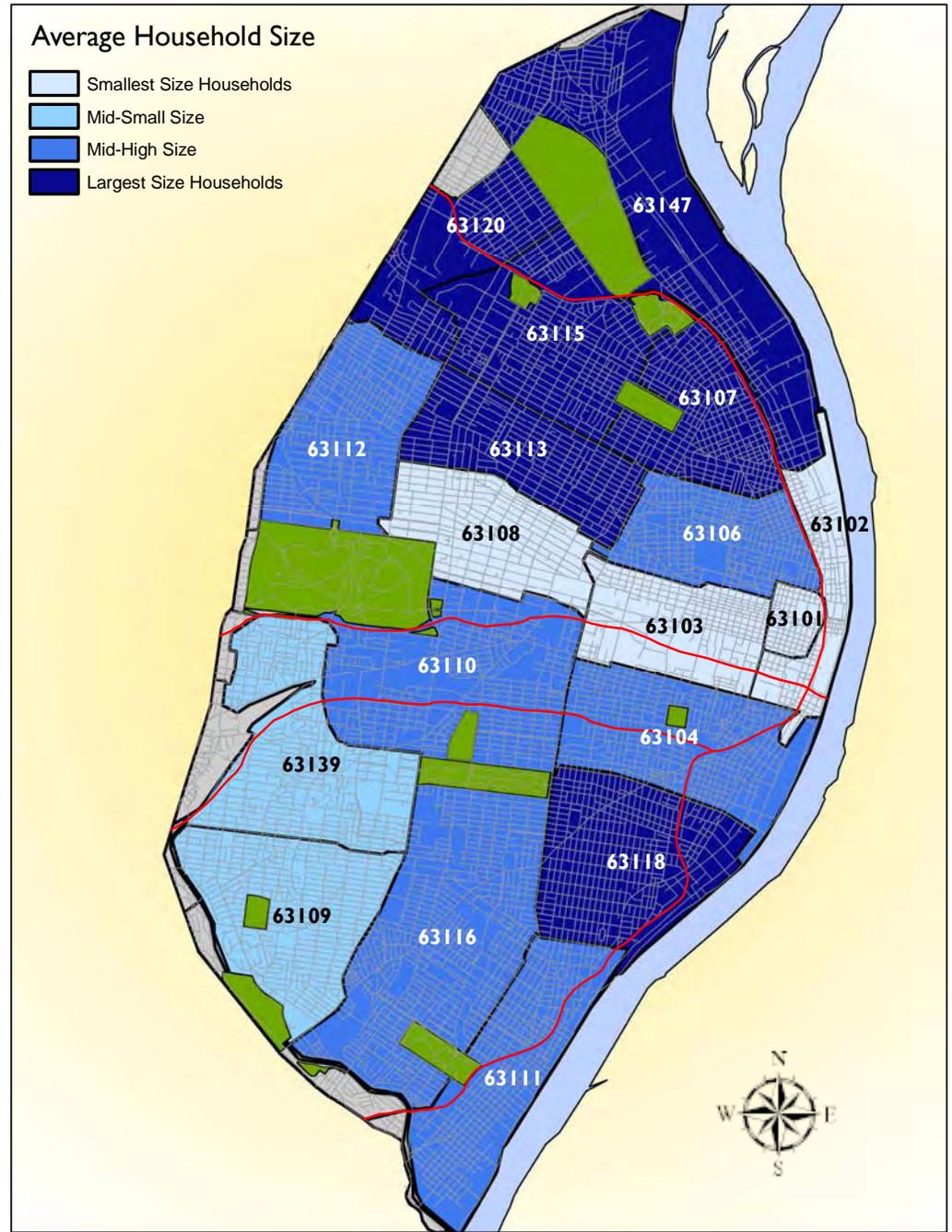
Data Source: Claritas, Inc. 2009 estimate

Average Household Size

ZIP Code	House Size	Map Quartile
63120	2.89	4
63107	2.84	4
63118	2.73	4
63147	2.70	4
63113	2.62	4
63115	2.55	4
63106	2.45	3
63110	2.44	3
63111	2.40	3
63116	2.39	3
63112	2.28	3
63104	2.27	3
63109	2.10	2
63139	2.05	2
63108	1.66	1
63101**	1.60	1
63103	1.42	1
63102**	1.19	1

STL City	2.31
STL Black	NAV
STL White	NAV
MO	2.45
MO Black	NAV
MO White	NAV
US	2.59
US Black	NAV
US White	NAV

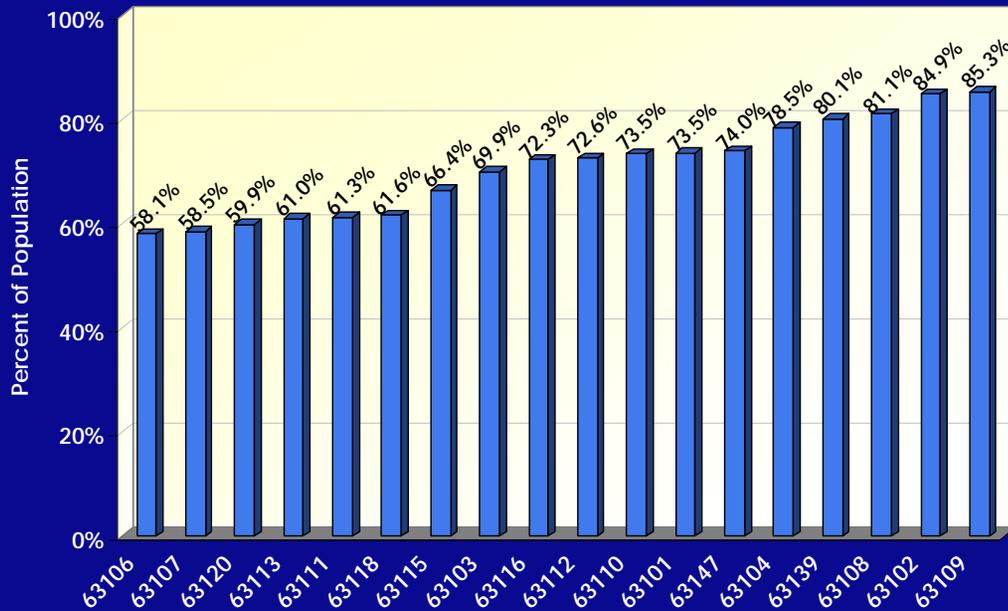
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Household Size

Education Level

High School Graduates or GED



“Education is a gateway to better health, stable employment with a living wage, living in safer neighborhoods in at least three ways: First, education influences health knowledge, behaviors and literacy that can lead to more informed decision making, making more nutritious dietary choices and engaging in physical activity. Secondly, education can influence working conditions, income and other benefits from employers such as insurance coverage, retirement benefits. Where people work often influences their access to safer neighborhoods and housing options that are less hazardous. Thirdly, education can lead to one’s access to diverse social networks, an improved sense of control, and overall social standing.”

-Dr. Keon Gilbert, Behavioral Science Professor SLU School of Public Health

Definition

Education level is determined by the percent of residents 25 years of age and older who have completed high school or received a GED. 2009 Claritas estimates are used. Education level is used as an indicator of economic status.

Public Health Implications

Communities with low education levels are more likely to experience poor health outcomes. Lower educational levels are associated with unemployment, higher birth rates, poverty, poorer housing standards and all the associated public health and health issues related with poverty.

St. Louis Rates and Comparative Info

According to the 2009 estimates, the percent of persons age 25 or older who have a high school degree or GED in St. Louis City is about 13 percent lower than that for Missouri and the U.S. The ZIP Codes with the lowest graduation rates are 63106, 63107, 63120. The ZIP Codes with the highest rates are 63109, 63102, 63108 and 63139.

Black/White Disparity

Data not available.

Disparity Ratio: N/A

Potential Public Health Interventions

Access to care assistance, culturally sensitive educational literature and programs

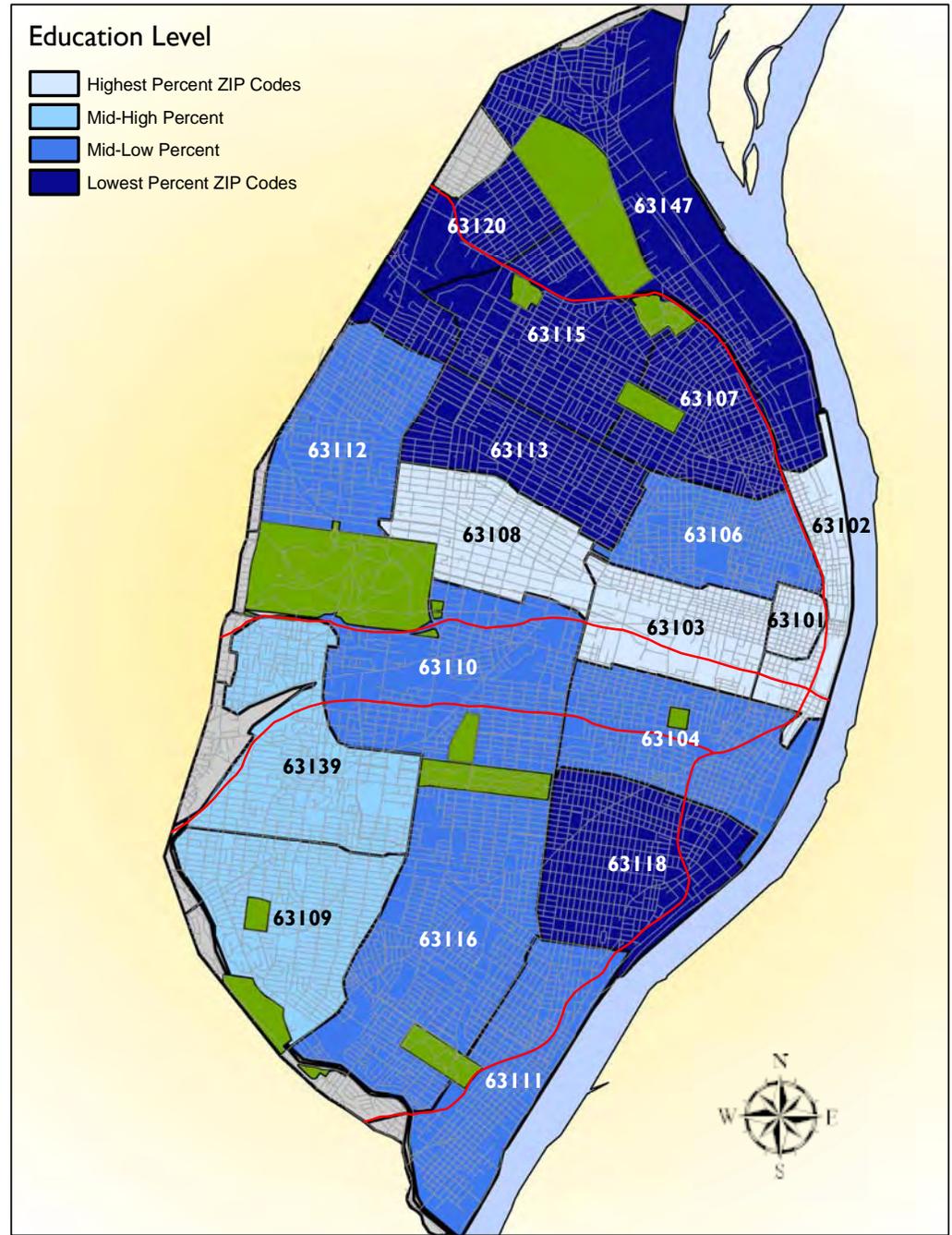
Data Source: Claritas, Inc. 2009 estimate

% of Population > 25 Years of Age

ZIP Code	Finish H.S.	Map Quartile
63106	58.1%	4
63107	58.5%	4
63120	59.9%	4
63113	61.0%	4
63111	61.3%	4
63118	61.6%	4
63115	66.4%	3
63103	69.9%	3
63116	72.3%	2
63112	72.6%	2
63110	73.5%	2
63101**	73.5%	2
63147	74.0%	2
63104	78.5%	1
63139	80.1%	1
63108	81.1%	1
63102**	84.9%	1
63109	85.3%	1

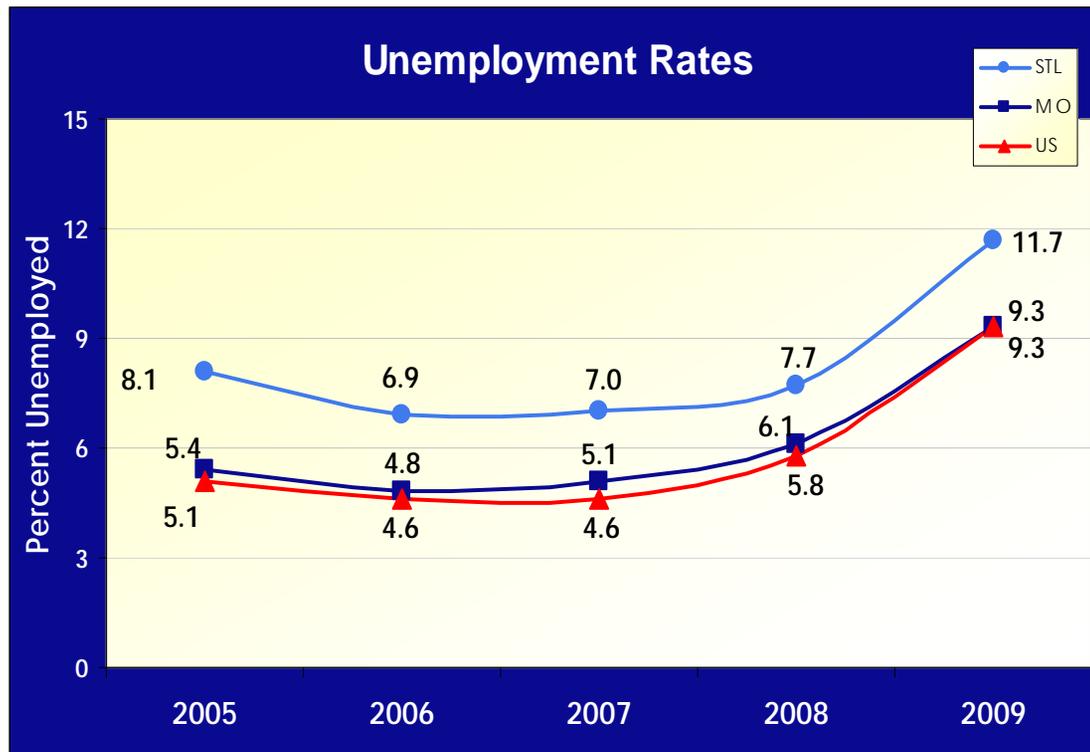
STL City	71.8%
STL Black	NAV
STL White	NAV
MO	81.7%
MO Black	NAV
MO White	NAV
US	80.7%
US Black	NAV
US White	NAV

**small population-interpret with caution



Education Level

Unemployment Rate



Definition

Unemployment rates measure the average percent of the civilian, non-institutional labor force that is unemployed during the year. The rate is expressed as a percent, i.e. the number of persons unemployed divided by the total number of persons in the civilian labor force. The data are from the U.S. Bureau of Labor Statistics (2005-2009) and Claritas, Inc. 2011 estimates.

Public Health Implications

Unemployment is an indirect way to measure lack of access to insurance and health care services provided by employers and employees' ability to pay for health care. The indicator is also associated with decreased economic strength and thus poorer health outcomes.

St. Louis Rates and Comparative Info

The unemployment rate in St. Louis City, according to the 2011 estimates, is about 1.3 times the Missouri and U.S. rates, 11.7 vs. 9.3 and 9.3, respectively. The ZIP Codes with the highest unemployment rates are 63102, 63106, 63120 and 63107. The ZIP Codes with the lowest rates are 63109, 63139 and 63116.

Black/White Disparity:

Data not available.

Disparity Ratio: N/A

Potential Public Health Interventions

Assisting the community in access to care.

"As it has been the case since unemployment went south in late 2007, the St. Louis numbers closely track the national jobless picture."

-St. Louis unemployment rate at 8.6 percent; St. Louis Post Dispatch, June, 2011

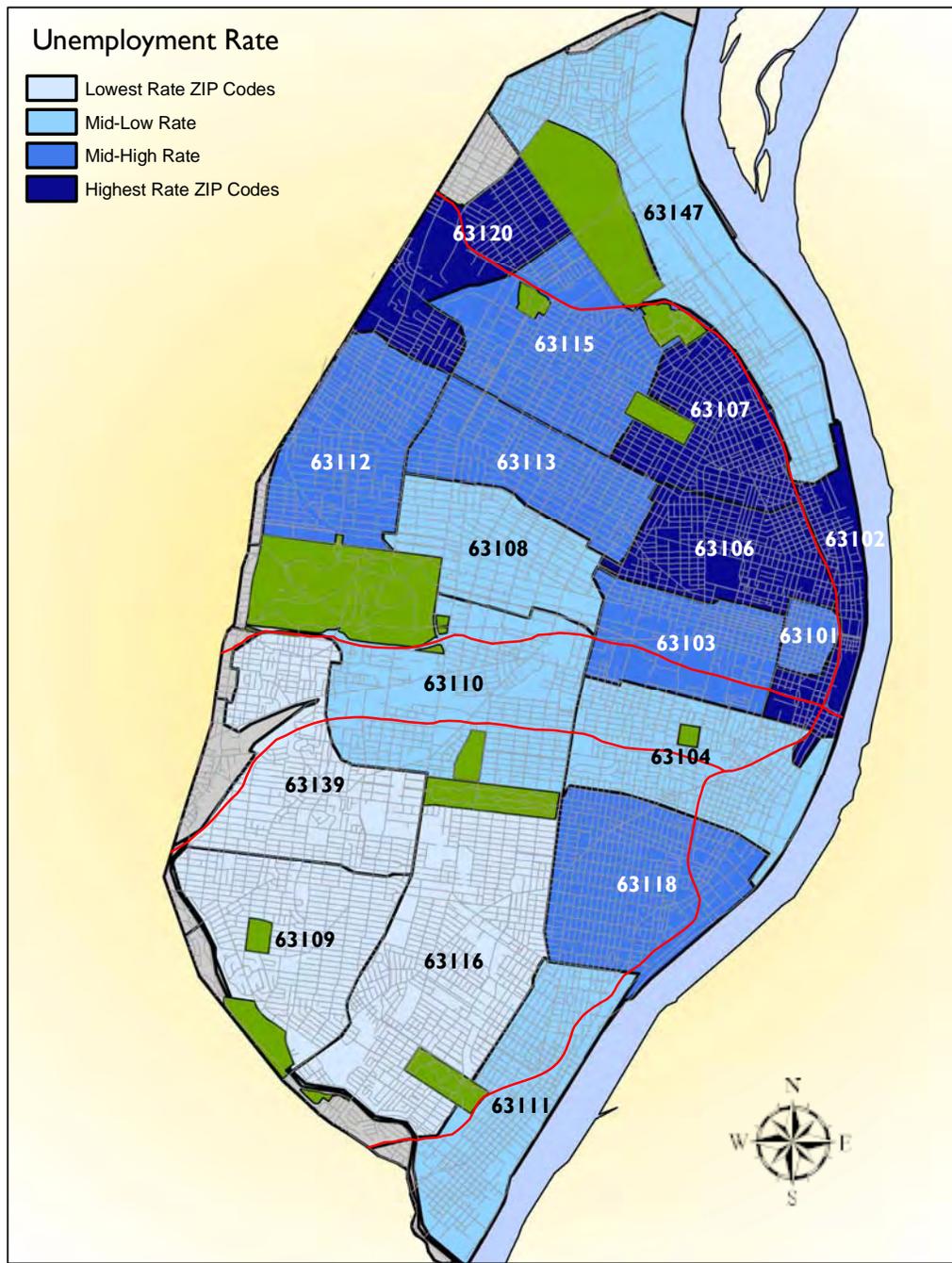
Data Source: 2005-2009 data from U.S. Bureau of Labor Statistics; ZIP code data from Claritas, Inc. 2011 Estimates

% of Civilian Labor Force

ZIP Code	Un-employ	Map Quartile
63102**	40.8%	4
63106	27.8%	4
63120	27.5%	4
63107	25.7%	4
63103	20.3%	3
63101**	19.4%	3
63113	18.9%	3
63115	17.4%	3
63118	16.6%	3
63112	16.4%	3
63110	15.8%	2
63147	15.6%	2
63108	14.8%	2
63111	13.2%	2
63104	12.0%	2
63116	7.8%	1
63139	5.7%	1
63109	4.0%	1

STL City	11.7%
STL Black	NAV
STL White	NAV
MO	9.3%
MO Black	NAV
MO White	NAV
US	9.3%
US Black	NAV
US White	NAV

**small population-interpret with caution



Unemployment Rate

Crimes Against Property



“Major crimes reported in the city fell 9.2 percent [in 2010], reflecting the lowest crime totals since 1967.”

-St. Louis Post Dispatch; Police say St. Louis crime numbers lowest since 1967, Jan. 2011

Data Source: City of St. Louis Police Department

Definition

“Crimes against property”, for this analysis, is defined as burglary, larceny and auto theft. These crimes are differentiated from “crimes against persons” which are of a violent nature. The crimes were committed within the specified ZIP Codes, they do not represent the residence of the perpetrator. The rate is based on 2009 crime data and presented per 1,000 population.

Public Health Implications

Crime has a negative impact on city residents, which could potentially cause residents to abandon the city, as well as discourage the influx of new population. Loss of population leads to less economic stability. Many more public health issues could manifest resulting in the increasing need to fund public health programming.

St. Louis Rates and Comparative Info

Comparative information is not available for this descriptive analysis. ZIP Codes 63101 and 63102 have small populations which may cause the rates to be artificially high. These ZIP Codes should be looked at with caution.

Black/White Disparity

Data not available.

Disparity Ratio: N/A

Potential Public Health Interventions

There is a need for increased funding to address all the public health issues that result from lower socioeconomic status.

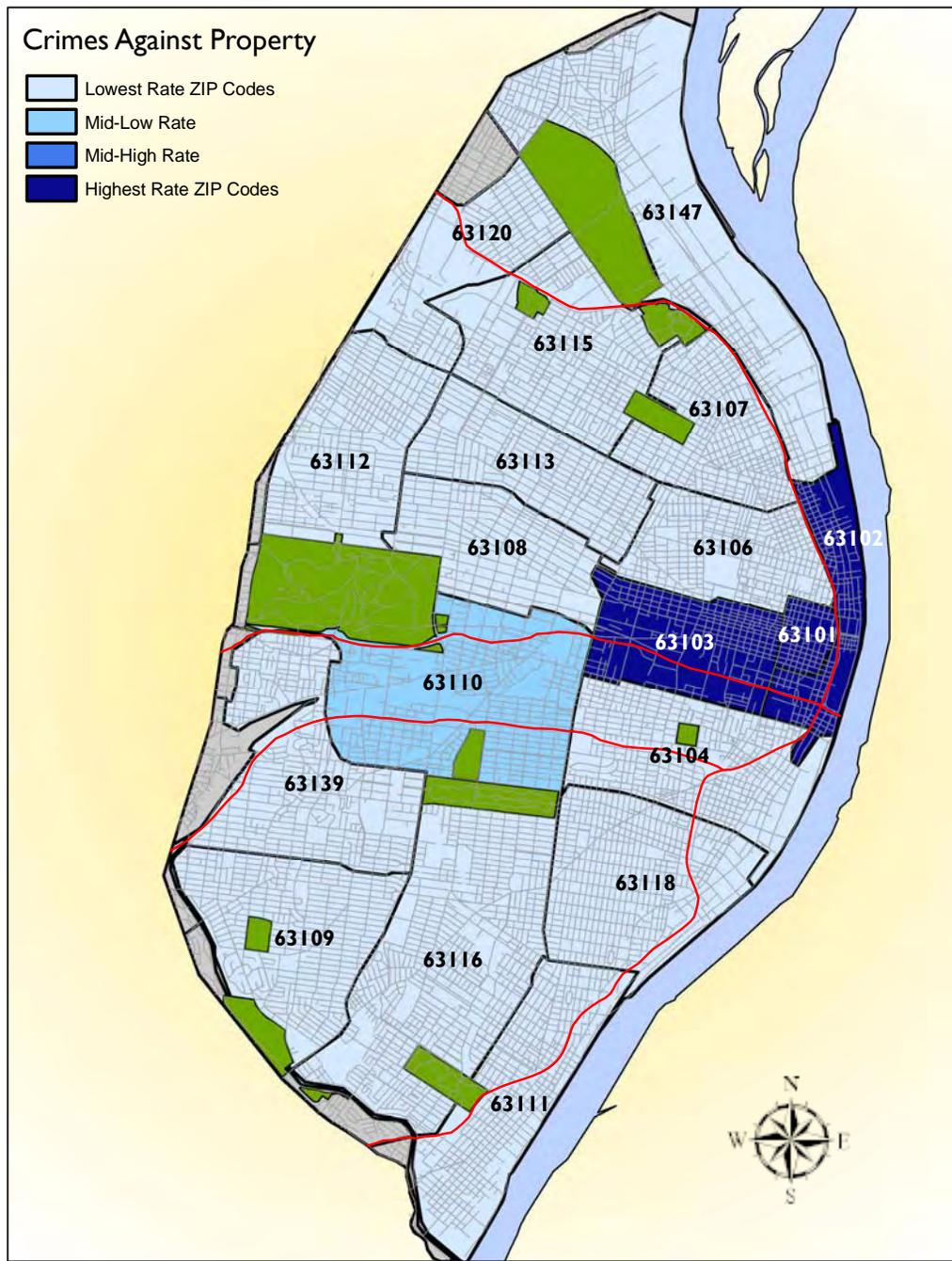
Property Crimes* /1000 Population

ZIP Code	Property Crime	Map Quartile
63102**	600.5	4
63103	296.5	4
63101**	295.9	4
63110	118.4	2
63147	97.1	1
63118	96.8	1
63106	96.6	1
63115	96.1	1
63104	92.9	1
63108	89.2	1
63113	85.3	1
63107	84.2	1
63120	83.3	1
63112	78.9	1
63111	77.4	1
63116	66.7	1
63139	49.3	1
63109	37.2	1

STL City	87.0
STL Black	NAV
STL White	NAV
MO	33.9
MO Black	NAV
MO White	NAV
US	30.4
US Black	NAV
US White	NAV

**small population-interpret with caution

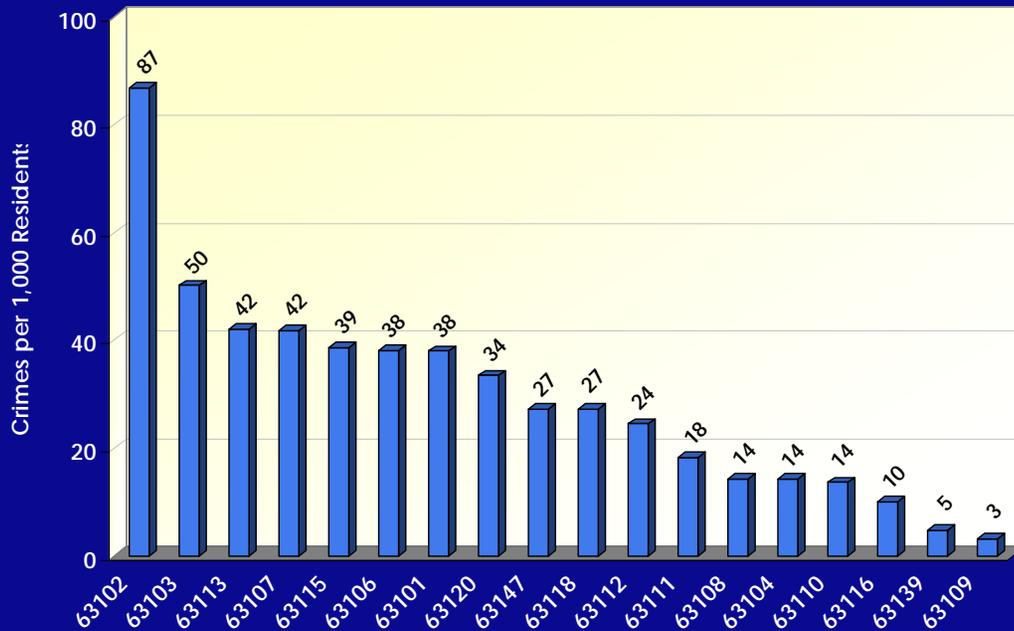
*Burglary, larceny, auto theft



Crimes Against Property

Crimes Against Persons

Crimes Against Persons



“...a lot of people are scared to just sit outside on their porch or just come outside. It does help because my neighborhood, I know, it stops a lot of crime because there’s always somebody outside. Anytime when I go outside to walk my dog, there’s always somebody else out there. And if not, I’m outside. So I think that kind of helps as a solution for to stop like crime and a lot of other things.”

-City resident in a community health assessment focus group

Definition

“Crimes against persons” for this analysis, is defined as homicide, rape, robbery and aggravated assault. These are crimes of a violent nature. The crime is counted in the ZIP Code where the crime was committed. It is not the residence of the perpetrator. The rate is based on data from 2009. The rate is per 1,000 population.

Public Health Implications

Violence has been recognized as a public health issue largely because of its impact on the health and well being of the country’s youth. Violent injury and death disproportionately affect children, adolescents and young adults in the United States.

St. Louis Rates and Comparative Info

Comparative data are not available for this analysis. ZIP Codes 63101 and 63102 have small populations and thus may cause the rates to be artificially high. These ZIP Codes should be looked at with caution.

Black/White Disparity

The crime data are not available by race. However, the ZIP Codes with the highest rates, when disregarding the ZIP Codes with very low populations, are located in ZIP Codes that are predominately black: 63113, 63107 and 63115. The lowest rates are in 63109 and 63139, which are predominately white.

Disparity Ratio: N/A

Potential Public Health Interventions

Development of surveillance systems to monitor firearm injuries and other violent crimes and related risk behaviors. Development of strategies and youth-oriented programs designed to prevent and reduce aggressive and violent behavior. Study the epidemiology of youth violence specific to the City of St. Louis.

Data Source: City of St. Louis Police Department

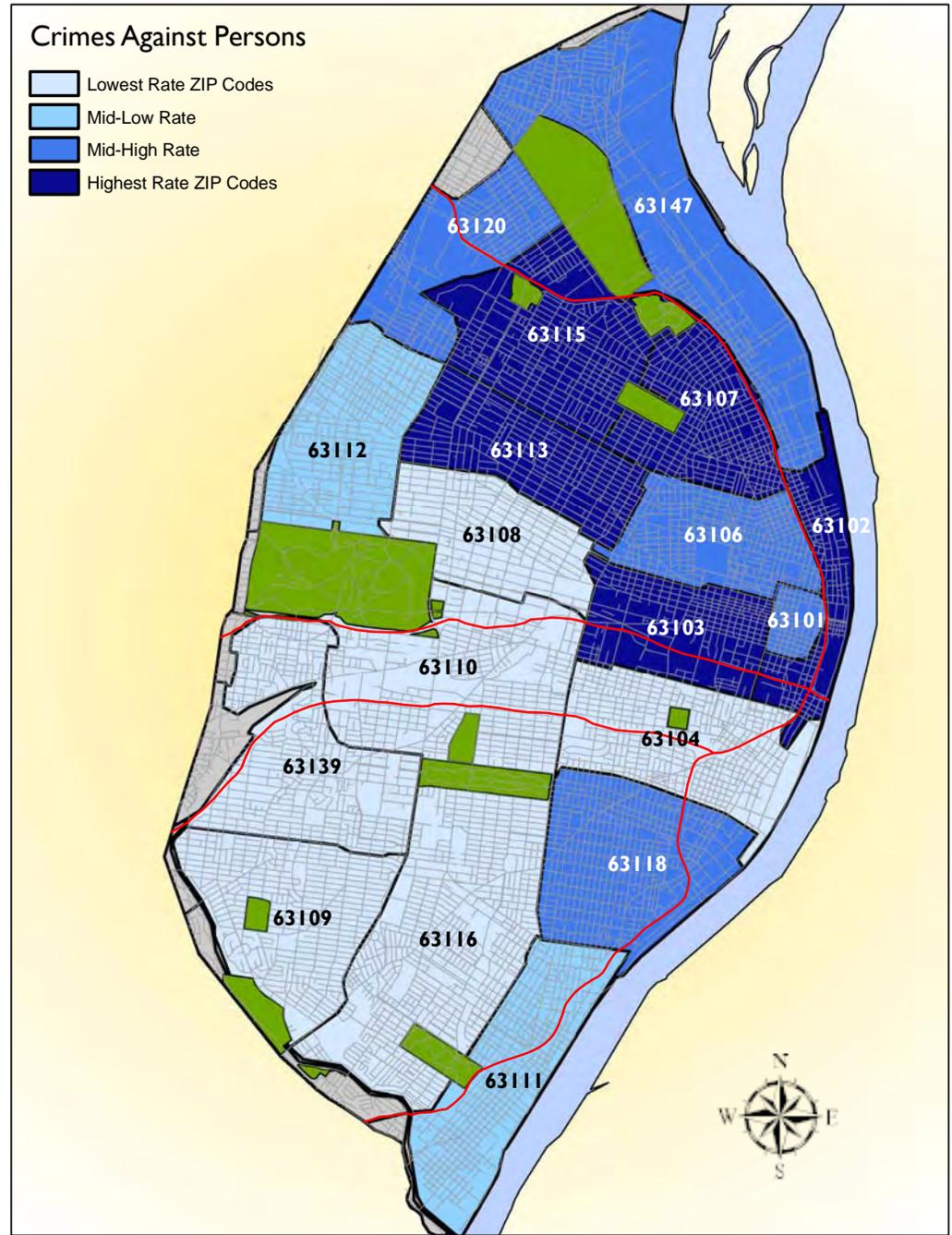
Person Crimes* /1,000 population

ZIP Code	Person Crime	Map Quartile
63102**	86.7	4
63103	50.1	4
63113	42.0	4
63107	41.8	4
63115	38.5	4
63106	38.0	3
63101**	38.0	3
63120	33.5	3
63147	27.3	3
63118	27.2	3
63112	24.4	2
63111	18.3	2
63108	14.3	1
63104	14.2	1
63110	13.6	1
63116	10.1	1
63139	4.8	1
63109	3.2	1

STL City	21.2
STL Black	NAV
STL White	NAV
MO	4.9
MO Black	NAV
MO White	NAV
US	4.3
US Black	NAV
US White	NAV

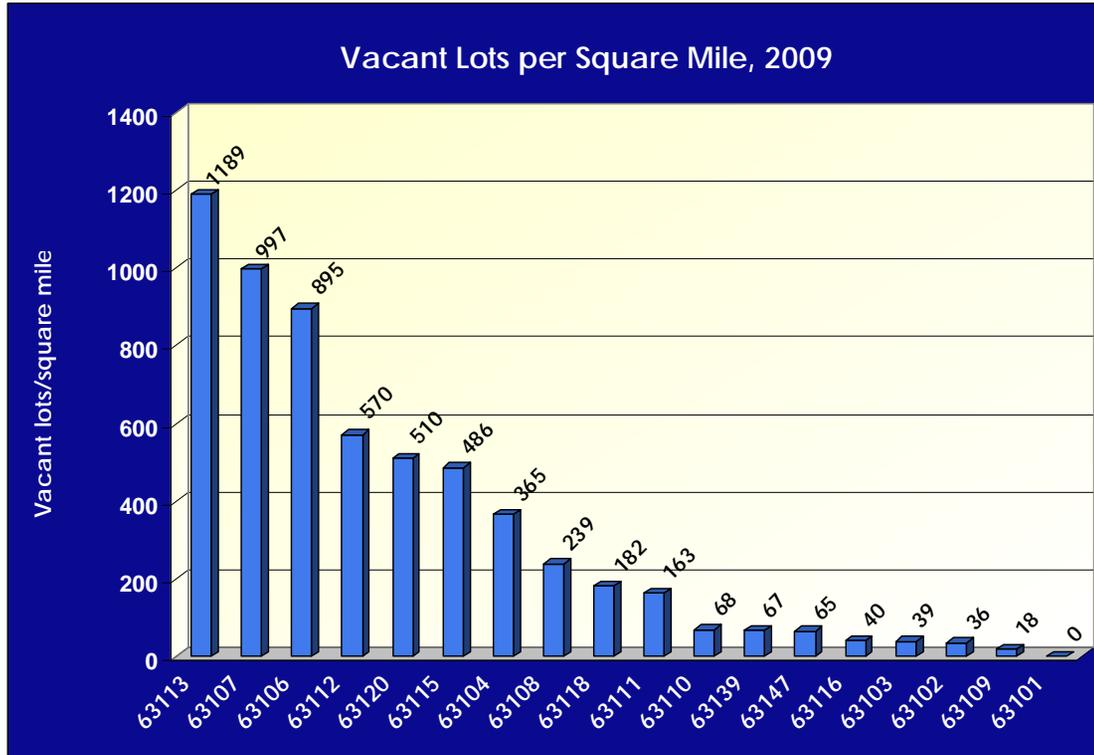
**small population-interpret with caution

*homicide, rape, robbery, aggravated assault



Crimes Against Persons

Vacant Lots



Definition

The number of vacant lots in each ZIP Code was divided by the square mileage of the respective ZIP Code. This created a ratio of the number of vacant lots per square mile. Increasing numbers of vacant lots cost money to secure and patrol, at the same time decreasing property tax revenue. Vacant lots can also create increased sanitation problems and reduce population density. 2009 property data were used.

Public Health Implications

Vacant lot data indicate the stability and economic strength of a city. Weakened communities and increased poverty could result in an increase in negative health outcomes. Vacant lots may also lead to sanitation and vector control problems that impact health.

St. Louis Rates and Comparative Info

In 2009 there were an estimated 16,772 vacant lots in the City. This represents about a 2% decrease in vacant lots since 2006. Comparative information is not available.

Black/White Disparity

The ZIP Codes with the highest vacant lot ratios in 2009 are 63113, 63107 and 63106, where the majority of the population is black. The ZIP Codes with the lowest ratios are 63101, 63109 and 63102. 63101 and 63102 are racially diverse ZIP Codes located in Downtown St. Louis where development is dense. The population of 63109 is predominately white.

Disparity Ratio: N/A

Potential Public Health Interventions

Increased environmental health services such as sanitation and vector control.

“If you go from St. Louis Avenue all the way down to Jefferson, come up Martin Luther King Drive or Kingshighway, in there, you see lots of everything... What they need to do is bring in some more business or something where somebody can make some money. There’s nothing there, you know, and the people in there, that’s why they depressed. When they come out the house, all they see is vacant lots.”

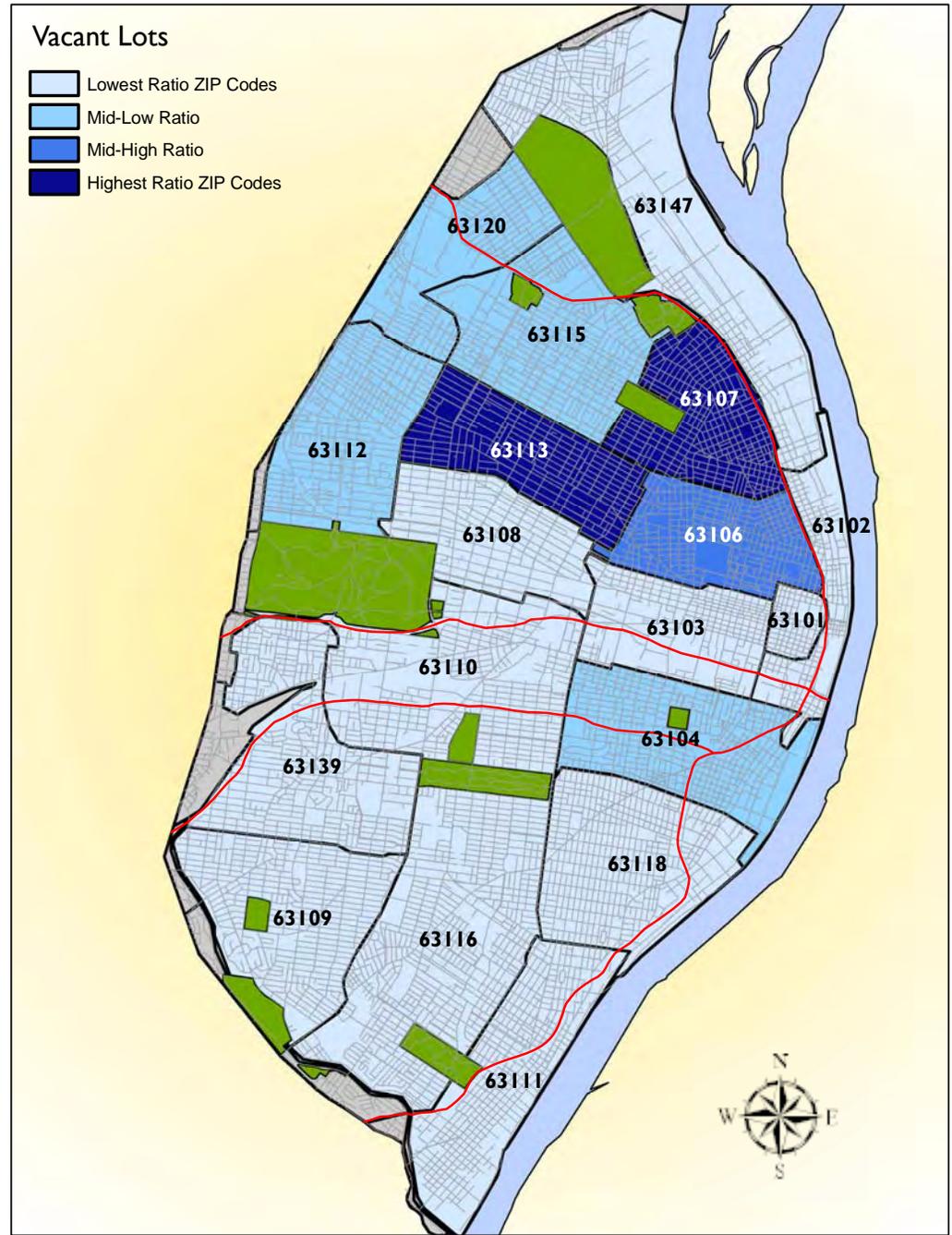
-City resident in a community health assessment focus group

Data Source: City of St. Louis Assessor’s Office

Vacant Lots /Square Mile

ZIP Code	Vacant Lots	Map Quartile
63113	1189	4
63107	997	4
63106	895	3
63112	570	2
63120	510	2
63115	486	2
63104	365	2
63108	239	1
63118	182	1
63111	163	1
63110	68	1
63139	67	1
63147	65	1
63116	40	1
63103	39	1
63102	36	1
63109	18	1
63101	0	1

STL City	285
STL Black	N/A
STL White	N/A
MO	NAV
MO Black	N/A
MO White	N/A
US	NAV
US Black	N/A
US White	N/A



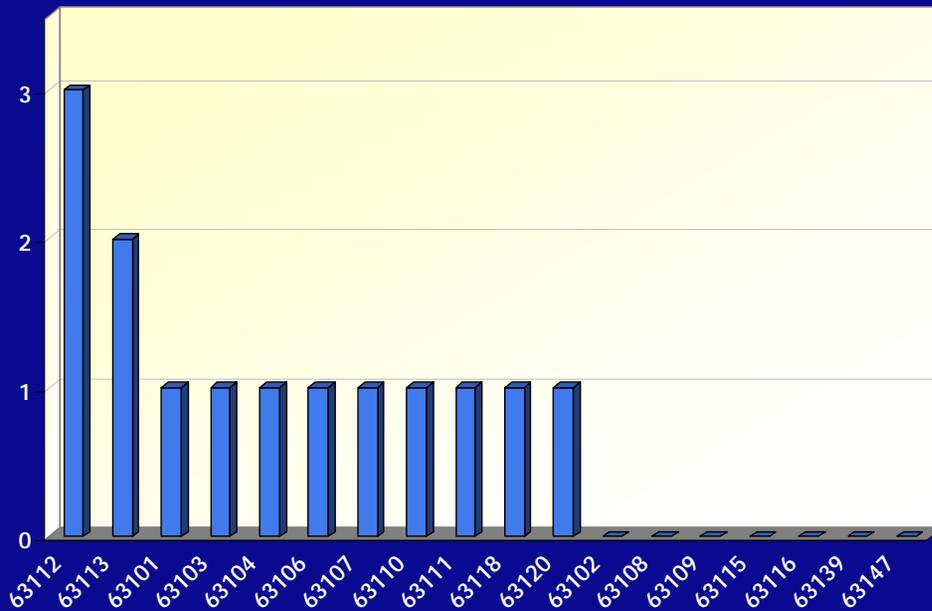
Vacant Lots

QUALITY / ACCESS



Community Health Centers

Number of Community Health Centers



“The extended downturn in the economy and the high rate of unemployment continues to strain the health care safety net in the St. Louis area. However, the collaborative efforts of the clinics, Connect Care, hospitals, the Regional Health Commission, and the Integrated Health Network have created a safety-net that has been flexible and responsive to the needs of the community in a way that was impossible only ten short years ago.”

-M. Ryan Barker, MSW, MPPA Director of Health Policy, Missouri Foundation for Health

Definition

The map identifies community health centers located within the City of St. Louis. The health centers include those operated by ConnectCare, the Federally Qualified Health Centers and independent health centers.

Public Health Implications

Inadequate access to health care is linked to a variety of poor health outcomes, delays in seeking care, poor quality of life indicators and higher morbidity and mortality.

St. Louis Rates and Comparative Info

N/A

Black/White Disparity

The address mapping shows that the majority of community based health centers are located in the areas of the City that are predominately black.

Ratio Disparity: N/A

Potential Public Health Interventions

Assist City residents in locating health services for prevention activities such as screening and prenatal care. Provide immunizations, lead screening and STD services. Conduct community surveys to determine needs.

Data Source: City of St. Louis Department of Health

Community Health Centers in St. Louis City

BETTY JEAN KERR PEOPLE'S HEALTH CENTERS

A. Central Health Center

CASA DE SALUD

B. Casa de Salud

COMMUNITY HEALTH-IN-PARTNERSHIP SERVICES (CHIPS)

C. Community Health-in-Partnership Services (CHIPS)

FAMILY CARE HEALTH CENTERS

D. Carondelet

E. Forest Park Southeast

GRACE HILL HEALTH CENTERS INC.

F. Murphy-O'Fallon Health Center

G. Soulard-Benton Health Center

H. South Health Center

I. St. Patrick Center

J. Water Tower Health Center

MYRTLE HILLIARD DAVIS COMPREHENSIVE HEALTH CENTERS

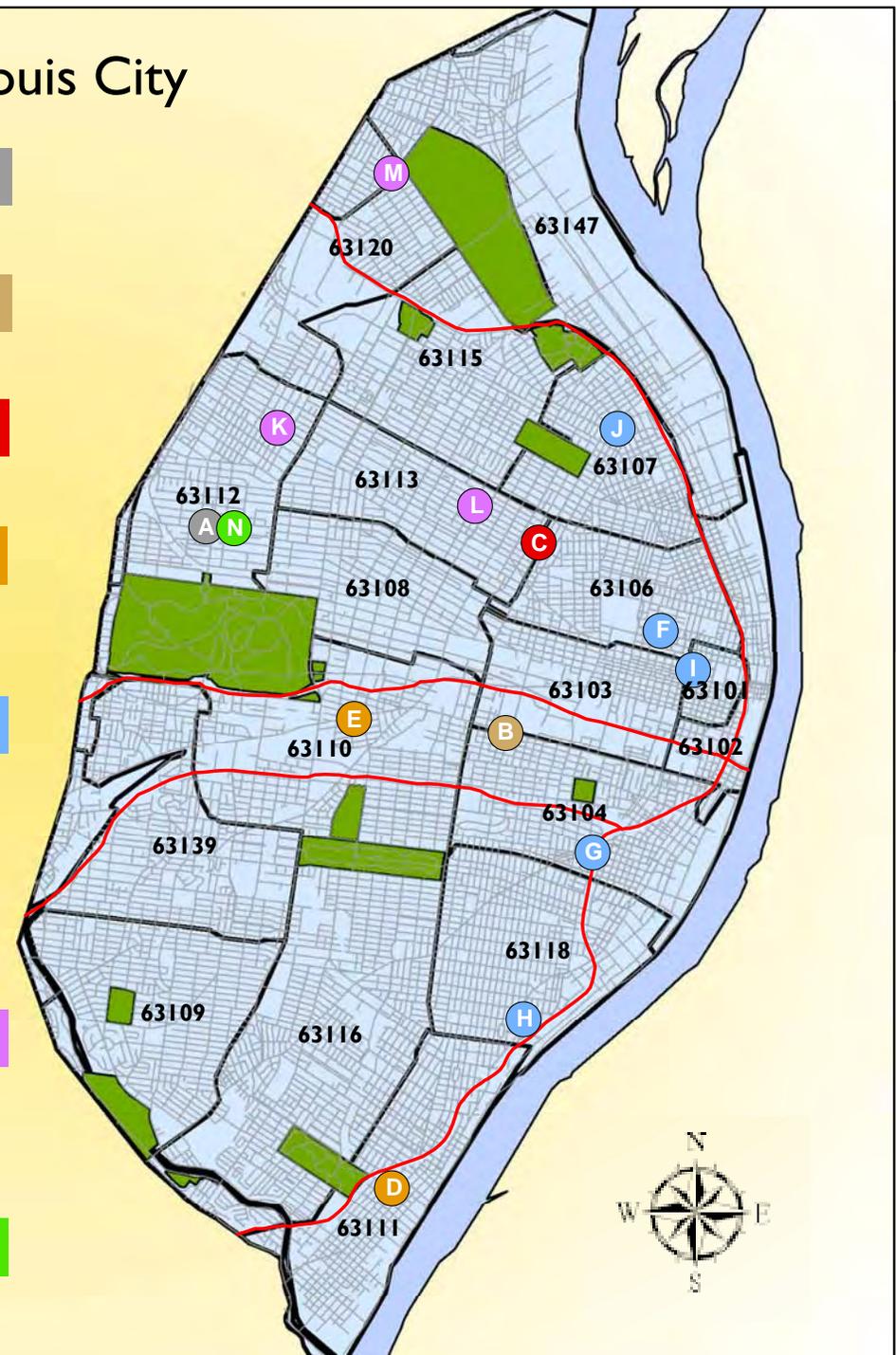
K. Comprehensive Health Center

L. Florence Hill Health Center

M. Homer G Phillips Health Center

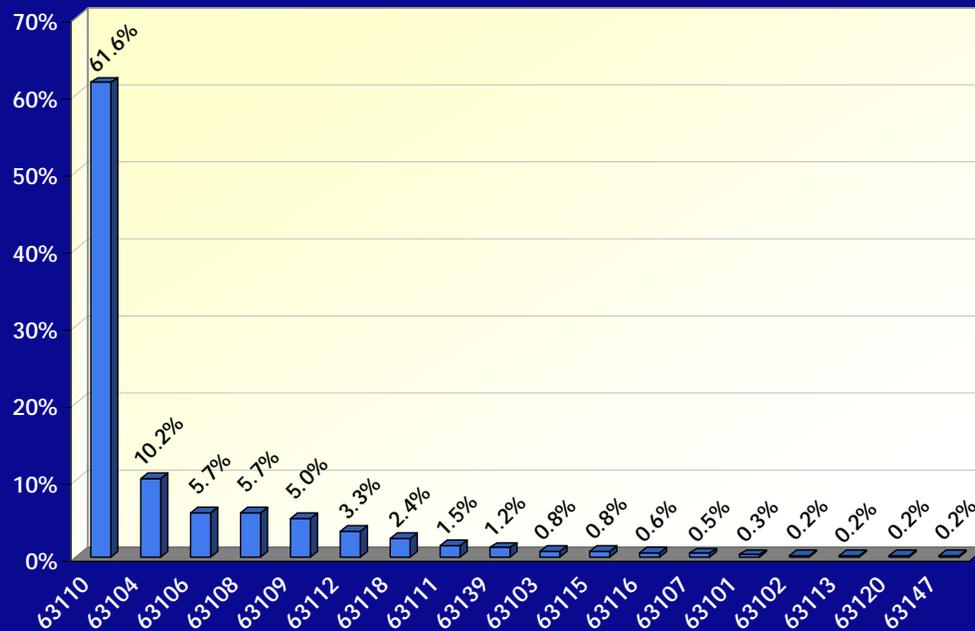
ST. LOUIS CONNECTCARE

N. St. Louis ConnectCare



Primary Care Physicians

Percent of Primary Care Physicians by ZIP Code



“I had little bump start out about a couple of weeks ago, started out as little bump. A couple of days, my whole face was swollen. I called my primary doctor. They couldn’t see me for three weeks.”

-City resident in a community health assessment focus group

Definition

Primary care physicians are defined as General Practitioners, Family Practitioners, Internists, Pediatricians (non-specialists) and Obstetricians/Gynecologists.

Public Health Implications

An inadequate supply of primary care physicians is considered a barrier to access that results in poor health outcomes. The inability to access primary care physicians contributes to decreased immunizations, increases in chronic disease complications, premature mortality and poorer health outcomes in general.

St. Louis Rates and Comparative Info

N/A

Black/White Disparity

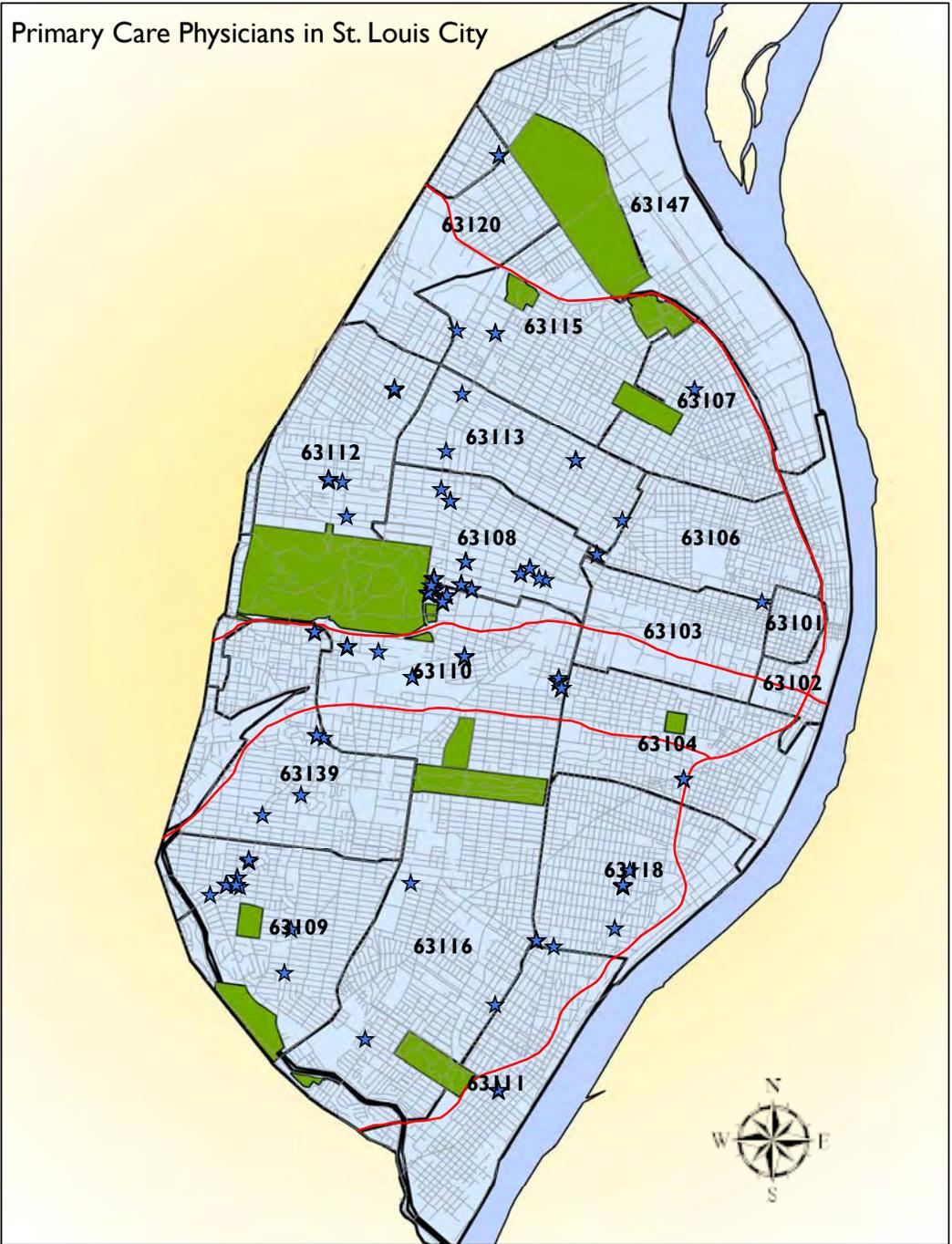
The address mapping and data show that various areas of the City have a need for more physicians. There are concentrations of primary care physicians located around the major teaching hospitals located in the City, i.e. Barnes Jewish, Children’s Hospital, Cardinal Glennon Children’s Hospital and St. Louis University Hospital.

Disparity Ratio: N/A

Potential Public Health Interventions

Assisting City residents locate health services for prevention activities such as screening and prenatal care. Provision of immunizations, lead screening and STD services at clients’ convenience.

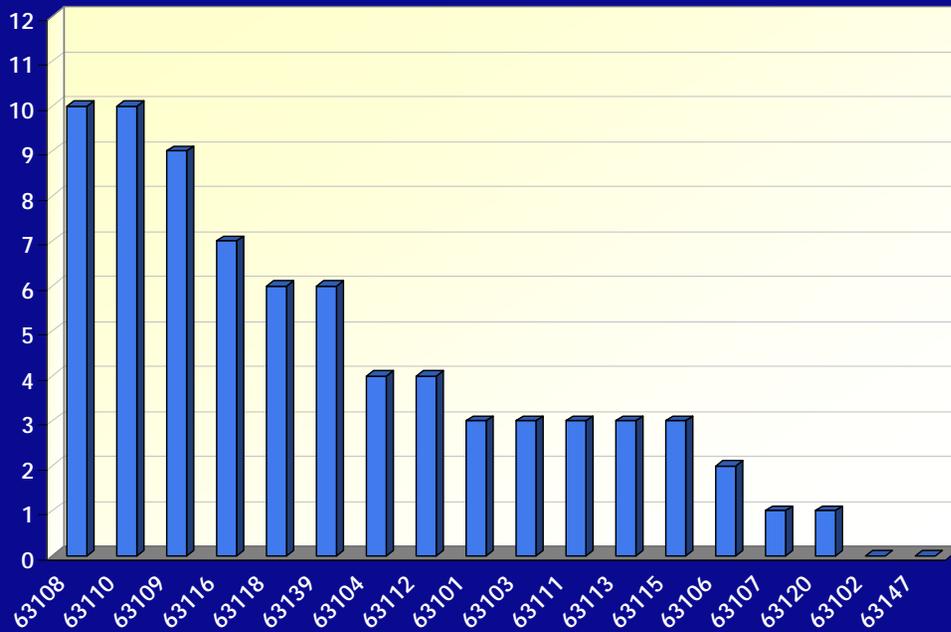
Data Source: St. Louis Metropolitan Medical Society



Primary Care Physicians

Pharmacies

Number of Pharmacies



“In response to the high rate of asthma in the St. Louis region, Asthma Friendly Pharmacies (AFP) have been established to provide additional education and services for people living with asthma. Pharmacists in AFPs are specially trained to teach the proper use, possible side effects, and most effective management of asthma medications. Asthma Friendly Pharmacists also act as a direct link to other health care professionals, such as primary care physicians, working to ensure better asthma management for their patients.”

-St. Louis Regional Asthma Consortium

Definition:

A store where prescribed therapies and drugs from physicians are filled and dispensed to the patient population.

Public Health Implications:

Pharmacies provide medications and patient counseling on the use of prescriptions and over-the-counter therapies recommended by health care professionals. Pharmacists communicate with physicians about medication therapy ideal for patients. Pharmacists provide information to patients about general health topics, such as diet, exercise, and stress management, and provide information on health products.

St. Louis Rates and Comparative Info

N/A

Black/White Disparity

N/A

Disparity Ratio:

N/A

Potential Public Health Interventions:

Surveillance, outreach, screening, consultation, counseling, health education

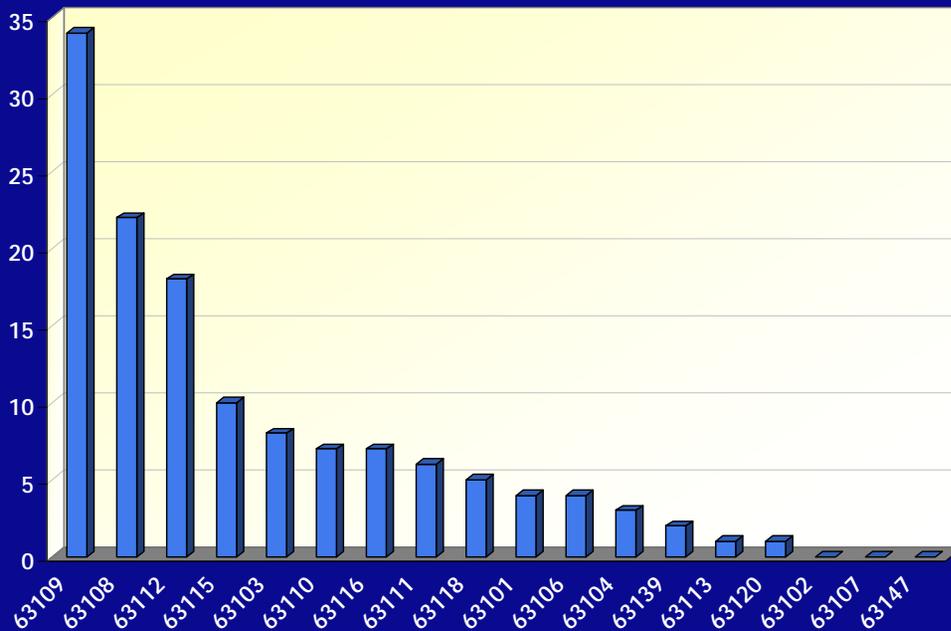
Data Source: Missouri Board of Registration for the Healing Arts



Pharmacies

Dentists

Number of Dentists



“The Delta Dental Health Theater in St. Louis is dedicated to educating children about dental health through an experience that is both entertaining and educational. If you visit the Delta Dental Health Theater while in St. Louis you will enjoy a 45 minute interactive show that teaches about the importance of dental health and have the chance to view age-appropriate videos about caring for your teeth. The Delta Dental Health Theater is located at 727 N. First Street in St. Louis just down the street from the Wax Museum in historic Laclede's Landing.”

-St. Louis Visitor's Guide

Definition

Professionals holding a Doctor of Dental Surgery or Doctor of Dental Medicine degree from an accredited dental school and that had passed the National Board Examination and the state competency examination currently licensed to practice as a dentist by the Missouri Board of Healing Arts were considered dentists.

Public Health Implications

Oral health problems such as cavities, gum disease and oral cancers have a large impact on health. There is evidence linking periodontal disease to chronic diseases with large public impacts such as, diabetes, stroke and heart disease. In addition maternal oral health problems have also been linked to premature and low birth weight babies.

St. Louis Rates and Comparative Info

The majority of dental offices were clustered in 63109 and 63108 while there were no dentists in 63102, 63107 or 63147. The population of 63102 is very small, so there may be fewer people in need of dental care in that area.

Black/White Disparity

N/A

Disparity Ratio:

N/A

Potential Public Health Interventions

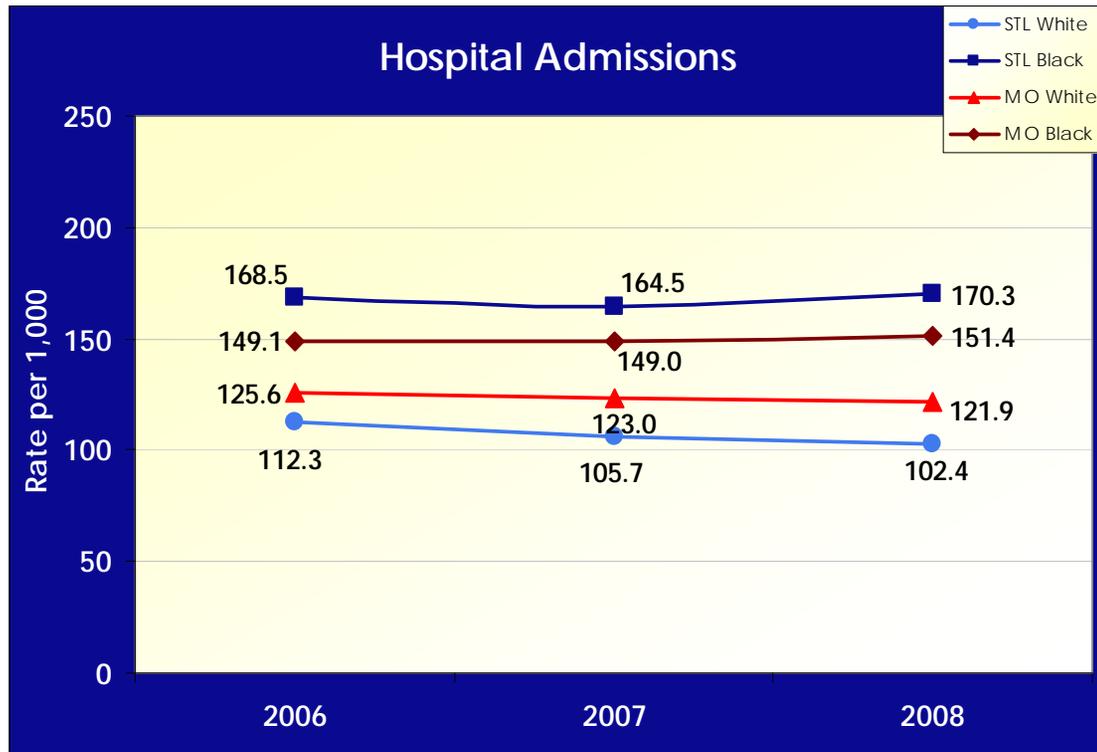
Many oral issues associated with chronic diseases are easily preventable with regular dental care. Ensuring people have access to affordable dental care can have implications beyond preventing poor oral health alone.

Data Source: Missouri Board of Registration for the Healing Arts



Dentists

Hospital Admission Rates



Definition

Hospital admission rates are a proxy for the amount of morbidity in the community. This is a very crude measure. 2006-2008 data are used. The rate is expressed as hospital admissions per 1,000 population.

Public Health Implications

The admission rates give an indication of the amount and types of morbidity in a community. A study of admission rates by Diagnostic Related Groupings would target specific morbidity.

St. Louis Rates and Comparative Info

The hospital admission rate in St. Louis City is 1.1 times the Missouri rate. The ZIP Codes with the highest hospital admission rates are 63101, 63103 and 63113. The ZIP Codes with the lowest rates are 63109, 63139, 63116 and 63110.

Black/White Disparity

In St. Louis City, for the black population, the average hospitalization rate is 1.6 times that of the St. Louis City white population.

Disparity Ratio: 1.6

Potential Public Health Interventions

Epidemiological studies, community health surveys, disease surveillance and health education programs.

“Access to high-quality and affordable prevention measures (including screening and appropriate follow-up) are essential steps in saving lives, reducing disability and lowering costs for medical care.”

-Missouri: Burden of Chronic Diseases; Centers for Disease Control, 2008

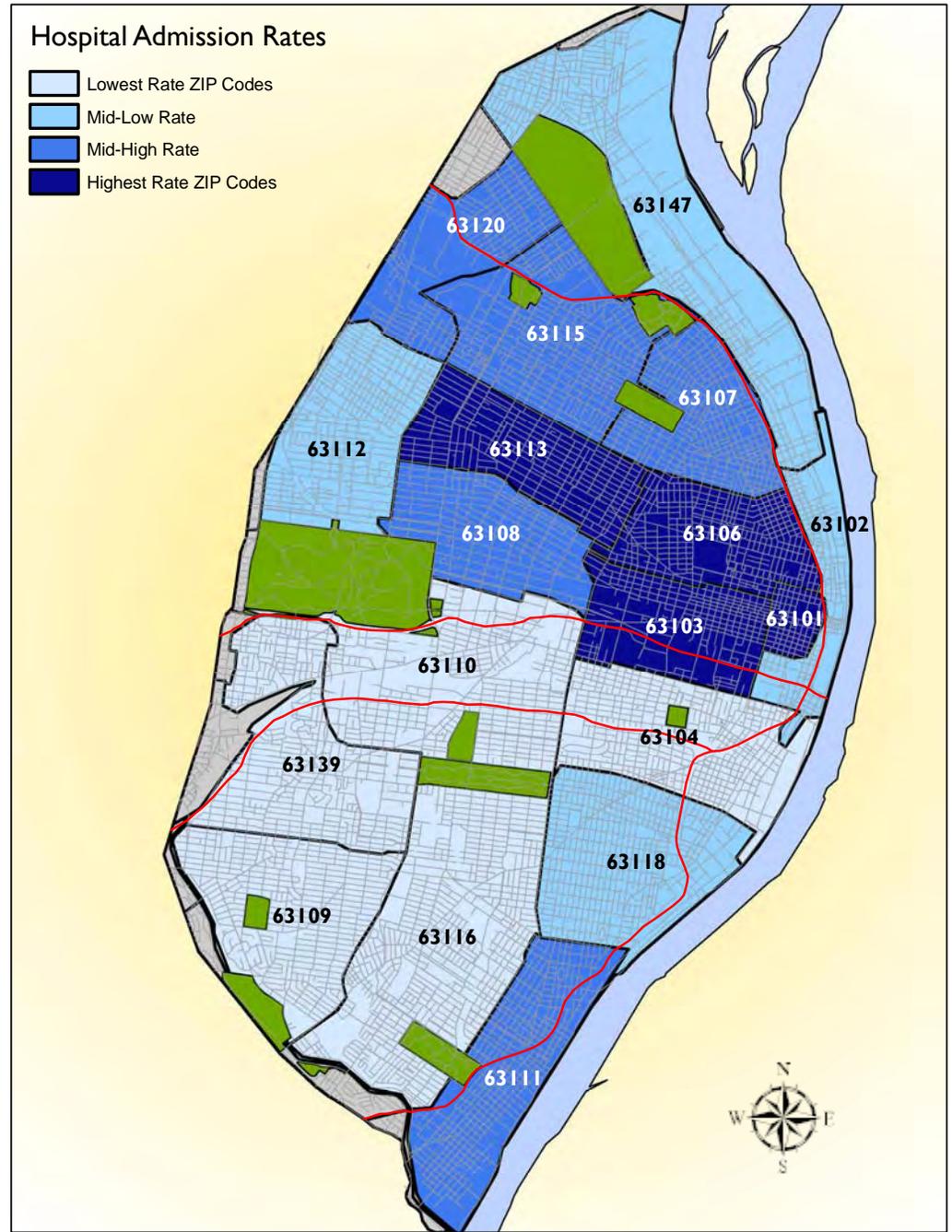
Data Source: Missouri Department of Health and Senior Services, Bureau of Health Care Analysis and Data Dissemination

Admissions /1000 Population

ZIP Code	Hosp Admit	Map Quartile
63101**	276.4	4
63103	223.4	4
63113	219.8	4
63106	195.1	4
63115	176.6	3
63107	176.0	3
63120	172.9	3
63111	168.8	3
63108	167.3	3
63147	161.9	2
63112	159.6	2
63118	150.4	2
63102**	148.4	2
63104	122.1	1
63110	119.9	1
63116	118.1	1
63139	114.8	1
63109	104.3	1

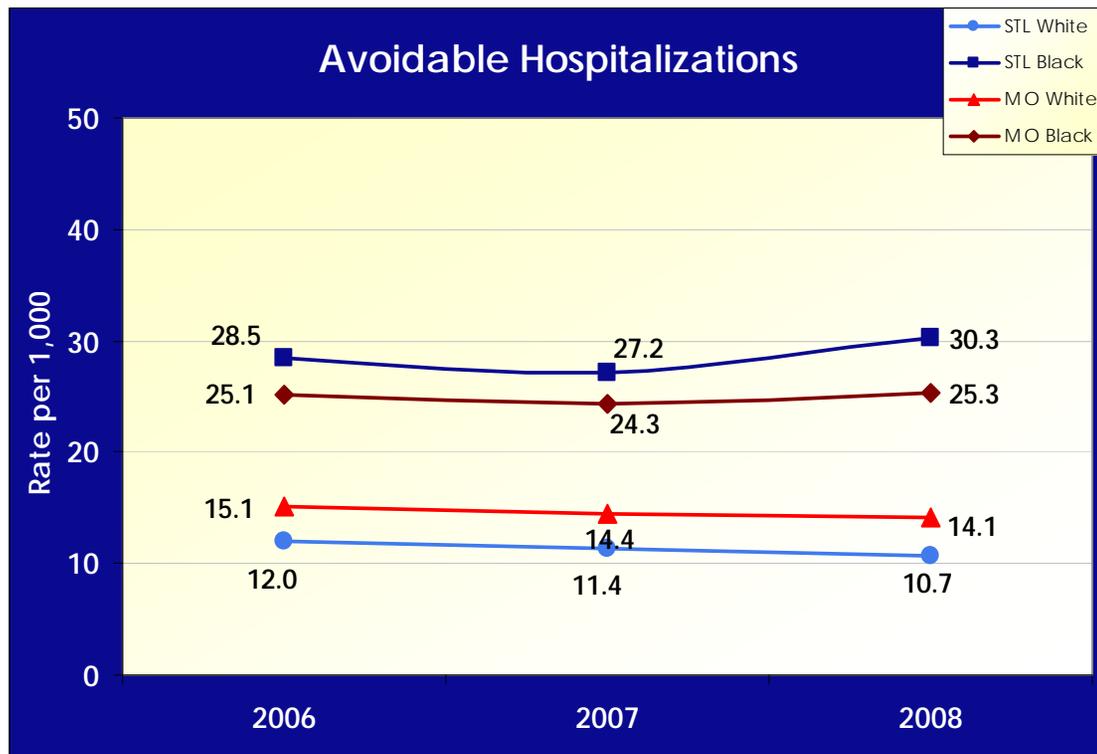
STL City	139.9
STL Black	167.7
STL White	106.7
MO	129.1
MO Black	149.7
MO White	123.5
US	NAV
US Black	NAV
US White	NAV

**small population-interpret with caution



Hospital Admission Rates

Avoidable Hospitalizations



Definition

Avoidable hospitalizations are those that might not have occurred had timely and effective outpatient primary medical care and disease management been received for certain chronic and acute diseases. Investigators have classified a number of conditions as “avoidable” including angina, congestive heart failure, hypertension, pneumonia, asthma/bronchitis and diabetes. The rate is per 1,000 population for 2006-2008.

Public Health Implications

Hospital admission rates for avoidable hospitalizations have been found to be related to poverty, insurance status and availability of primary care. Avoidable hospital condition admission rates can serve as an indicator of the need for primary care access.

St. Louis Rates and Comparative Info

The avoidable hospitalization rate in St. Louis City is 1.3 times the Missouri rate. U.S. comparative data are not available. The ZIP Codes with the highest hospital admission rates are 63101, 63103 and 63113. The ZIP Codes with the lowest rates are 63109, 63139 and 63116.

Black/White Disparity

The average rate in the St. Louis City black population is 2.5 times that seen in the St. Louis City white population. U.S. comparative data are not available.

Disparity Ratio: 2.5

Potential Public Health Interventions

Assist in access to primary care through outreach services. Epidemiological studies to determine primary avoidable conditions and appropriate health education programs.

“...Washington University in St. Louis’s redesign in care management was able to reduce hospitalizations. Instead of conducting care management for most patients via telephone from a remote site... the organization spoke with patients through frequent phone and occasional in-person contact from local care manager, focusing particularly on patients with the greatest risk of hospitalization.”

-Clinical Quality and Infection Control; New Care Management Approach Reduced Hospitalizations 12% in St. Louis, June, 2012

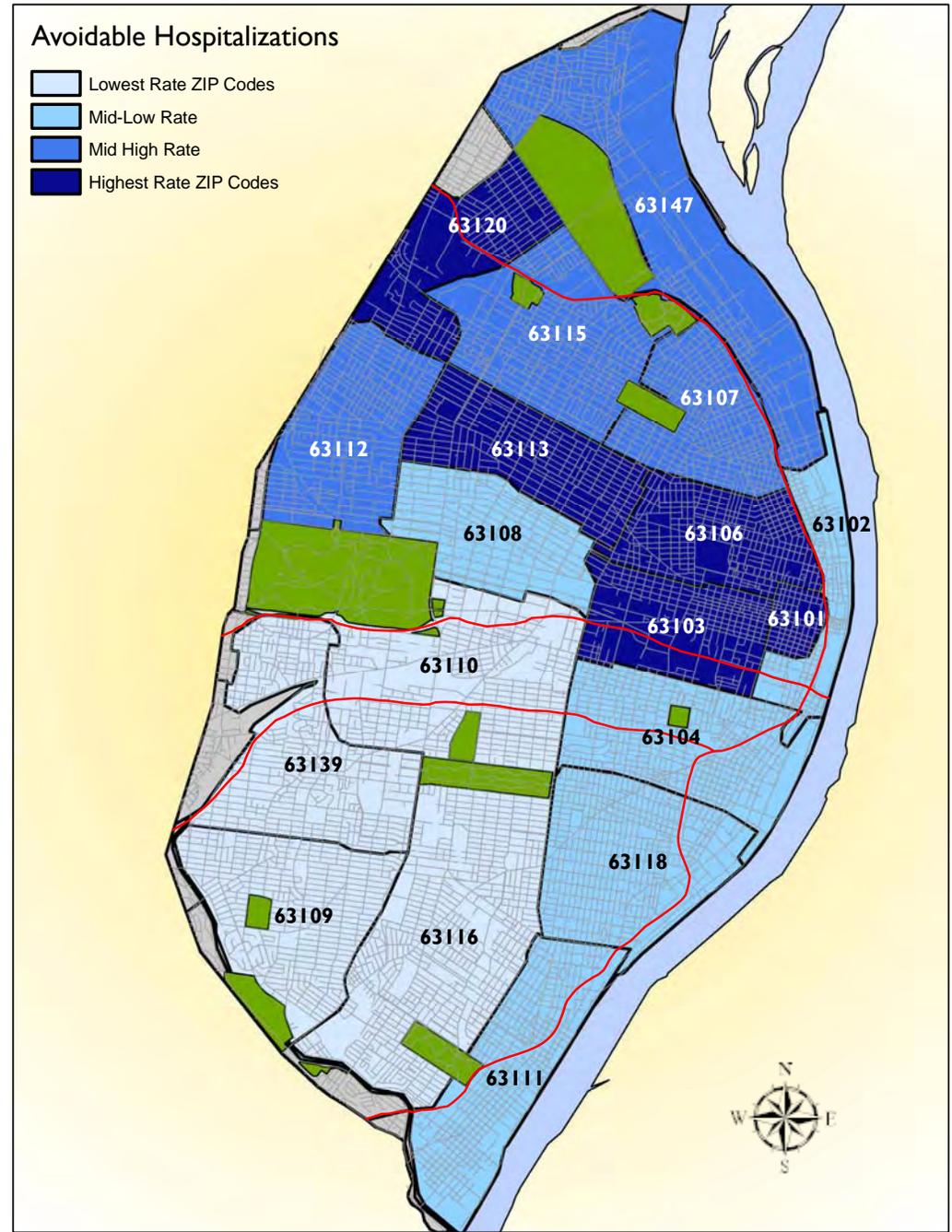
Data Source: Missouri Department of Health and Senior Services, Bureau of Health Care Analysis and Data Dissemination

Hospitalizations /1000 Population

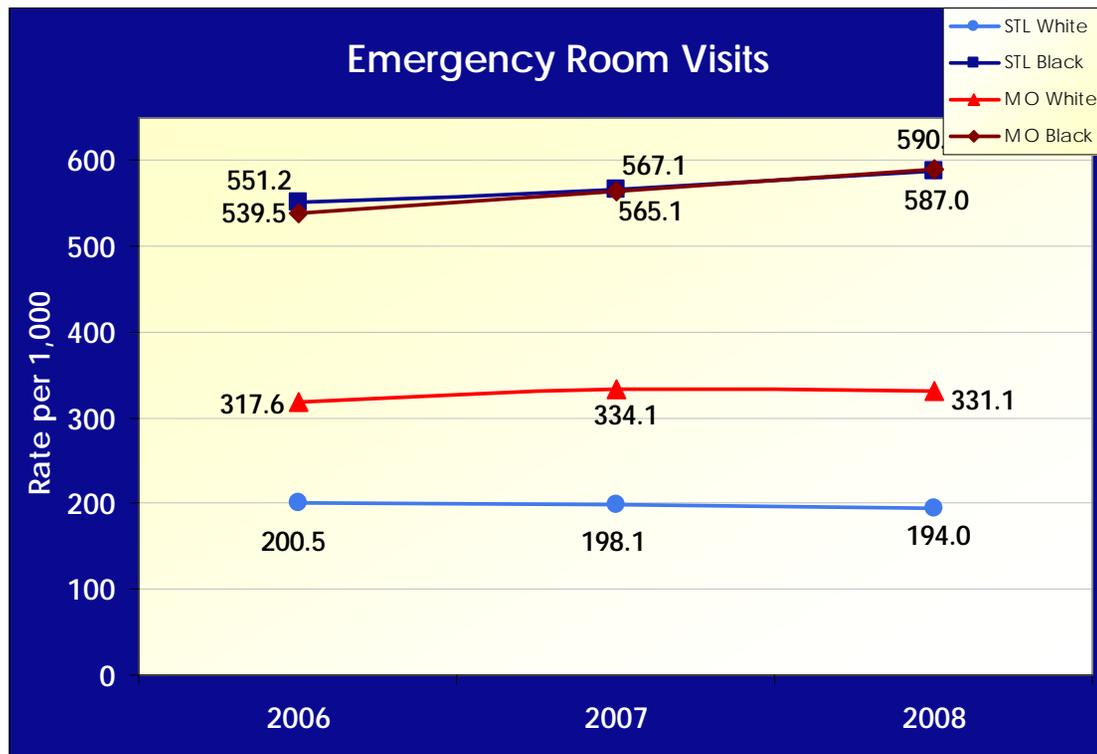
ZIP Code	Avoid Hosp	Map Quartile
63101**	39.6	4
63113	36.6	4
63103	34.8	4
63106	33.8	4
63120	30.9	4
63107	29.5	3
63115	28.9	3
63147	26.2	3
63112	25.9	3
63108	22.7	2
63111	22.1	2
63102**	21.6	2
63118	21.3	2
63104	17.4	2
63110	15.8	1
63116	14.1	1
63139	12.3	1
63109	10.3	1

STL City	20.2
STL Black	28.6
STL White	11.3
MO	15.9
MO Black	24.9
MO White	14.6
US	NAV
US Black	NAV
US White	NAV

**small population-interpret with caution



Emergency Room Visits



Definition

Emergency room visit rates may be an indication of a lack of access to primary care services. The rate is expressed as emergency room visits per 1,000 population for 2006-2008.

Public Health Implications

Lack of primary care access leads to poor health outcomes either due to delay in diagnosis and treatment or not receiving and practicing prevention activities. Barriers may be financial that would include lack of health insurance as well as non-financial which could include transportation or education.

St. Louis Rates and Comparative Info

The emergency room visit rate in St. Louis City is 1.1 times the Missouri rate slightly lower than the U.S rate. The ZIP Codes with the highest ER visit rates are 63101, 63106 and 63102. The ZIP Codes with the lowest rates are 63109, 63139, 63116 and 63108.

Black/White Disparity

The average emergency room visit rate in the St. Louis City black population is 2.9 times that seen in the St. Louis City white population.

Disparity Ratio: 2.9

Potential Public Health Interventions

Epidemiological studies to determine primary care access and other programmatic needs.

“Missourians covered by Medicaid used the Emergency Department twice as much as their proportion of the population.”

-Missouri Foundation for Health Charity Care at Missouri Hospitals 2007-2008

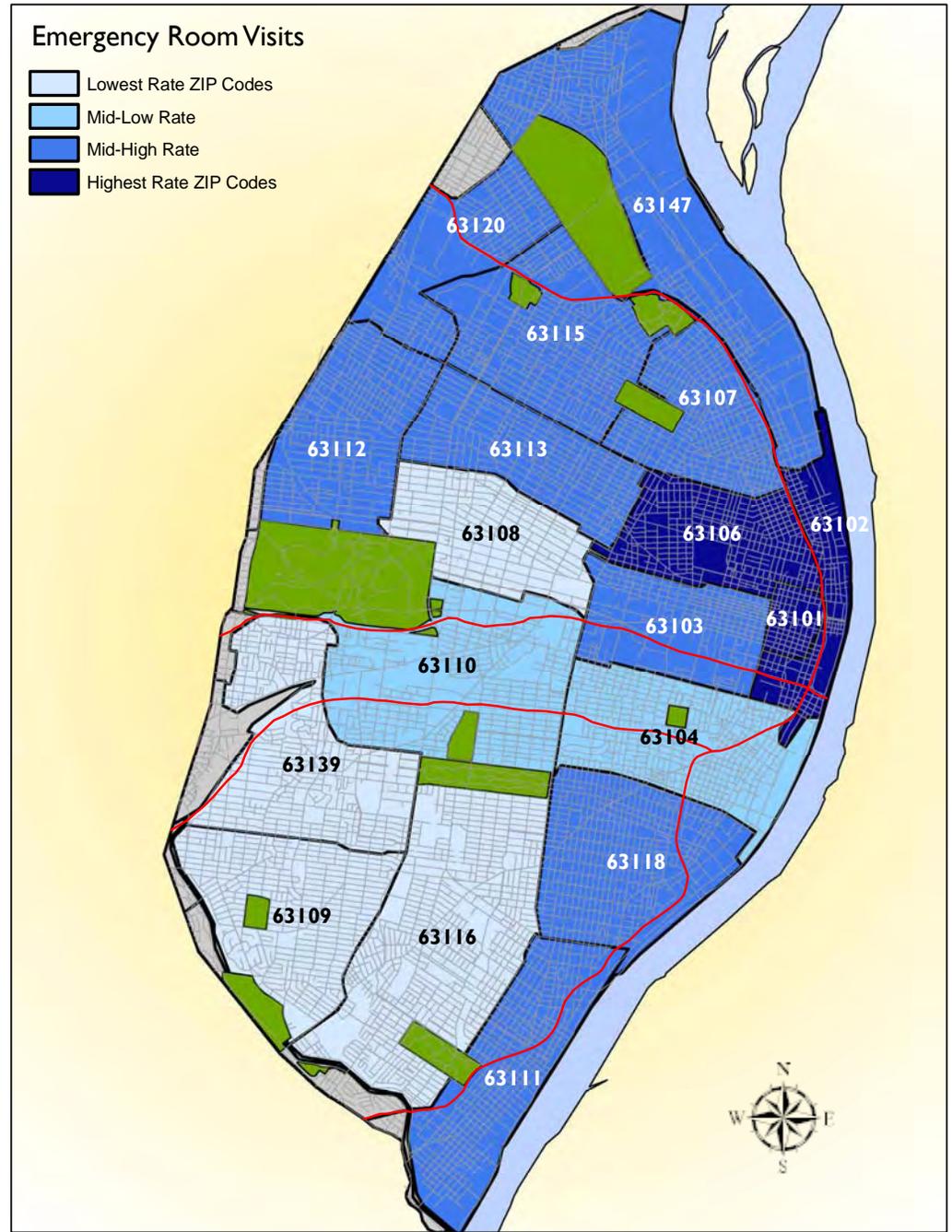
Data Source: Missouri Department of Health and Senior Services, Bureau of Health Care Analysis and Data Dissemination

ER Visits /1000 Population

ZIP Code	ER Visits	Map Quartile
63101**	807.2	4
63106	717.3	4
63102**	683.2	4
63113	580.5	3
63118	572.9	3
63103	571.1	3
63107	543.6	3
63120	542.7	3
63115	526.3	3
63111	494.6	3
63147	461.7	3
63112	458.6	3
63104	418.1	2
63110	352.1	2
63108	309.0	1
63116	307.9	1
63139	214.1	1
63109	180.3	1

STL City	392.2
STL Black	568.4
STL White	197.5
MO	363.3
MO Black	565.2
MO White	327.6
US	400.9
US Black	743.4
US White	371.3

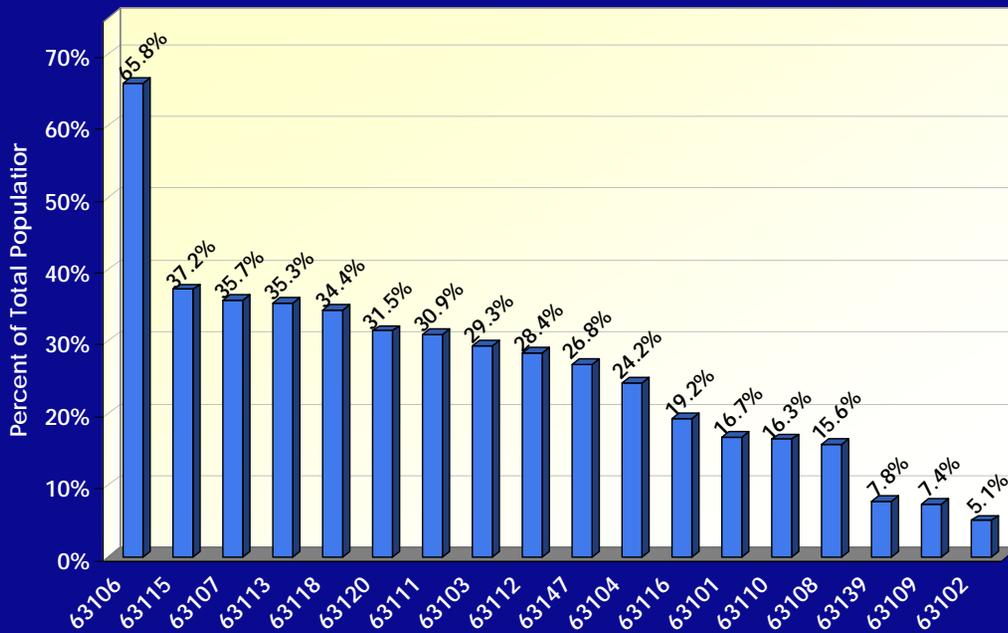
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Emergency Room Visits

Medicaid Eligible

Medicaid Eligible



“Now people that are on Medicaid have access to more medical treatment that people who are not...So I mean the people who are extremely poor and can get on Medicaid and they’ll get government assistance for a lot of their medical needs...It’s not a scam it’s just that some of these people are just in an area of ability to be on Medicaid.”

-Female community member

Definition

The traditional Medicaid program, in general, covers low-income children; their parents, guardians or caretakers (with health insurance coverage); and aged (including Long Term Care), blind or disabled people. Income eligibility criteria are based on poverty guidelines established by the federal government.

Public Health Implications

“Medicaid eligible” is a double-edge sword. It is a positive indicator in that it increases access to medical care but a negative indicator in that it is associated with poverty.

St. Louis Rates and Comparative Info

In November of 2011, the ZIP Codes with the highest percentages of Medicaid-eligible persons are 63106, 63115 and 63107. The ZIP Codes with the lowest percentages are 63102, 63109 and 63139.

Black/White Disparity

In 2011, the black population in St. Louis City experienced an “eligible” percentage that is 4.8 times that in the white population in St. Louis City.

Disparity Ratio: 4.8

Potential Public Health Interventions

Assistance with the identification and enrollment for “eligibles” with emphasis on children.

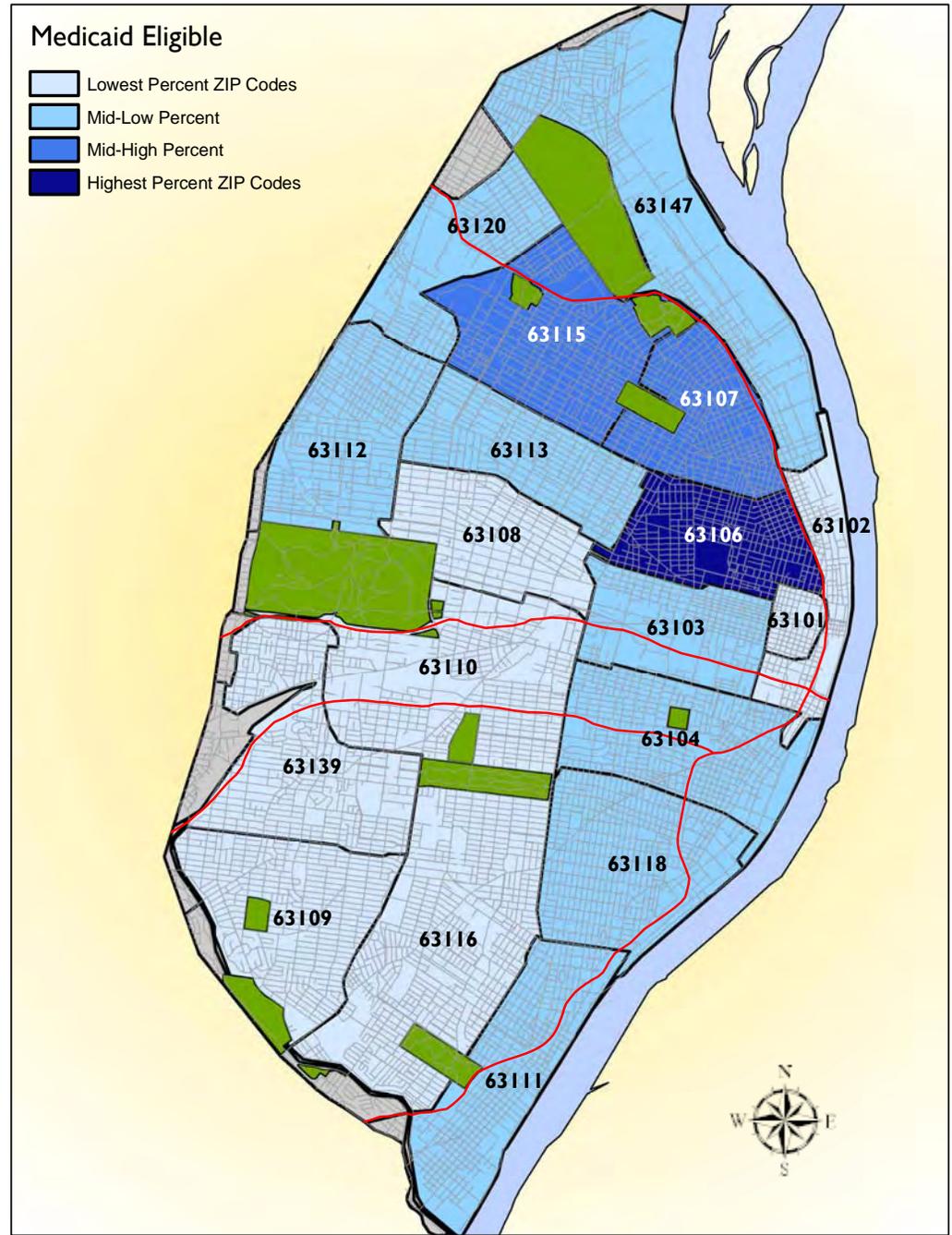
Data Source: Missouri Department of Social Services, Research and Evaluation Unit

% of Total Population

ZIP Code	Medicaid Elig	Map Quartile
63106	65.8%	4
63115	37.2%	3
63107	35.7%	3
63113	35.3%	2
63118	34.4%	2
63120	31.5%	2
63111	30.9%	2
63103	29.3%	2
63112	28.4%	2
63147	26.8%	2
63104	24.2%	2
63116	19.2%	1
63101**	16.7%	1
63110	16.3%	1
63108	15.6%	1
63139	7.8%	1
63109	7.4%	1
63102**	5.1%	1

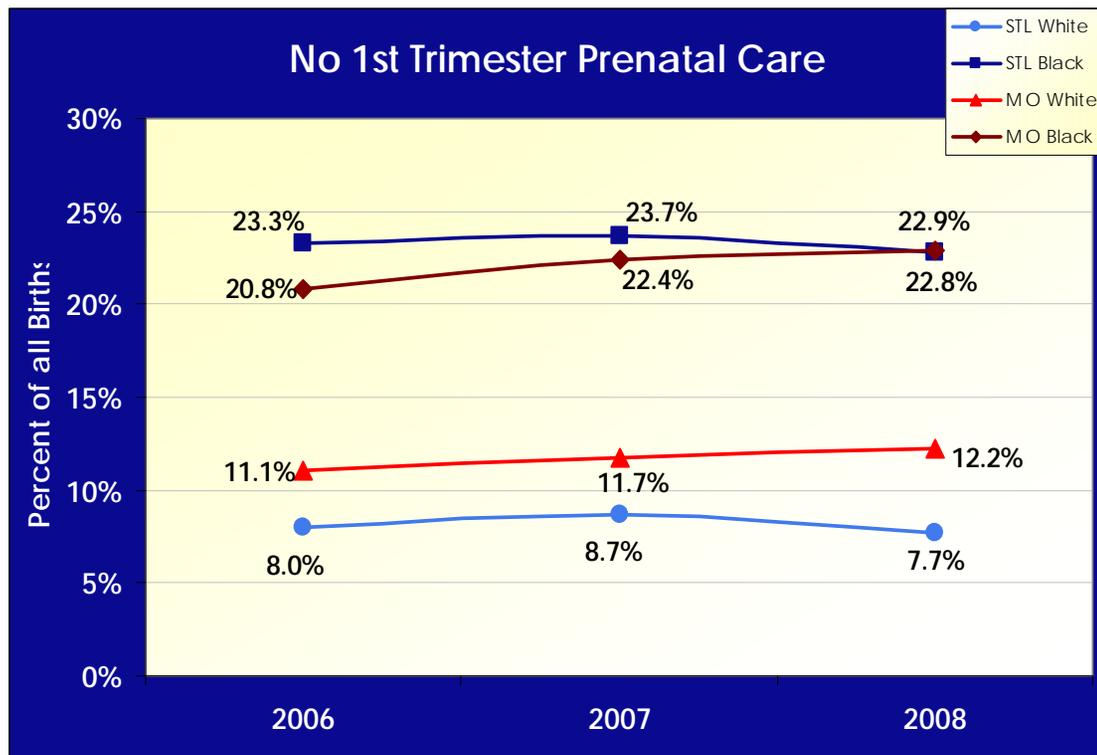
STL City	25.9%
STL Black	42.2%
STL White	8.8%
MO	15.9%
MO Black	35.4%
MO White	13.2%
US	NAV
US Black	NAV
US White	NAV

**small population-interpret with caution



Medicaid Eligible

Prenatal Care



Definition

Prenatal care begins when a physician or other health professional first examines and/or counsels pregnant women. Verification of pregnancy alone is not prenatal care. The rate presented for this analysis is the percent of live births where the mother did not receive prenatal care in the first trimester. Data are averaged for the time period 2006 through 2008.

Public Health Implications

Pregnant women not receiving sufficient or early prenatal care may result in adverse birth outcomes including low-birth weight, infant mortality, disability and other negative birth outcomes.

St. Louis Rates and Comparative Info

The St. Louis City average percent, from 2006 through 2008, is 1.3 times the Missouri average rate and 1.2 times the U.S. average rate. In 2008, 904 pregnant women did not receive 1st trimester prenatal care in St. Louis City out of 5,408 live births. Of those 904, 99 didn't receive any prenatal care. The highest percentages are in 63107, 63113, 63120. The highest rates of prenatal care are in 63109, 63139 and 63102.

Black/White Disparity

The average percent of the black population not receiving care is 2.9 times average white population percent in St. Louis City. The rate for the black population in St. Louis City is 1.3 times the average black population percent for the U.S.

Disparity Ratio: 2.9

Potential Public Health Interventions

Outreach services for pregnant women including educational programs.

“Our challenge and opportunity is to marry high quality medical care with the array of social, emotional, environmental and economic resources in our community to wrap around and support individuals and families before, during and following pregnancy.”

-Kendra Copanas, Executive Director for Maternal, Child and Family Health Coalition

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

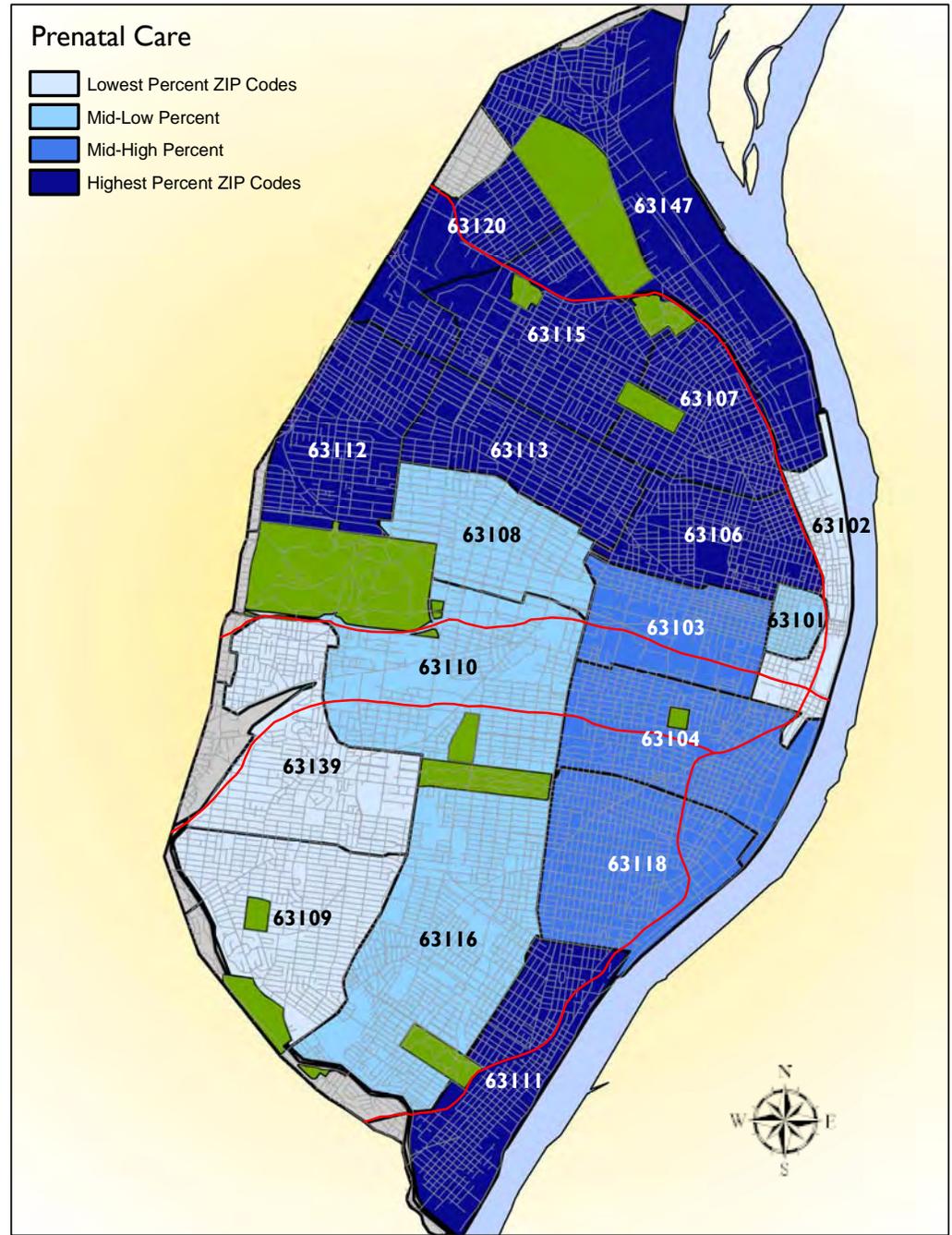
% of Live Births

ZIP Code	Prenatal Care	Map Quartile
63107	25.7%	4
63113	25.5%	4
63120	24.1%	4
63106	22.9%	4
63115	22.4%	4
63147	22.4%	4
63112	21.5%	4
63111	20.8%	4
63118	19.3%	3
63104	17.9%	3
63103	15.5%	3
63116	14.0%	2
63101**	13.5%	2*
63108	13.0%	2
63110	12.6%	2
63102**	8.0%	1*
63139	7.0%	1
63109	5.1%	1

STL City	17.5%
STL Black	23.3%
STL White	8.1%
MO	13.5%
MO Black	22.0%
MO White	11.7%
US	14.3%
US Black	17.4%
US White	13.7%

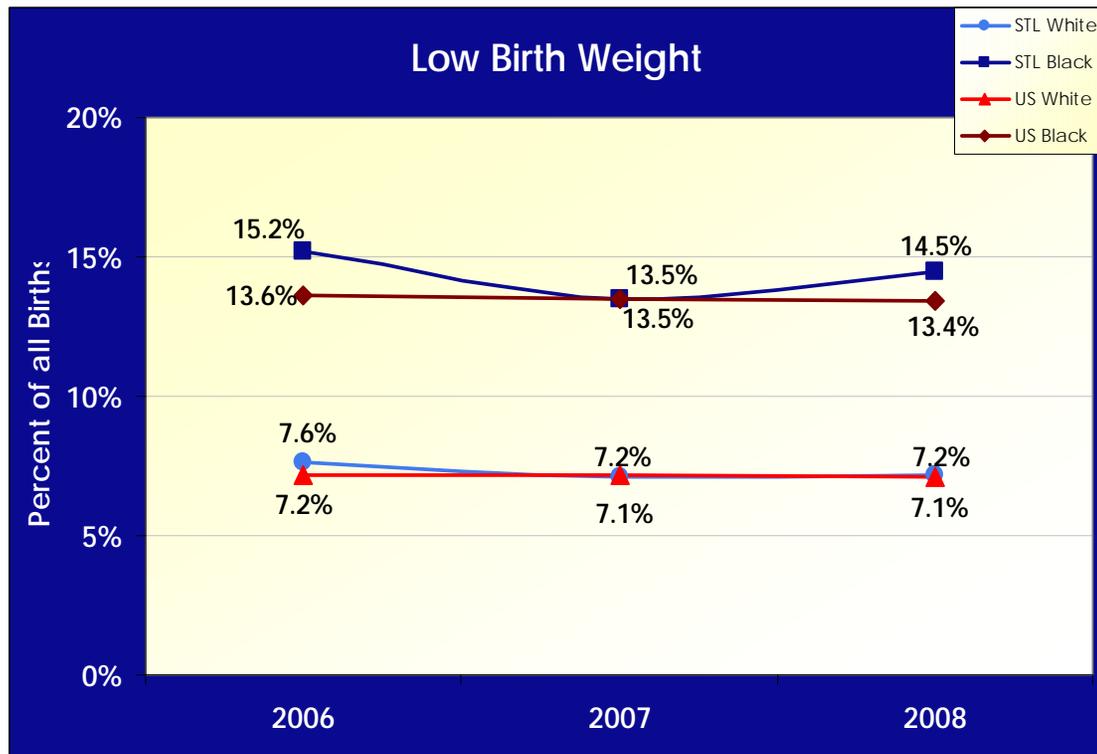
**small population-interpret with caution

* < 20 health events-interpret with caution



Prenatal Care

Low Birth Weight



“A consistent pattern of north side zip codes with the highest risk of having a low birth weight birth has persisted over the last decade, reflecting our inability to change the distribution of prenatal risk. We also see a consistent pattern over time of racial disparity in LBW with two African American mothers delivering low birth weight babies for every white [mother].”

-Dr. Louise Flick, Professor of Epidemiology at St. Louis University, Principal Investigator for the National Children’s Study

Definition

Low-birth weight infants are those born weighing less than 2,500 grams, or about 5.5 pounds. Some are born prematurely, some are full-term but small for their gestational age and some are both premature and small. The rate is presented as a percent of live births. Data are averaged for the time period 2006 through 2008.

Public Health Implications

Low-birth weight infants are at a higher risk of death or long-term illness and disability than are infants of normal weight. Birth weight is one of the most important predictors of an infant’s subsequent health and survival.

St. Louis Rates and Comparative Info

The average 2006 through 2008 low-birth weight rate in St. Louis City is about 1.5 times the average rates for Missouri and the U.S. In 2008, 631 babies were born weighing less than 2,500 grams in the City of St. Louis. This represented about 12% of all births in 2008. The ZIP Codes with the highest rates are 63107, 63113 and 63102. The lowest rates are in 63139, 63109 and 63110.

Black/White Disparity

The average 2006-2008 low-birth weight rate for births among blacks in St. Louis City is twice the average rate for white births in St. Louis City. The average rate for black low-birth weight babies in St. Louis City is slightly higher than the average black population rates for Missouri and U.S.

Disparity Ratio: 2.0

Potential Public Health Interventions

Assisting in enrolling pregnant women in WIC and food stamp programs. Identifying pregnant women who need prenatal care services.

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

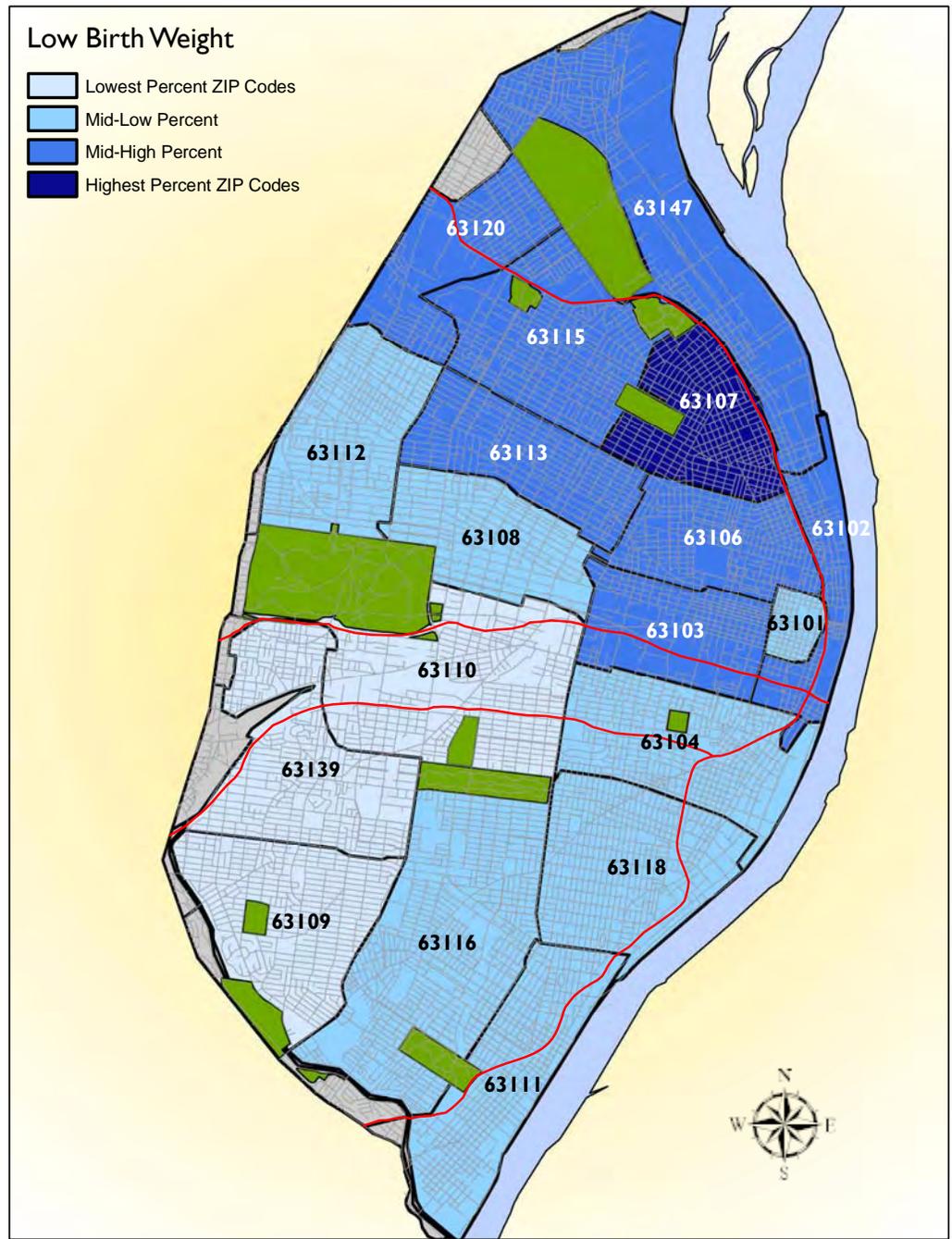
% of Live Births

ZIP Code	Low Birth Weight	Map Quartile
63107	19.6%	4
63113	15.9%	3
63102**	15.4%	3*
63120	14.8%	3
63147	14.6%	3
63103	13.0%	3*
63106	12.9%	3
63115	12.8%	3
63112	12.3%	2
63111	12.0%	2
63118	11.7%	2
63101**	11.3%	2*
63108	10.9%	2
63104	10.1%	2
63116	9.9%	2
63110	8.7%	1
63109	7.5%	1
63139	5.4%	1

STL City	11.6%
STL Black	14.4%
STL White	7.3%
MO	8.0%
MO Black	13.5%
MO White	7.0%
US	8.2%
US Black	13.9%
US White	7.3%

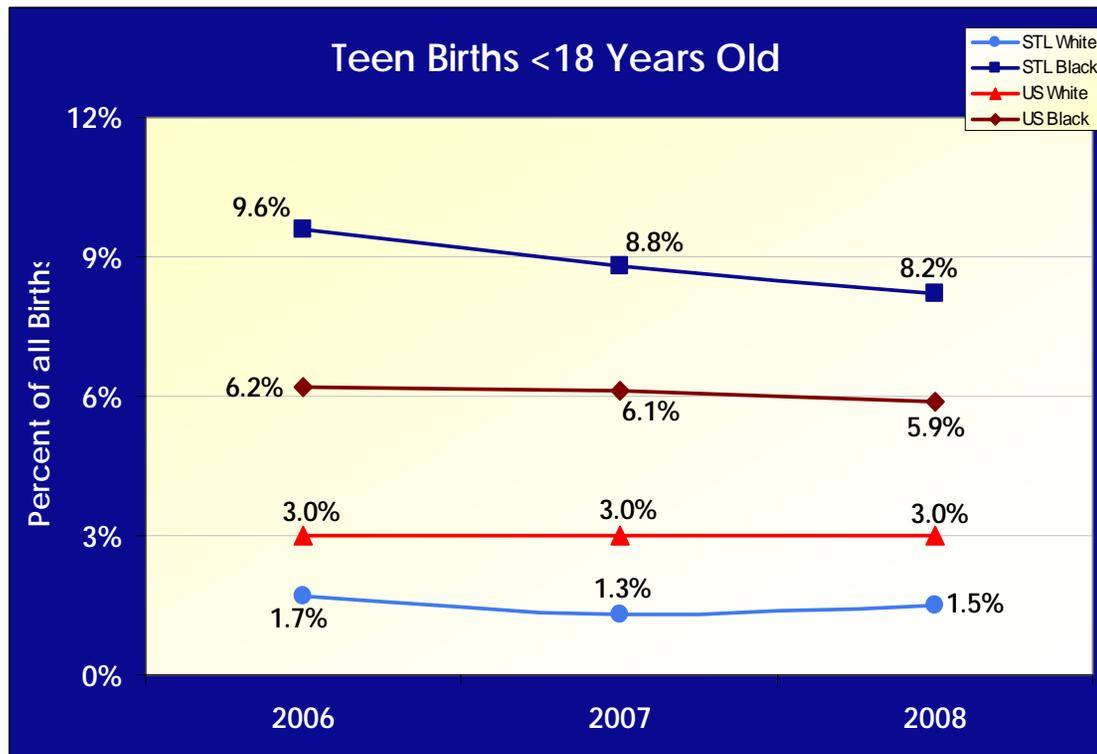
**small population-interpret with caution

* < 20 health events-interpret with caution



Low Birth Weight

Teen Births 10 to 17



Definition

The teen birth rate, for this assessment, is defined as the number of live births to 10 to 17 year olds expressed as a percentage of total live births. Data are averaged for the time period 2006 through 2008.

Public Health Implications

Bearing a child during teen years is associated with long-term difficulties for the mother, the child and society. These consequences are often attributable to poverty and other adverse socioeconomic circumstances that frequently accompany early childbearing. Babies born to teen mothers are at a higher risk of low birth weight and infant mortality.

St. Louis Rates and Comparative Info

The St. Louis City average rate for 2006 through 2008 is about 1.7 times the average Missouri and U.S. rate. In 2008, there were 301 babies born to teens less than 18 years of age in St. Louis City. The ZIP Codes with the highest rates are 63113, 63107, 63120 and 63115. The ZIP Codes with the lowest rates are 63102, 63101, 63109 and 63139.

Black/White Disparity

The average teen birth rate in 10 to 17 year old black teens in St. Louis City is 5.9 times the average rate for white teens in St. Louis City.

Disparity Ratio: 5.9

Potential Public Health Interventions

Programs that provide appropriate, accurate sexual and reproductive health education and abstinence programs. Studying the epidemiology of teen pregnancy to determine interventions specific to the St. Louis teen population.

“Over the last 10 years the percentage of live births occurring to teenage mothers aged 10-17 has declined in the US and in St. Louis City for both African Americans and Whites. These trends mirror the declining trend in the overall birthrate across the country.”

-Dr. Louise Flick, Professor of Epidemiology at St. Louis University, Principal Investigator for the National Children’s Study

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

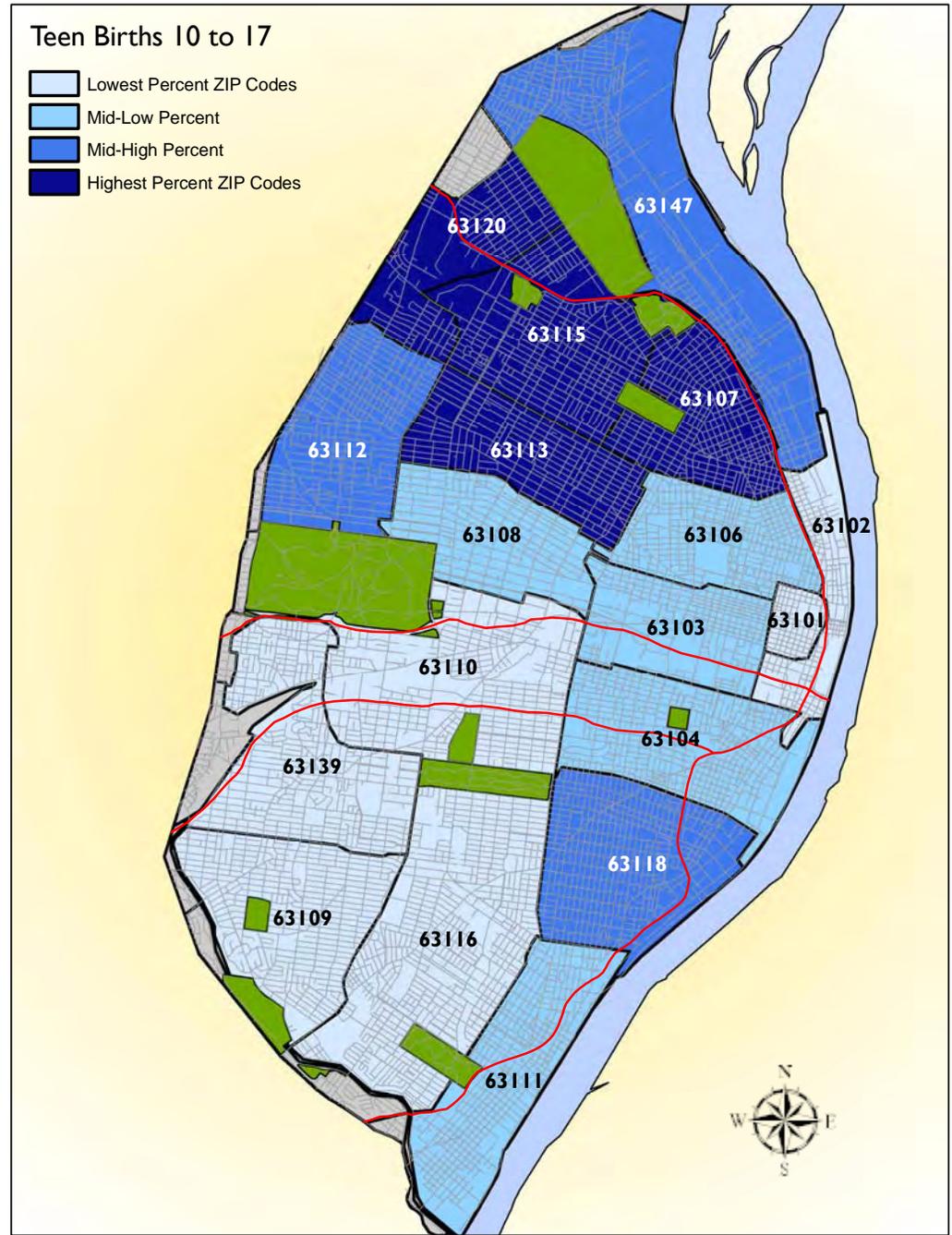
% of Live Births

ZIP Code	Preg 10-17	Map Quartile
63113	12.1%	4
63107	11.8%	4
63120	11.0%	4
63115	9.4%	4
63147	9.0%	3
63118	8.3%	3
63112	6.6%	3
63106	6.4%	2
63111	5.8%	2
63104	5.7%	2
63103	4.6%	2*
63108	4.5%	2
63110	3.5%	1
63116	3.0%	1
63139	1.3%	1*
63109	0.8%	1*
63101**	0.0%	1*
63102**	0.0%	1*

STL City	6.0%
STL Black	8.9%
STL White	1.5%
MO	3.5%
MO Black	7.2%
MO White	2.8%
US	3.4%
US Black	6.1%
US White	3.0%

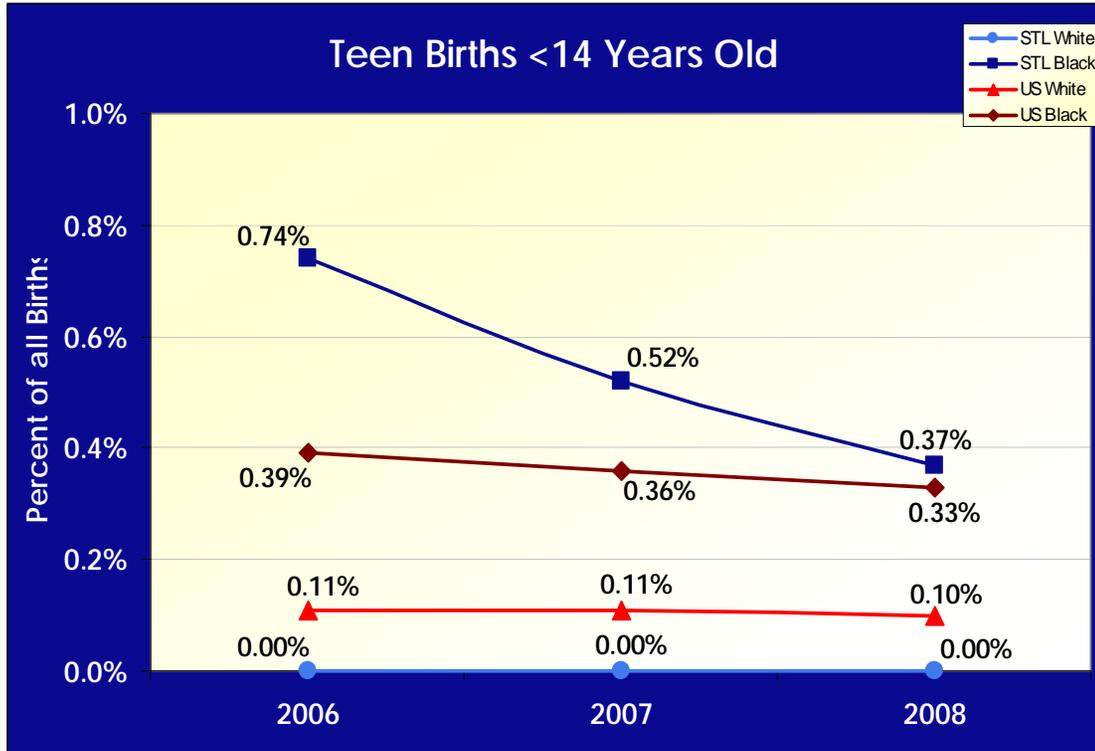
**small population-interpret with caution

* < 20 health events-interpret with caution



Teen Births 10 to 17

Teen Births 10 to 14



“Well the thing that struck me with teenage pregnancy when I looked at the statistics from the health services I mean we’re way over the average in a negative way, as far as the health services concerned... it’s kind of scary actually because it seems like a lot of the resources are going toward emergencies rather than preventative care.”

-Female community member

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

Definition

This teen birth rate is for the youngest teens, those less than 15 years of age. The rate, for this assessment, is defined as the number of live births to 10 to 14 year olds expressed as a percentage of total live births. Data are averaged for the time period 2006 through 2008.

Public Health Implications

Although the rates are low, this is an even more troubling indicator than the older teens. These are children having children. Teens of this age lack information about reproduction and often do not have support systems, ranging from prenatal care to emotional and economic support. These babies are at an even higher risk of low-birth weight and infant mortality.

St. Louis Rates and Comparative Info

The St. Louis City average rate for 2006 through 2008 is 2.8 times the average Missouri rate. In 2008, there were 13 babies born to mothers between 10 and 14 years of age in St. Louis City. The ZIP Codes with rates of most highest rates of teen births are 63147, 63113 and 63115. Multiple ZIP Codes had zero.

Black/White Disparity

All births among 10 to 14 year old girls in this time period were black.

Disparity Ratio: N/A

Potential Public Health Interventions

Programs that provide appropriate, accurate sexual and reproductive health education and abstinence programs in the schools. Studying the epidemiology of teen pregnancy to determine interventions specific to the St. Louis City teen population.

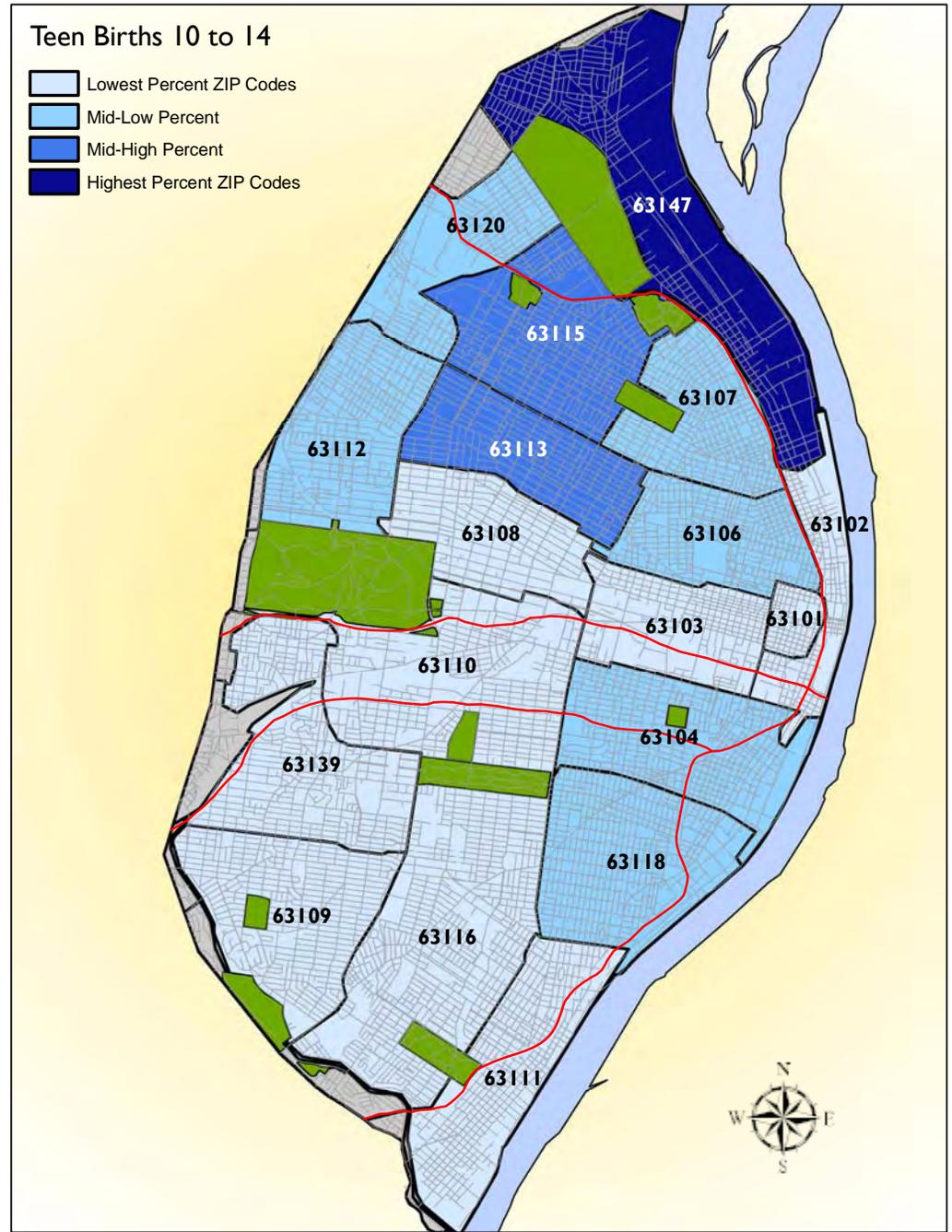
% of Live Births

ZIP Code	Preg 10-14	Map Quartile
63147	1.22%	4*
63113	0.89%	3*
63115	0.69%	3*
63106	0.51%	2*
63107	0.51%	2*
63112	0.48%	2*
63118	0.48%	2*
63120	0.46%	2*
63104	0.33%	2*
63110	0.27%	1*
63116	0.13%	1*
63139	0.10%	1*
63101**	0.00%	1*
63102**	0.00%	1*
63103	0.00%	1*
63108	0.00%	1*
63109	0.00%	1*
63111	0.00%	1*

STL City	0.36%
STL Black	0.54%
STL White	0.00%
MO	0.13%
MO Black	0.41%
MO White	0.07%
US	0.14%
US Black	0.36%
US White	0.11%

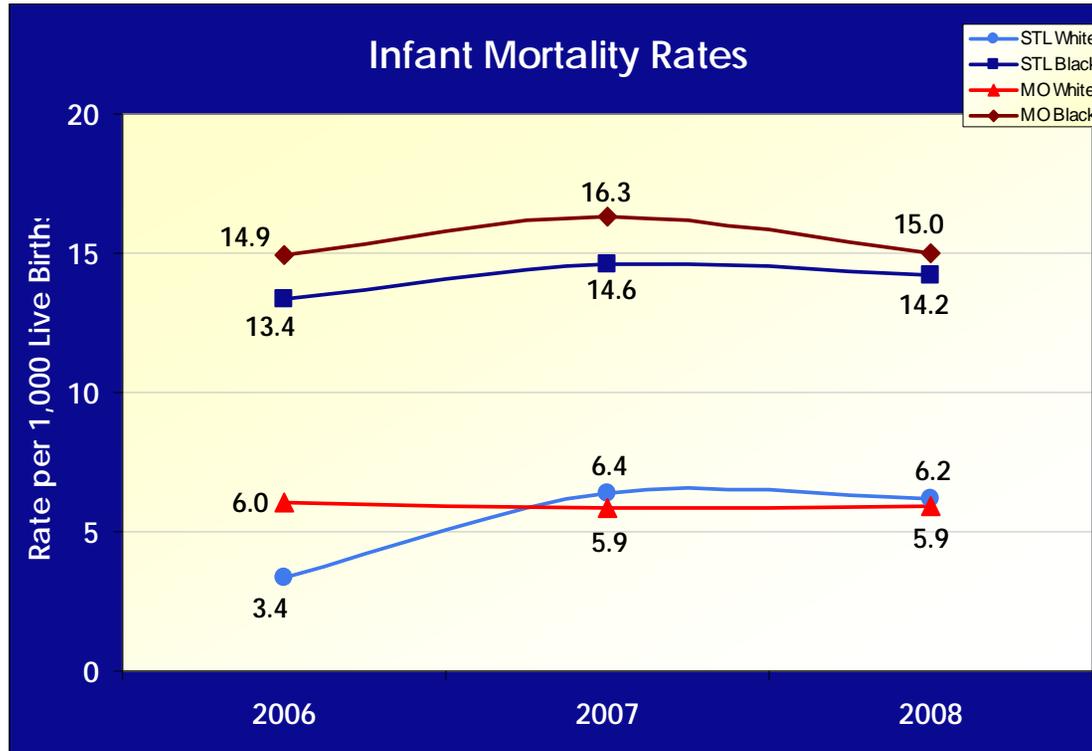
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* < 20 health events-interpret with caution



Teen Births 10 to 14

Infant Mortality



“The leading reasons for our poor infant health begin well before pregnancy. So no longer can we wait until prenatal care begins to support women and their families. And no longer can we focus on women, fathers play a vital role in the health of their children.”

-Kendra Copanas, Executive Director for Maternal, Child and Family Health Coalition

Definition

Infant mortality is defined as the death of an infant before his or her first birthday. The rate is expressed as infant deaths per 1,000 live births. St. Louis City and Missouri data are averaged for the time period 2006 through 2008. U.S. data are averaged for the time period 2007 through 2008.

Public Health Implications

The infant mortality rate is an important measure of the well-being of infants, children and pregnant women because it is associated with many factors including the health of the mother, quality and access to care for mother and infant, socioeconomic conditions and public health practices. Infant mortality is often considered preventable and thus can be influenced by various education and care programs.

St. Louis Rates and Comparative Info

The St. Louis City average rate for 2006 through 2008 is 1.5 times the average Missouri rate and 1.6 times the U.S. rate. In 2008, there were 59 infant deaths in St. Louis City. The ZIP Codes with the highest rates are 63103 and 63107. The ZIP Codes with the lowest rates are 63101, 63102, 63139 and 63109.

Black/White Disparity

The average rate of infant mortality among black residents of St. Louis City for the years 2006 through 2008 is 2.7 times the St. Louis average white rate. The St. Louis City black average rate is slightly better than the average Missouri rate, slightly worse than the U.S. black rate.

Disparity Ratio: 2.7

Potential Public Health Interventions

Programs to identify women at risk and educate them about healthy behaviors during and after pregnancy including nutrition and smoking cessation. Assistance in accessing prenatal care.

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

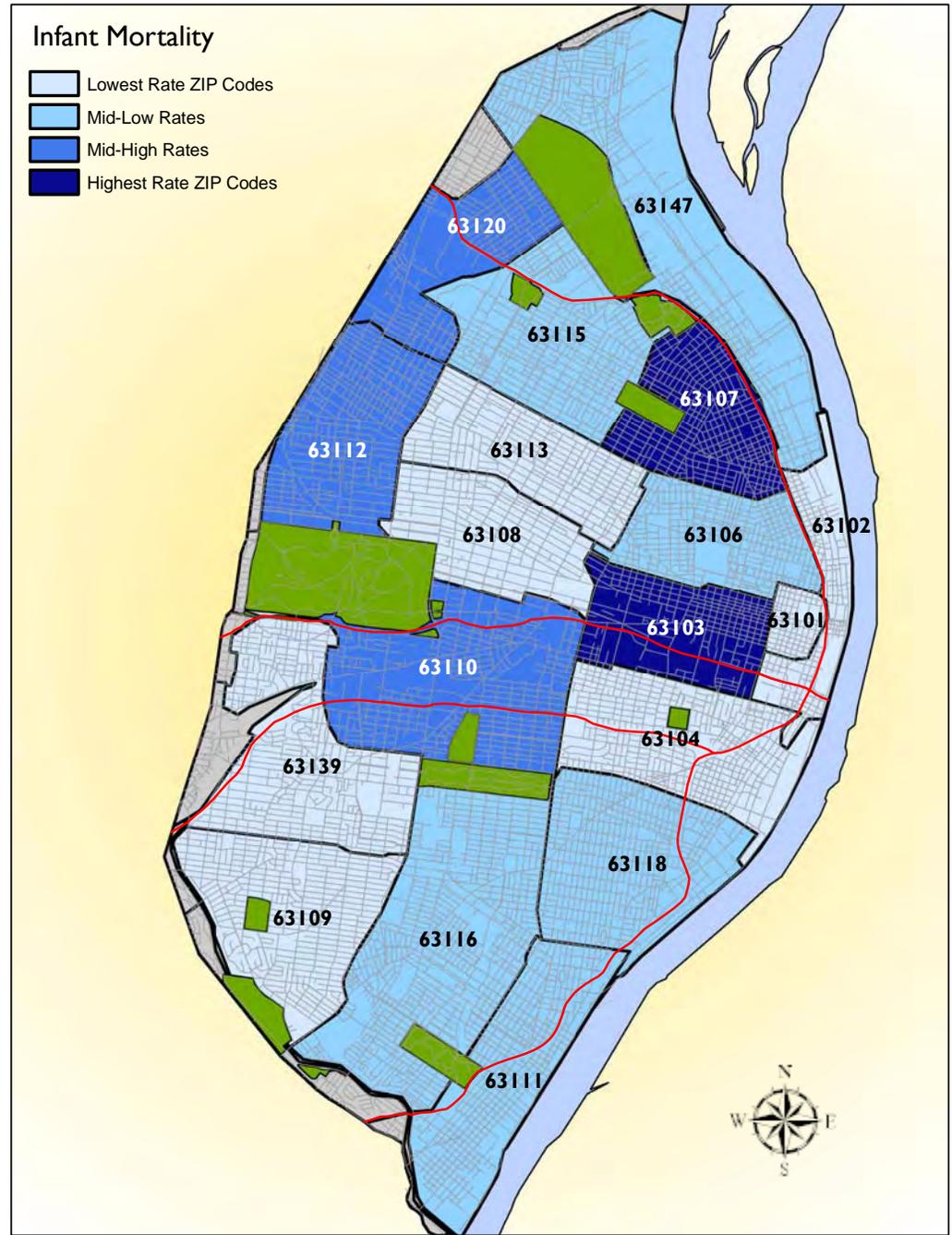
Deaths /1000 Live Births

ZIP Code	Infant Mortality	Map Quartile
63103	26.5	4*
63107	24.7	4
63120	17.1	3*
63110	16.0	3*
63112	15.8	3*
63115	12.5	2*
63118	11.6	2*
63147	10.4	2*
63111	10.2	2*
63106	9.1	2*
63116	8.9	2
63113	6.6	1*
63104	5.6	1*
63108	4.1	1*
63109	3.2	1*
63139	2.2	1*
63101**	0.0	1*
63102**	0.0	1*

STL City	10.8
STL Black	14.1
STL White	5.3
MO	7.4
MO Black	15.4
MO White	6.0
US	6.8
US Black	13.2
US White	5.6

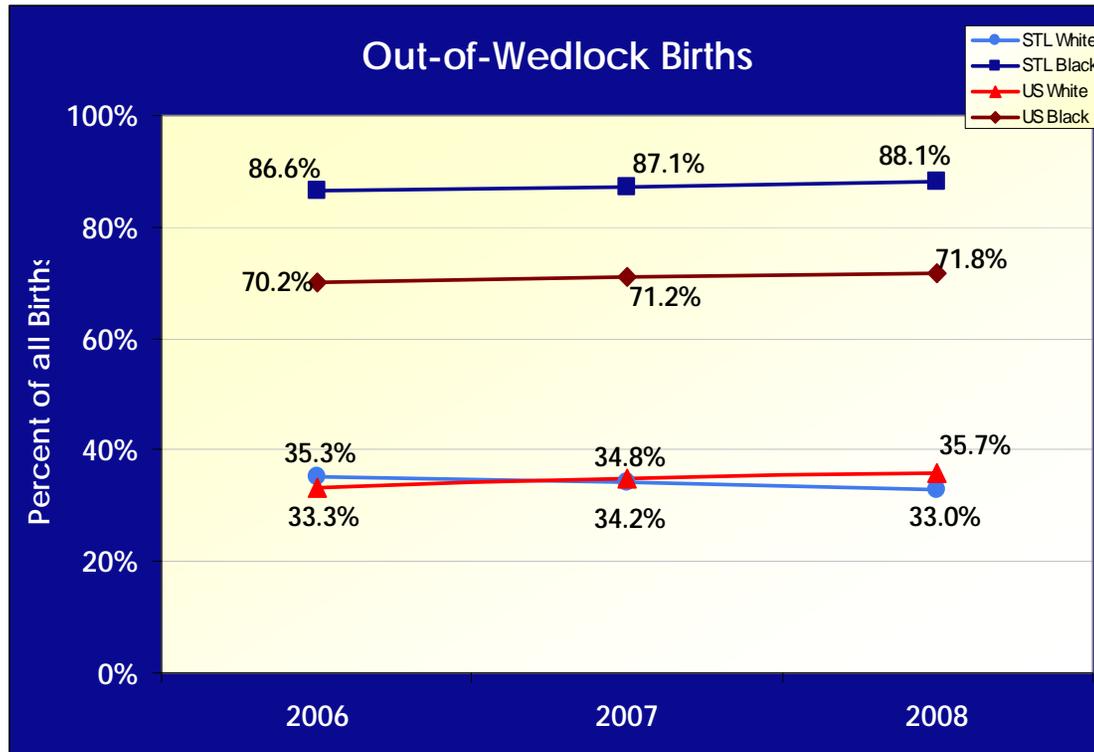
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* < 20 health events-interpret with caution



Infant Mortality

Out-of-Wedlock Births



“Statistics also prove that children raised without a positive male role model in their lives are more likely to do a poor job in school. These children are also at higher risk of getting involved in criminal actions including drugs. Worst of all, those children are likely to repeat the same pattern of negative behavior as they become adults and have children.”

-The Catholic Family Services Fatherhood Initiative Program

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

Definition

For birth certificate purposes, the mother is considered married “if the mother was married at the time of conception, the time of delivery, or any time between conception and delivery and states husband is the father.” The rate is the number of live births to unmarried mothers expressed as a percent of total live births. Data are averaged for the time period 2006 through 2008.

Public Health Implications

Increases in births to unmarried women are among the many changes in American society that have affected family structure and economic security to children. Children of unmarried mothers are at higher risk of having adverse birth outcomes, such as low birth weight and infant mortality and are more likely to live in poverty than children of married mothers. In a recent study, the infant mortality rate was twice as high for unmarried women as for married women.

St. Louis Rates and Comparative Info

The St. Louis City average rate for 2006 through 2008 is about 1.9 times the average Missouri and U.S. rates. In 2008 there were 3,596 babies born out-of-wedlock in St. Louis City. The ZIP Codes with higher rates are 63106, 63113, 63107 and 63120. The ZIP Codes with the lowest rates are 63109 and 63139.

Black/White Disparity

The St. Louis City black rate is 1.7 times the St. Louis white rate. The St. Louis City black rate is 1.1 times the average black rate for Missouri.

Disparity Ratio: 1.7

Potential Public Health Interventions

Epidemiological studies to determine populations at risk in order to develop appropriate programs and collaboration efforts.

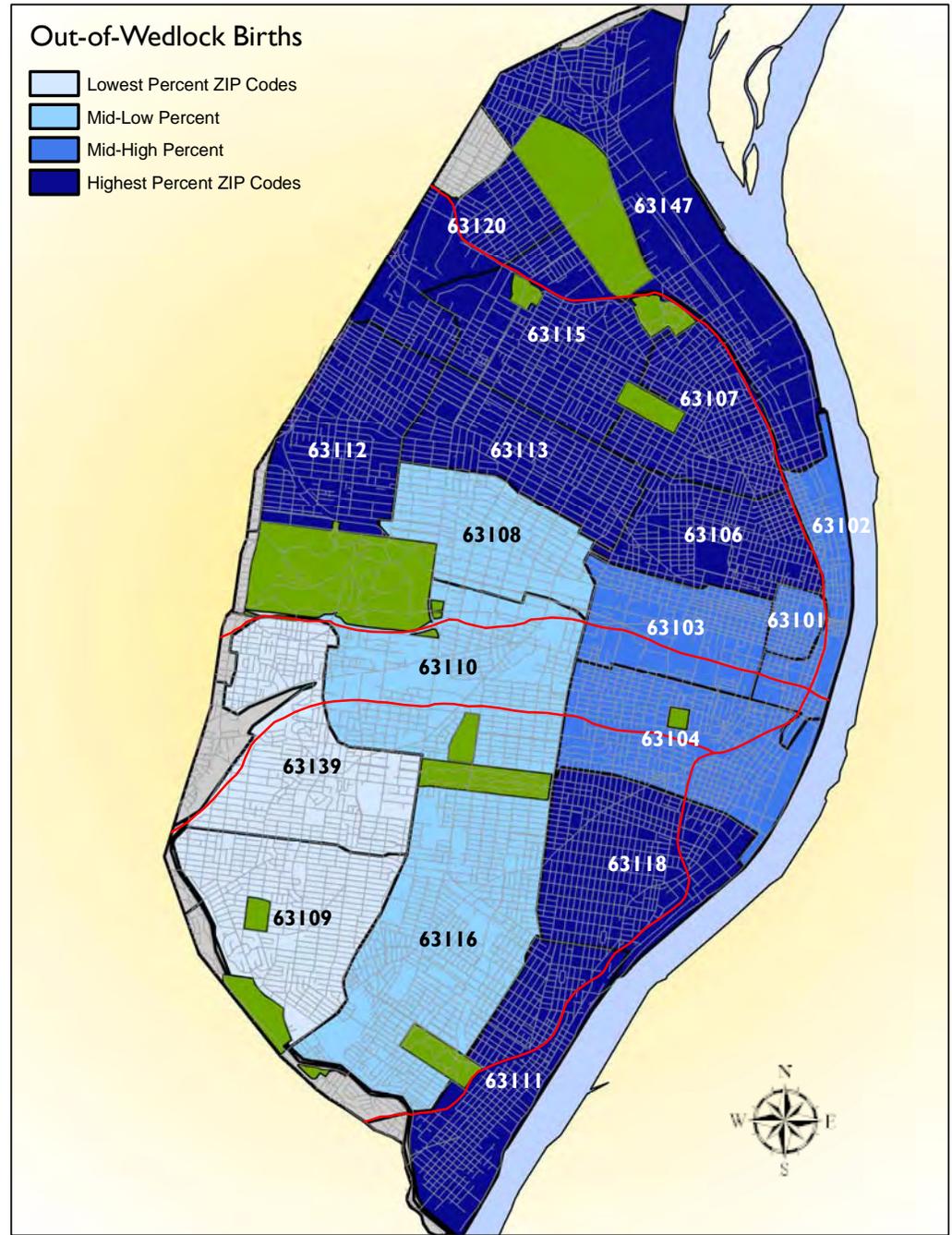
% of Live Births

ZIP Code	OOW Births	Map Quartile
63120	90.6%	4
63106	90.4%	4
63107	90.0%	4
63113	89.5%	4
63115	88.9%	4
63147	87.0%	4
63118	76.2%	4
63112	75.4%	4
63111	74.2%	4
63102**	65.4%	3*
63104	62.5%	3
63101**	58.5%	3
63103	58.0%	3
63110	55.6%	2
63116	51.3%	2
63108	51.1%	2
63139	30.6%	1
63109	23.8%	1

STL City	66.5%
STL Black	87.2%
STL White	34.2%
MO	40.2%
MO Black	78.6%
MO White	33.4%
US	39.6%
US Black	71.1%
US White	34.6%

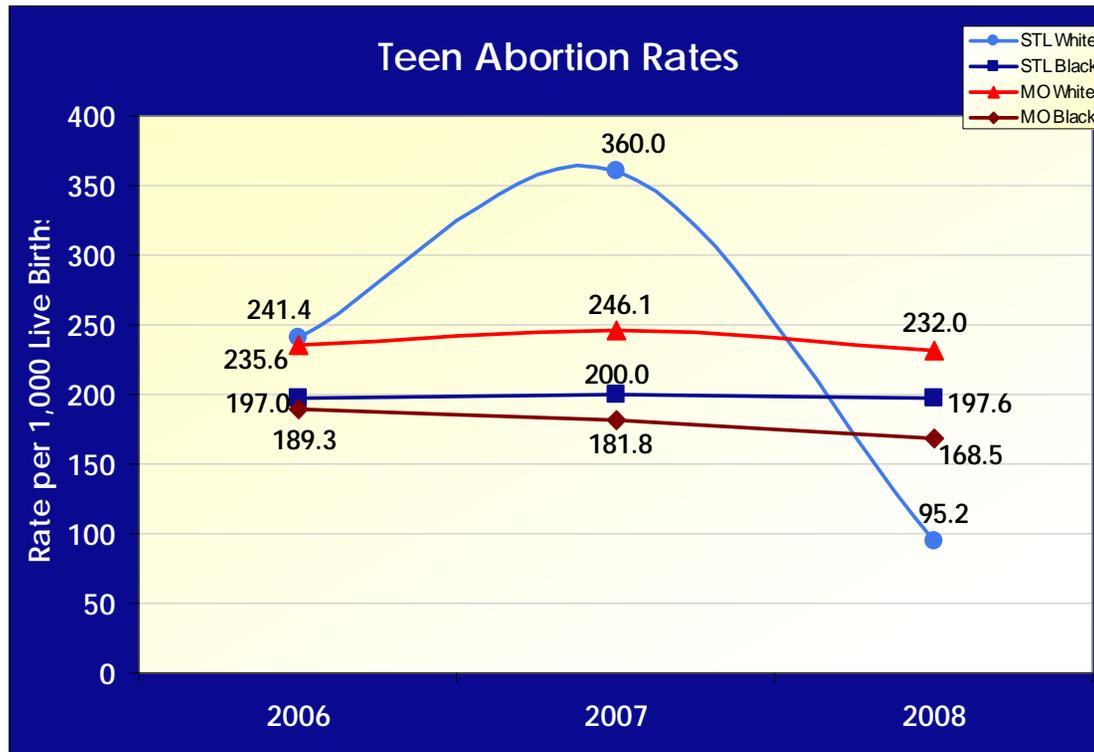
**small population-interpret with caution

* < 20 health events-interpret with caution



Out-of-Wedlock Births

Teen Abortions 10 to 17



Data Source: Missouri Department of Health and Senior Services

Definition

The teen abortion ratio in this analysis is the number of abortions to teens 10 through 17 years of age per 1,000 total pregnancies for teens 10 through 17 years of age. St. Louis City and Missouri data are averaged for the time period 2006 through 2008.

Public Health Implications

The problem of teen abortions is related to the bigger problem of teen pregnancies. Nationally, about 1 million teens become pregnant each year. Ninety-five percent of those pregnancies are unintended and almost one third end in abortions.

St. Louis Rates and Comparative Info

The St. Louis City average rate for the time period 2006 through 2008 is about the same as the Missouri average rate for the same time period. In 2008, there were 72 abortions in the 10 to 17 year old age group in the St. Louis City. The ZIP Codes with the highest rates of teen abortion are 63139 and 63109. The ZIP Codes with the lowest rates are 63118 and 63106.

Black/White Disparity

The St. Louis City average rate for the white population is 1.2 times the St. Louis City average rate for the black population. The St. Louis white average rate is similar to the Missouri average white rate.

Disparity Ratio: 0.83

Potential Public Health Interventions

Epidemiological studies to determine populations at risk in order to develop programs and policies and collaboration with appropriate agencies.

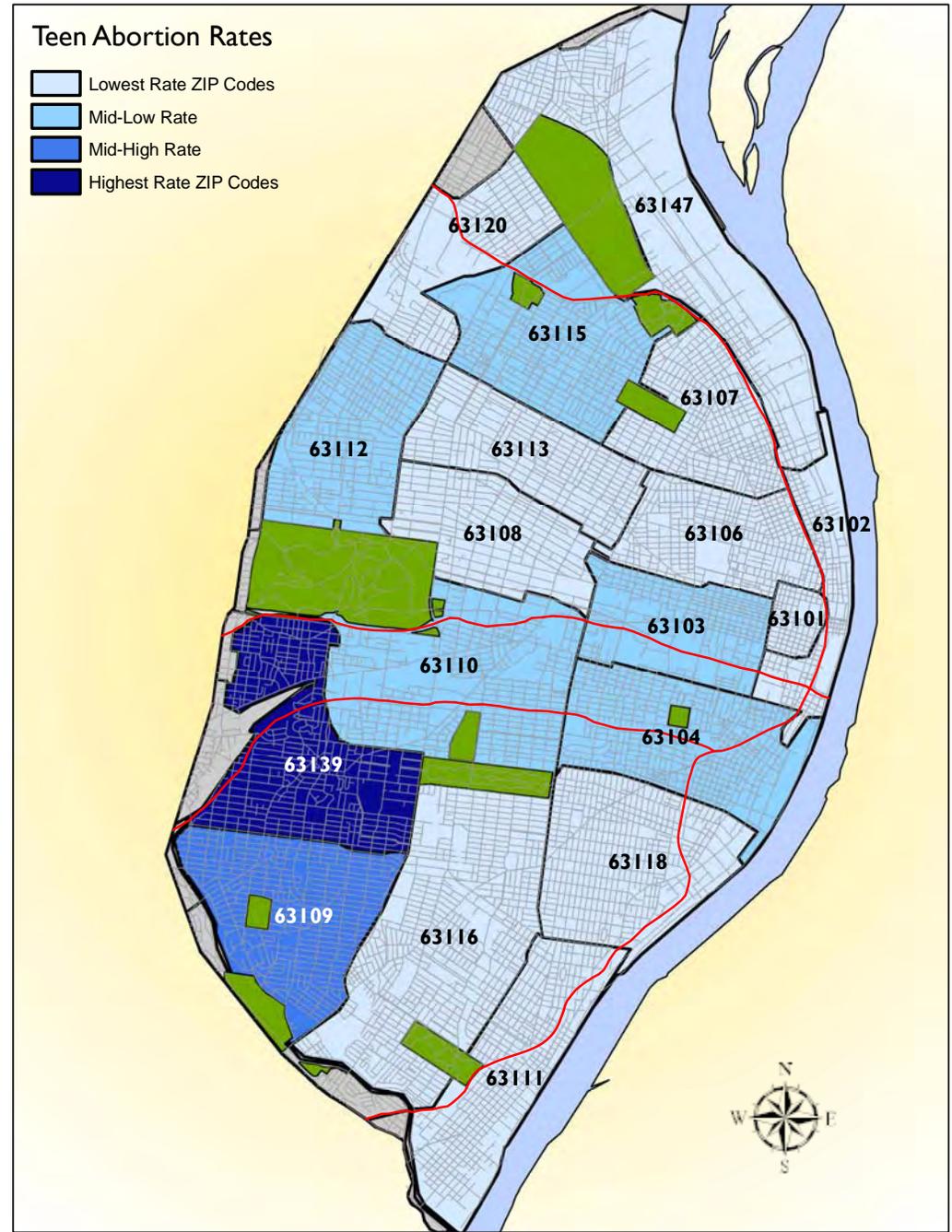
Abortions /1000 Pregnancies

ZIP Code	Teen Abortion	Map Quartile
63139	269.2	4*
63109	217.4	3*
63112	171.2	2
63103	<166.6	2*
63110	163.9	2*
63104	160.4	2*
63115	148.0	2
63120	133.8	1
63147	130.0	1*
63108	117.6	1*
63111	114.3	1*
63113	107.1	1
63116	99.2	1*
63107	97.8	1*
63106	90.9	1*
63118	90.3	1
63101**	0.0	1*
63102**	0.0	1*

STL City	199.5
STL Black	198.2
STL White	240.0
MO	198.0
MO Black	180.1
MO White	237.9
US	NAV
US Black	NAV
US White	NAV

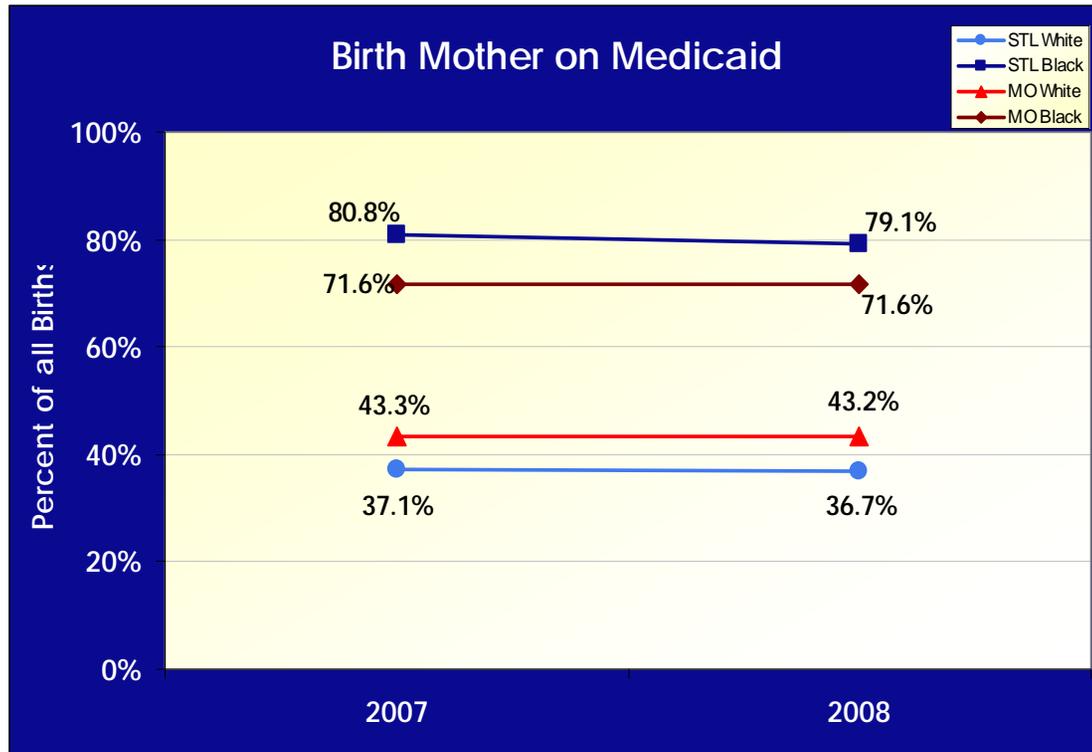
**small population-interpret with caution

* < 20 health events-interpret with caution



Teen Abortions 10 to 17

Birth - Medicaid



“Low income women on Medicaid have a higher incidence of risk factors and complications of pregnancy than women not on Medicaid. Rates of smoking during pregnancy are higher for Medicaid recipients... Women on Medicaid have higher rates of excess gestational weight gain than women not on Medicaid... Prevalence of pregnancy induced hypertension and depression in pregnancy are both higher for women on Medicaid.”

-Women’s Health Before and Between Pregnancy; Maternal, Child and Family Health Coalition, 2011

Definition

This statistic represents mothers that participated in the Medicaid program during their pregnancy. The rate is presented as the number of birth mothers that are Medicaid participants as a percent of total live births. St. Louis City and Missouri data are averaged for the time period 2006 through 2007.

Public Health Implications

High Medicaid participation is both positive and negative. The positive aspect is that it increases access to care during pregnancy. The negative aspect is that it is an indicator of poverty that is associated with poorer health outcomes. Medicaid participation, along with the food stamp program (SNAP) and WIC participation can be used to determine possible effects of these interventions on the adequacy of preventive care and pregnancy outcomes.

St. Louis Rates and Comparative Info

The St. Louis City average rate for the time period 2006 through 2007 is 1.34 times the average Missouri rate. In 2007 in St. Louis City, there were 3,308 birth mothers that were Medicaid participants. The ZIP Codes with the highest rates are 63106, 63107, 63115 and 63120. The ZIP Codes with the lowest rates are 63109, 63102 and 63139.

Black/White Disparity

The St. Louis City black average rate is 2.2 times the St. Louis City white average rate. The St. Louis City black average rate is 1.1 times the average Missouri black rate.

Disparity Ratio: 2.2

Potential Public Health Interventions

Assist in MO HealthNet enrollment.

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

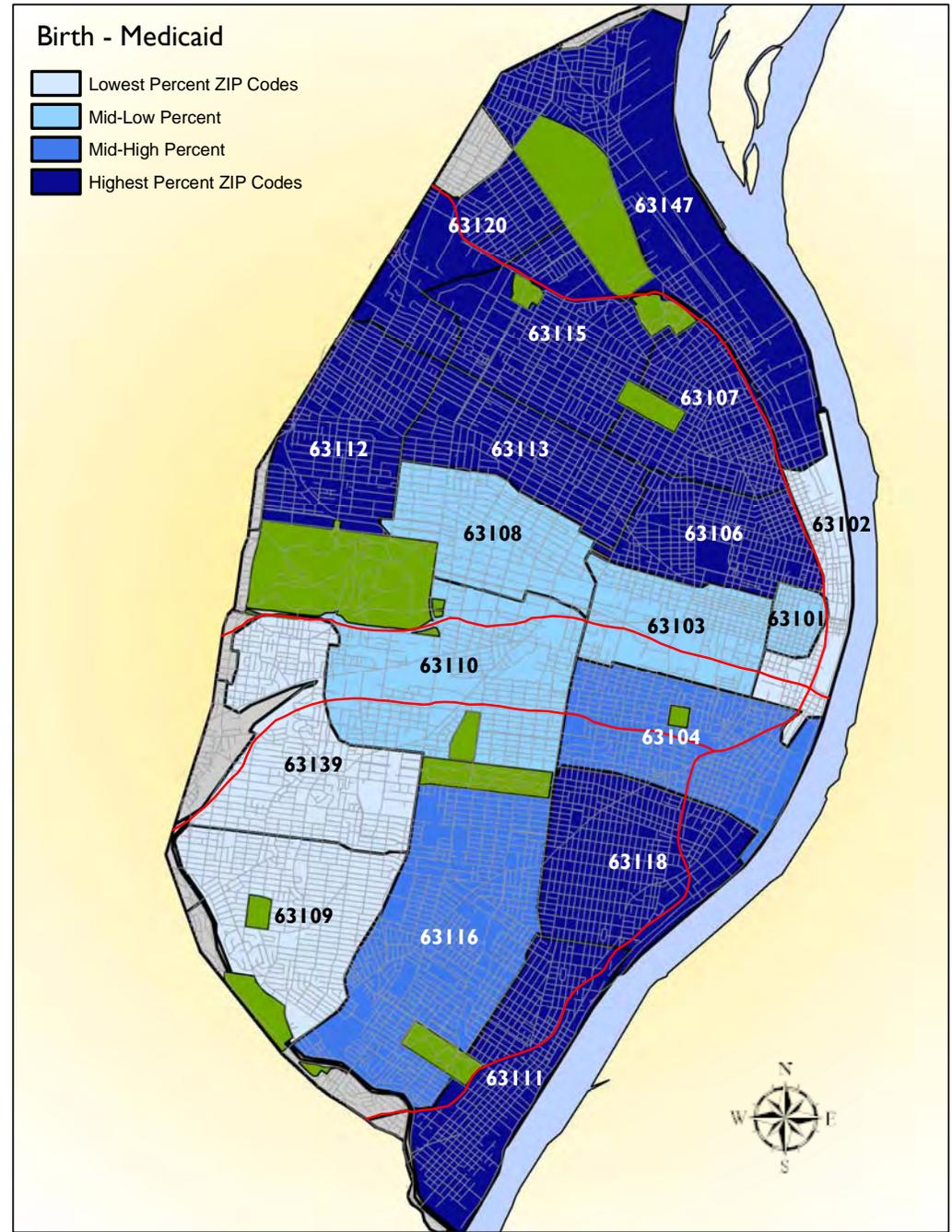
% of Live Births

ZIP Code	Birth Med	Map Quartile
63106	83.2%	4
63107	81.7%	4
63115	81.4%	4
63120	81.3%	4
63113	80.2%	4
63147	76.0%	4
63111	74.3%	4
63118	74.2%	4
63112	69.0%	4
63104	62.4%	3
63116	58.3%	3
63110	54.0%	2
63101**	53.1%	2*
63103	47.9%	2
63108	46.0%	2
63139	29.6%	1
63102**	29.4%	1*
63109	25.3%	1

STL City	63.8%
STL Black	80.0%
STL White	36.9%
MO	47.5%
MO Black	71.6%
MO White	43.2%
US	NAV
US Black	NAV
US White	NAV

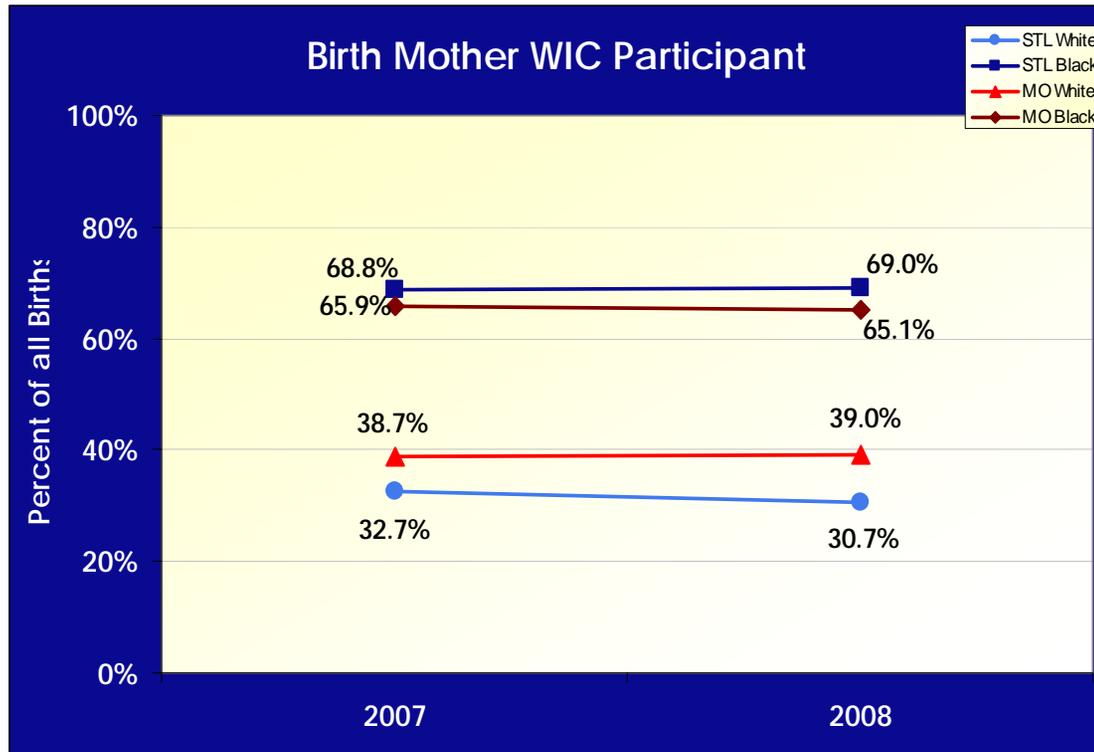
**small population-interpret with caution

* < 20 health events-interpret with caution



Birth - Medicaid

Birth - WIC



Definition

The WIC (Special Supplemental Nutrition Program for Women, Infants and Children) participant rate is the number of “mothers who participated in the WIC program during pregnancy” expressed as a percent of total live births. St. Louis City and Missouri data are averaged for the time period 2006 through 2007.

Public Health Implications

WIC participation, along with the food stamp program (SNAP) and Medicaid participation can be used to determine possible effects of these interventions on the adequacy of preventive care and pregnancy outcomes. The positive aspect of high rates is enhanced nutrition during pregnancy to help improve outcomes. The negative side is that the WIC program is associated with poverty status.

St. Louis Rates and Comparative Info

The St. Louis City average rate for 2006 through 2007 is 1.3 times the average Missouri rate. In 2007, 2,863 births were to mothers participating in the WIC program. This represents 55% of all births in 2007. The ZIP Codes with the highest rates are 63120, 63106, 63115 and 63107. The ZIP Codes with the lowest rates are 63109, 63139 and 63102.

Black/White Disparity

The St. Louis City black average rate is 2.2 times the St. Louis City average white rate. The St. Louis City black average rate is only slightly higher than the Missouri black average rate.

Disparity Ratio: 2.2

Potential Public Health Interventions

Nutritional education programs.

“According to state data, the northern end of the city is perhaps the most underserved in terms of access to full-service supermarkets. Nearly 5,000 families served by WIC live in that part of town, but they can count only seven stores where needy mothers can buy WIC supplies.”

-STL Beacon; Mothers find state WIC rules create obstacles to getting nutritious foods, October, 2010

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

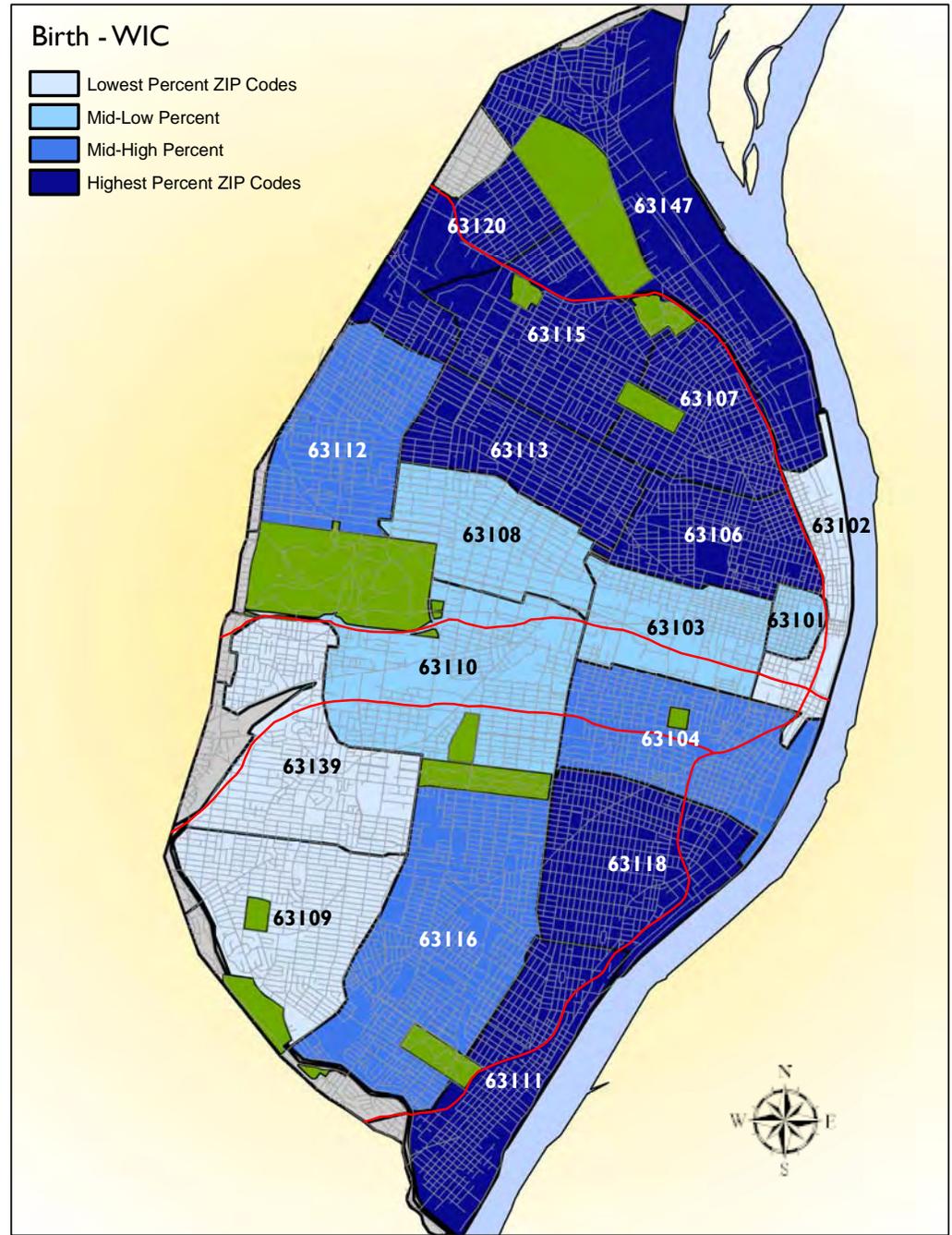
% of Live Births

ZIP Code	Birth WIC	Map Quartile
63120	76.7%	4
63106	71.9%	4
63115	70.9%	4
63107	69.8%	4
63147	67.9%	4
63113	67.8%	4
63111	65.5%	4
63118	63.4%	4
63112	56.7%	3
63104	52.0%	3
63116	50.7%	3
63110	45.2%	2
63101**	43.8%	2*
63108	38.6%	2
63103	38.4%	2
63102**	35.3%	1*
63139	24.5%	1
63109	21.9%	1

STL City	55.0%
STL Black	68.9%
STL White	31.7%
MO	42.9%
MO Black	65.5%
MO White	38.8%
US	NAV
US Black	NAV
US White	NAV

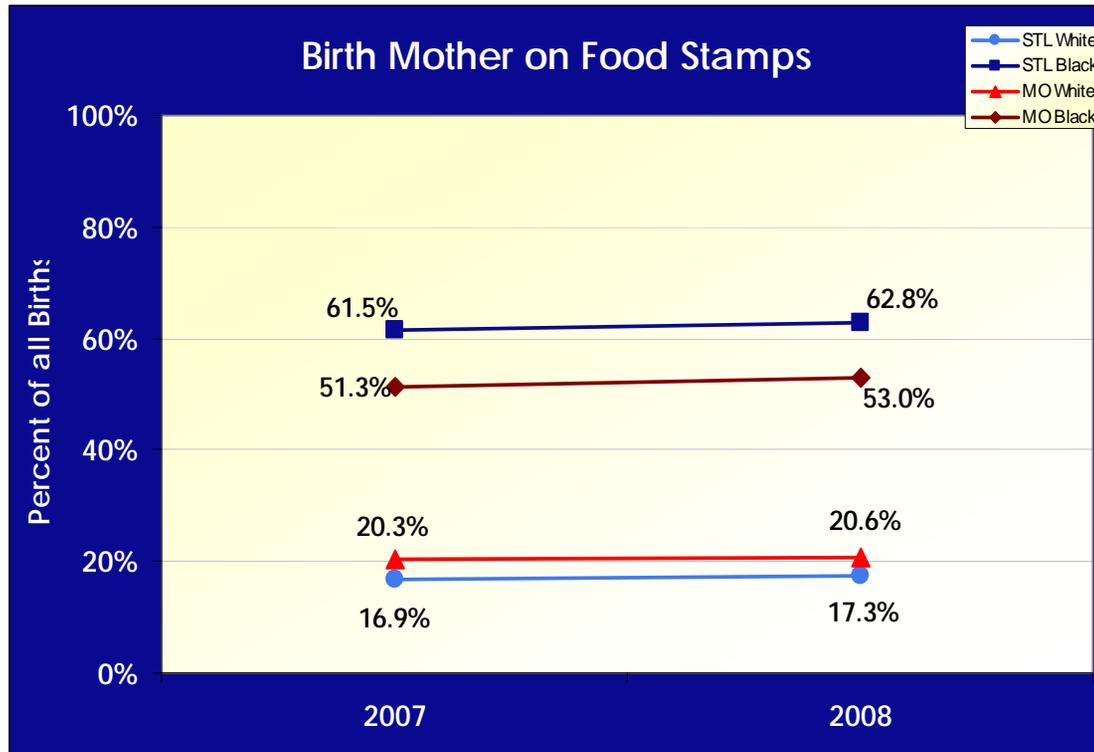
**small population-interpret with caution

* < 20 health events-interpret with caution



Birth - WIC

Birth – Food stamps (SNAP)



Data Source: Missouri Department of Health and Senior Services; Vital Records Data

Definition

Birth mother food stamp (SNAP) participation is the number of mothers participating in the food stamp program during pregnancy. The rate is presented as the number of “birth mother food stamp program participants” expressed as a percent of total live births. St. Louis City and Missouri data are averaged for the time period 2006 through 2007.

Public Health Implications

Food stamp participation, along with WIC and Medicaid participation can be used to determine possible effects of these interventions on the adequacy of preventive care and pregnancy outcomes. The positive aspect of high rates is enhanced nutrition for birth mothers. The negative side is the association with poverty.

St. Louis Rates and Comparative Info

The St. Louis City average rate for 2006 through 2007 is 1.8 times the average Missouri rate. In 2007, 2,364 births were to mothers participating in the Food Stamp Program in the City of St. Louis. The ZIP Codes with the highest rates are 63106 and 63107. The ZIP Codes with the lowest rates are 63109 and 63139.

Black/White Disparity

The St. Louis City black average rate for the years is 3.6 times the St. Louis average white rate. The St. Louis City black average rate is 1.2 times the Missouri average black rate.

Disparity Ratio: 3.6

Potential Public Health Interventions

Nutritional education programs.

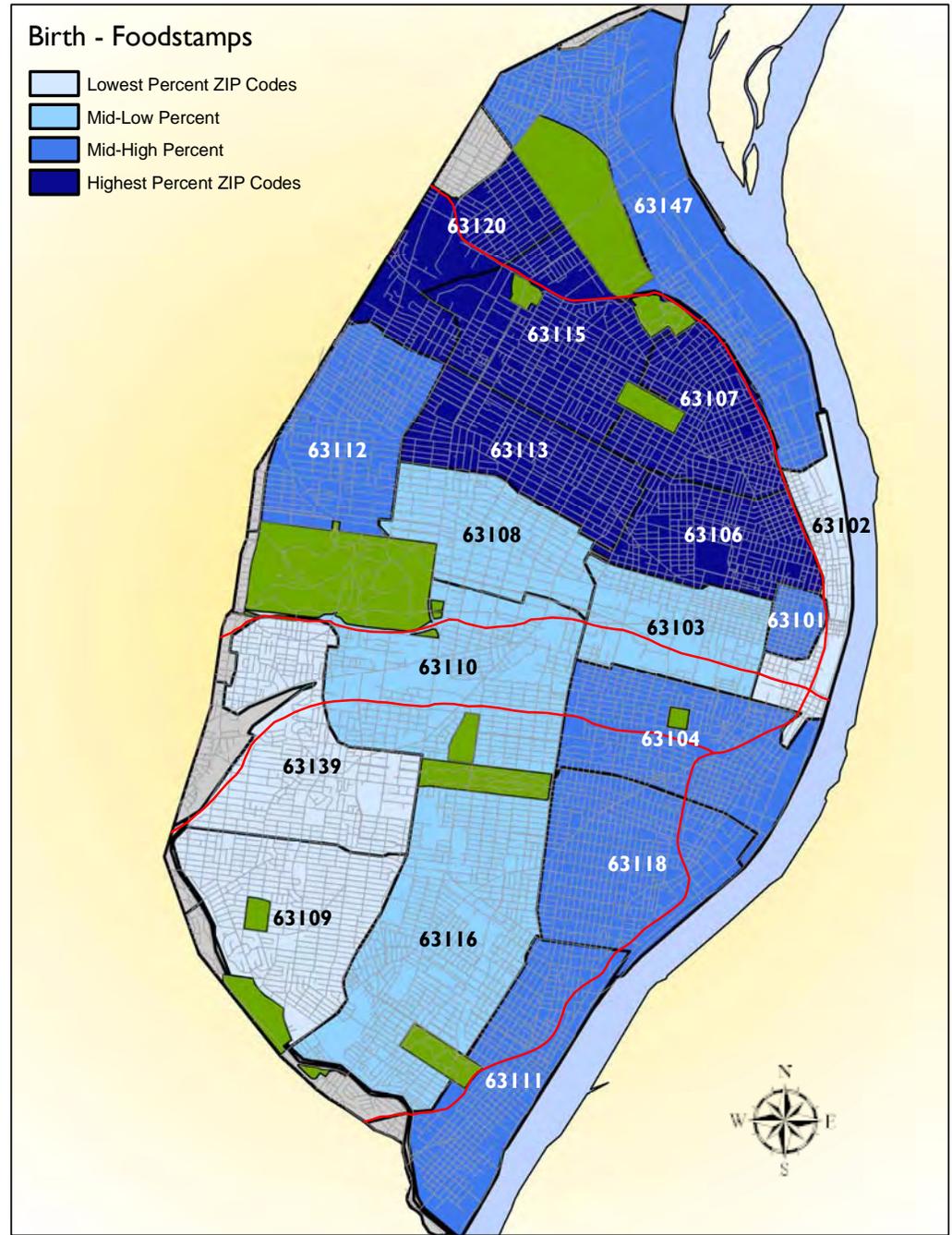
% of Live Births

ZIP Code	Birth Fd Stamp	Map Quartile
63106	69.7%	4
63107	64.8%	4
63120	62.7%	4
63115	62.6%	4
63113	60.0%	4
63147	53.6%	3
63101**	53.1%	3*
63112	51.6%	3
63118	51.4%	3
63111	48.4%	3
63104	46.1%	3
63110	37.8%	2
63116	33.5%	2
63108	31.5%	2
63103	30.1%	2
63102**	17.6%	1*
63139	14.9%	1
63109	14.5%	1

STL City	44.7%
STL Black	62.1%
STL White	17.1%
MO	25.2%
MO Black	52.1%
MO White	20.5%
US	NAV
US Black	NAV
US White	NAV

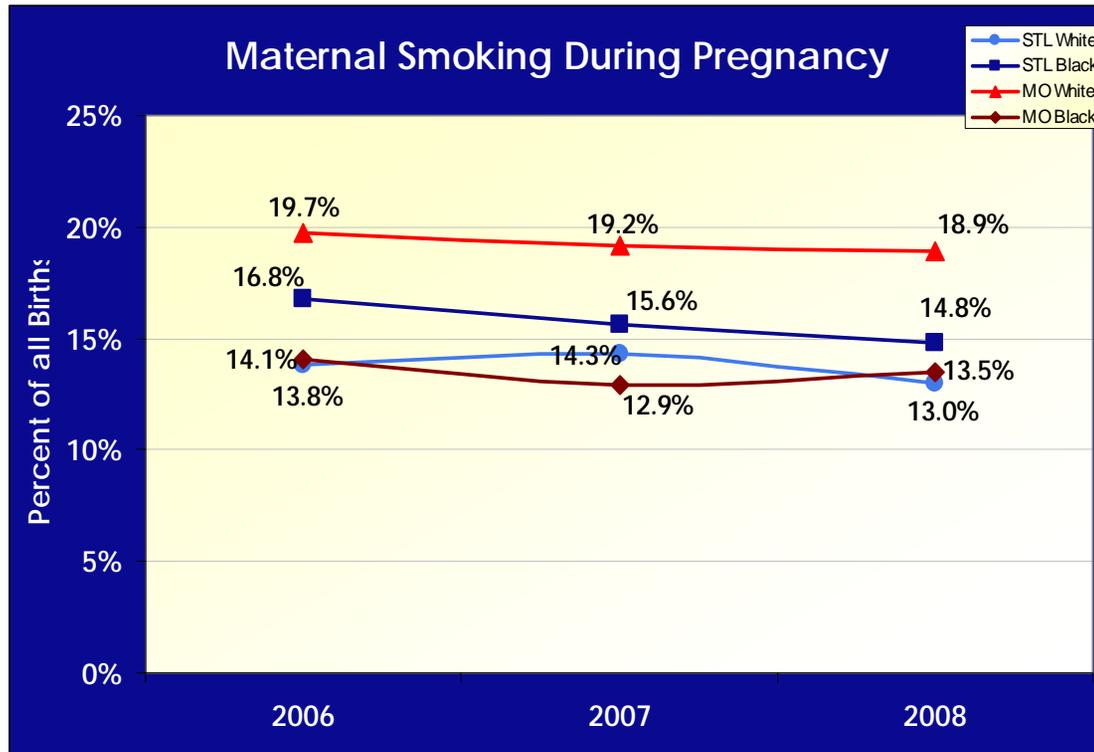
**small population-interpret with caution

* < 20 health events-interpret with caution



Birth - Food stamps (SNAP)

Birth – Smoking



Definition

This information is taken from the birth certificate and is considered “yes” if the mother smoked at any time during the pregnancy. This information is self reported and therefore may possibly be underreported. The rate for this analysis is “mothers who smoked during pregnancy” as a percent of total live births. Data are averaged for the time period 2006 through 2008.

Public Health Implications

Women who smoke during pregnancy are at risk for premature birth, pregnancy complications, low-birth weight infants, still birth and a higher rate of infant mortality. Smoking also puts the babies at risk for sudden infant death syndrome (SIDS), poor lung development, asthma and respiratory infections.

St. Louis Rates and Comparative Info

The St. Louis City average rate for the time period 2006 through 2008 is almost three times the average U.S. rate. However, it is actually slightly lower than the average Missouri rate. In 2008, 747 birth mothers reported that they smoked during the pregnancy in St. Louis City. The ZIP Code with the highest rate is 63111. The ZIP Code with the lowest rate is 63103.

Black/White Disparity

The St. Louis City average white rate is slightly lower than the St. Louis average black rate in the same time period.

Disparity Ratio: 1.1

Potential Public Health Interventions

Surveillance, epidemiological studies and health education programs.

“Smoking causes numerous health problems to not only the mom but the unborn baby and even other children around.”

-City of St. Louis Resident in a community health assessment focus group

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

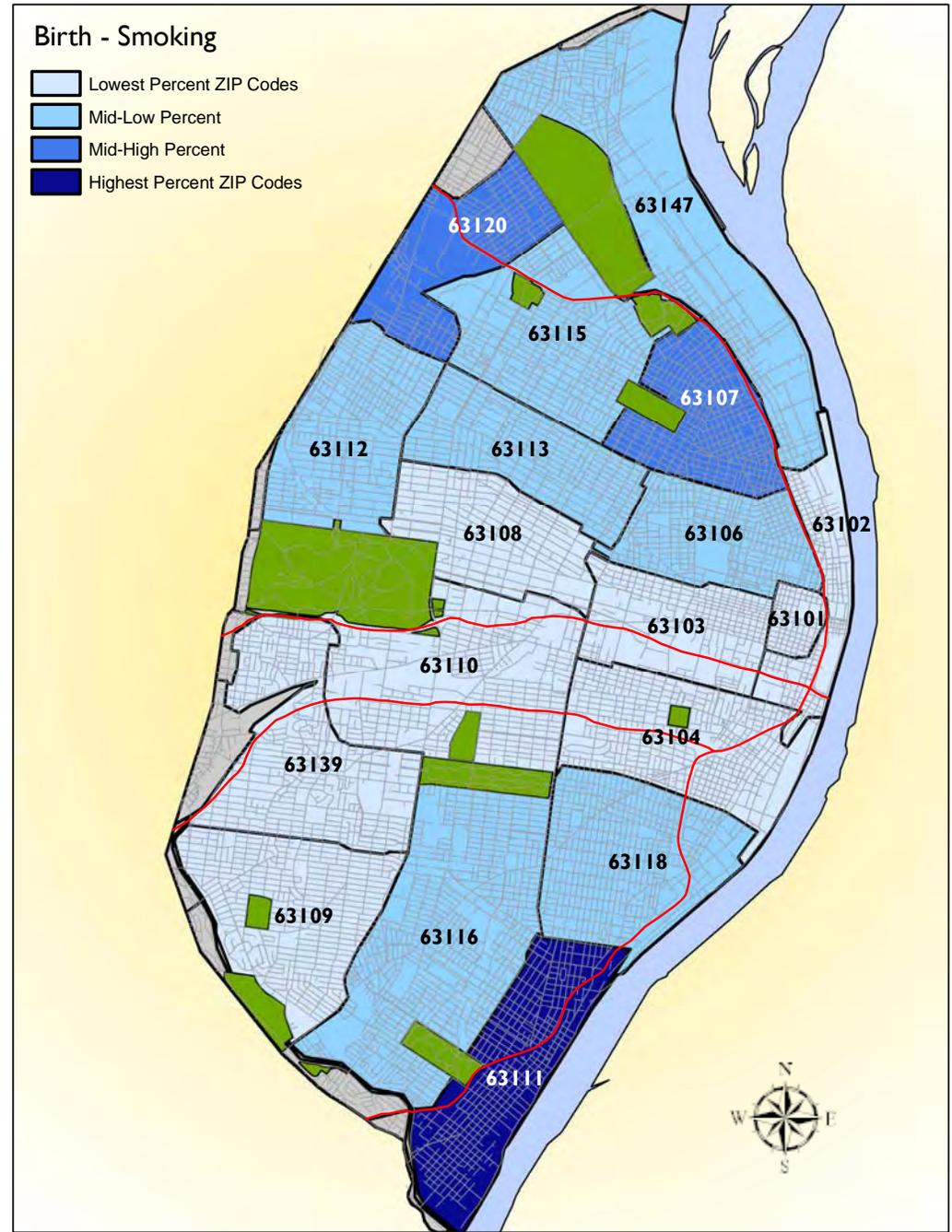
% of Live Births

ZIP Code	Birth Smoking	Map Quartile
63111	24.9%	4
63120	19.4%	3
63107	19.3%	3
63113	16.7%	2
63115	16.5%	2
63118	15.4%	2
63106	14.9%	2
63147	14.5%	2
63116	13.4%	2
63112	13.3%	2
63104	11.9%	1
63102**	11.5%	1*
63139	10.6%	1
63108	10.5%	1
63101**	9.4%	1*
63110	9.4%	1
63109	8.9%	1
63103	6.9%	1*

STL City	14.6%
STL Black	15.7%
STL White	13.7%
MO	17.9%
MO Black	13.5%
MO White	19.2%
US	5.0%
US Black	3.7%
US White	5.5%

**small population-interpret with caution

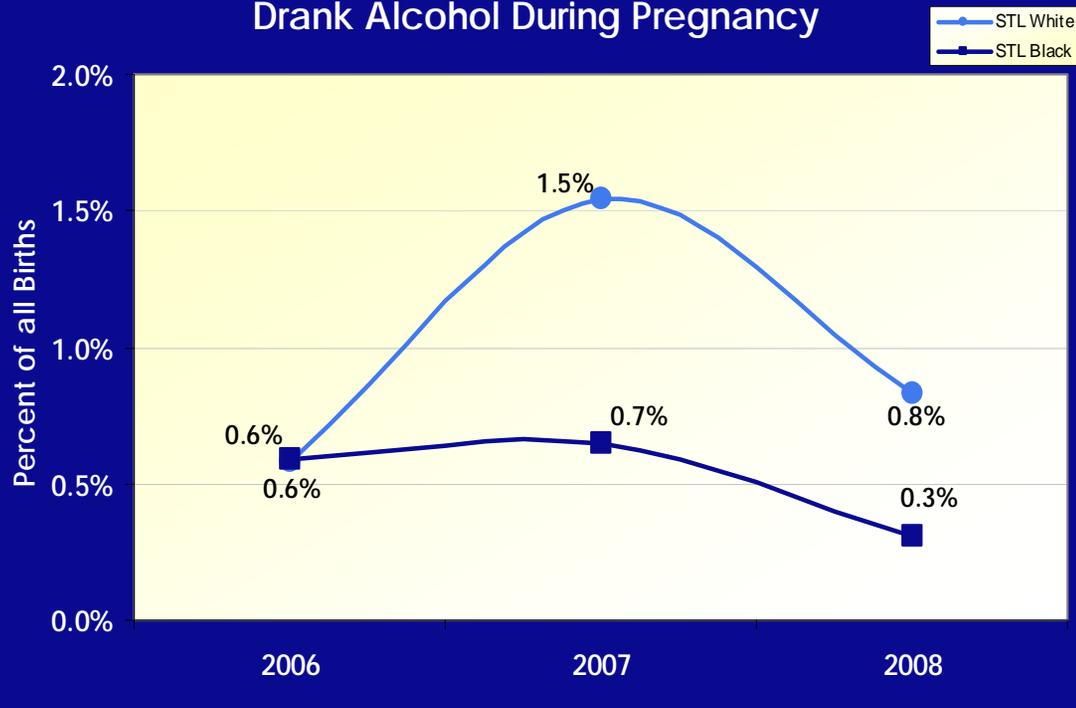
* < 20 health events-interpret with caution



Birth - Smoking

Birth – Alcohol

Drank Alcohol During Pregnancy



“Fetal Alcohol Syndrome (FAS) is a birth-related condition that is 100% preventable. All you have to do is not drink for nine months and not drink if you are thinking about getting pregnant.”

-Dr. Leigh Tenkku, Assistant Professor and Director of Research for St. Louis University School of Medicine, Department of Family and Community Medicine

Definition

This information is taken from the birth certificate and is considered “yes” if the mother consumed alcoholic beverages at any time during the pregnancy. This information is self reported and therefore may be underreported. The rate is the number of “mothers who drank alcohol during pregnancy” expressed as a percent of total live births. Data are averaged for the time period 2006 through 2008.

Public Health Implications

Birth defects can be an outcome of the use of alcohol during pregnancy. In utero alcohol exposure can cause lifelong consequences such as mental retardation, learning disabilities and serious behavioral problems.

St. Louis Rates and Comparative Info

National and state data are not available. In 2008, just 28 birth mothers reported they drank alcohol during their pregnancy in the St. Louis City. The ZIP Codes with the highest rates are 63101, 63104, 63110 and 63139. The ZIP Codes with the lowest rates are 63102, 63112, 63147 and 63118. The rate has improved significantly since 1993 when it was 3.9%.

Black/White Disparity

The St. Louis City white average rate is roughly twice the St. Louis average black rate in the same time period.

Disparity Ratio: 0.52

Potential Public Health Interventions

Educational programs and media advocacy regarding drinking alcohol during pregnancy.

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

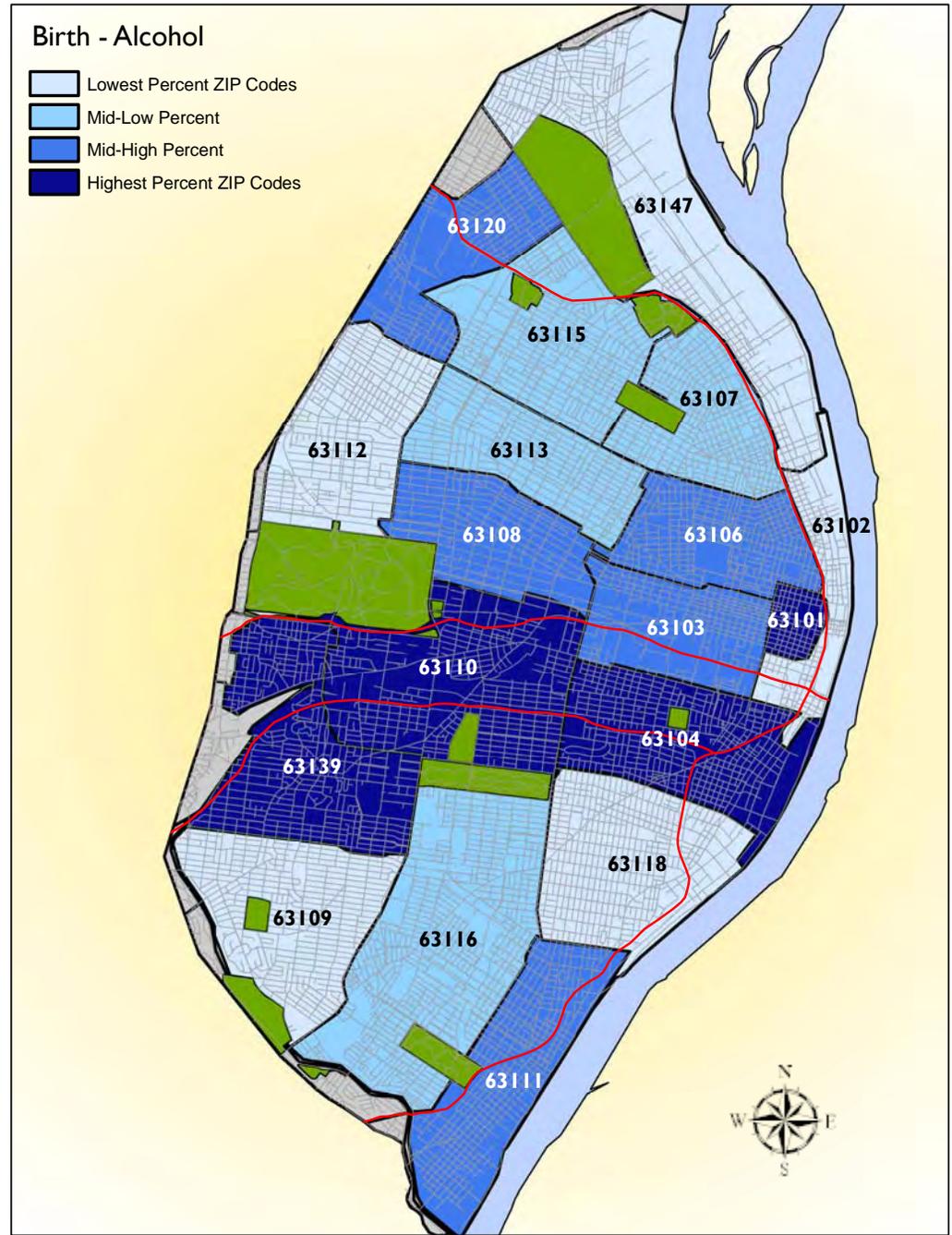
% of Live Births

ZIP Code	Birth Alcohol	Map Quartile
63101**	1.89%	4*
63104	1.31%	4*
63110	1.21%	4*
63139	1.16%	4*
63108	0.98%	3*
63111	0.83%	3*
63120	0.78%	3*
63103	0.77%	3*
63106	0.77%	3*
63116	0.72%	2*
63113	0.64%	2*
63115	0.52%	2*
63107	0.51%	2*
63109	0.40%	1*
63118	0.36%	1*
63147	0.35%	1*
63112	0.19%	1*
63102**	0.00%	1*

STL City	0.67%
STL Black	0.51%
STL White	0.98%
MO	NAV
MO Black	NAV
MO White	NAV
US	NAV
US Black	NAV
US White	NAV

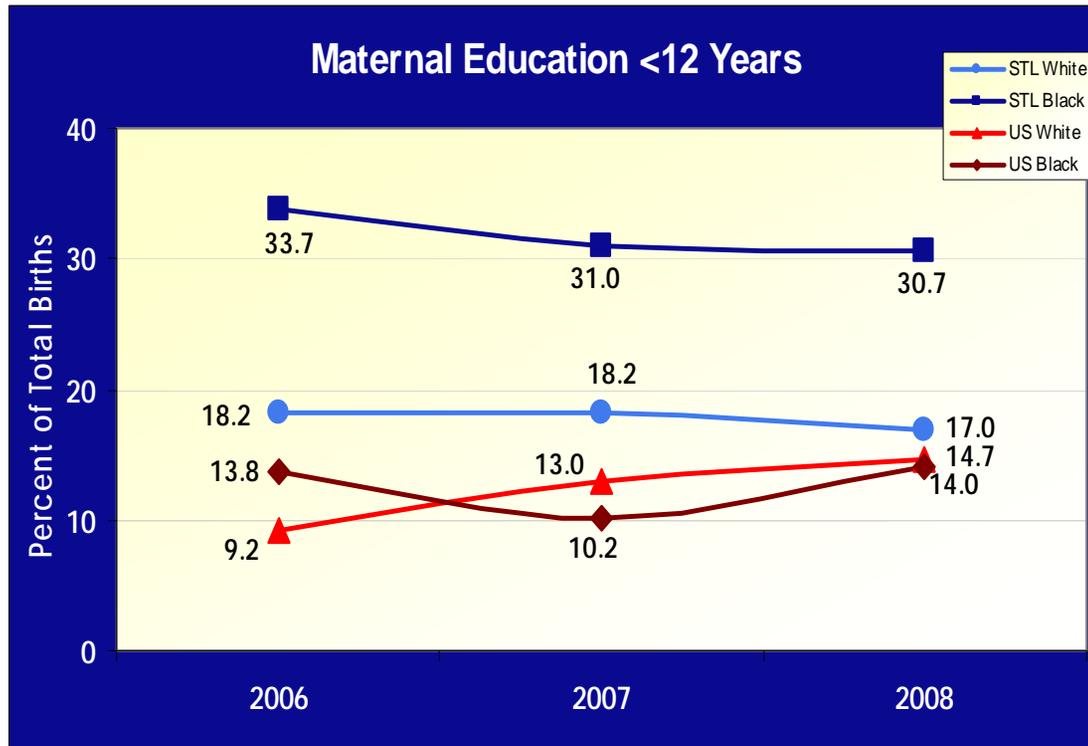
**small population-interpret with caution

* < 20 health events-interpret with caution



Birth - Alcohol

Birth - Education



Definition

This represents the percent of birth mothers that completed less than 12 years of education. The rate is the number of birth mothers that completed less than 12 years of education expressed as a percent of total live births. St. Louis City, Missouri and U.S. data are averaged for the time period 2006 through 2008.

Public Health Implications

Education is correlated with fertility and birth outcomes and is used as an indicator of socioeconomic status. It is used to measure the effect of education and socioeconomic status on health, childbearing and infant mortality. In general, infant mortality declines with increasing education of the mother. In a recent study, mothers who had not completed high school had infant mortality rates more than twice that of women with college education.

St. Louis Rates and Comparative Info

The St. Louis City average rate for 2006 through 2008 is 1.5 times the average Missouri rate and 2.2 times the averaged U.S. rate in the same time period. In 2008, 1,367 birth mothers had less than 12 years of education which represented about 26% of all births. The ZIP Codes with the highest rates are 63107, 63111, 63118 and 63120. The ZIP Codes with the lowest rates are 63109 and 63139.

Black/White Disparity

The St. Louis City average black rate for the years 2006 through 2008 is 1.8 times the St. Louis City average white rate. The St. Louis City average rate for blacks for the years 2006 through 2008 is 2.6 times the U.S. average black rate.

Disparity Ratio: 1.8

Potential Public Health Interventions

Health education programs. Collaborative efforts with appropriate agencies.

“More than any other group of high school dropouts, girls who leave due to pregnancy report that they would have stayed in school if they had receive greater support from the adults at school.”

-ACLU Blog: Teen Pregnancy, Discrimination, and the Dropout Rate, Oct, 2010

Data Source: Missouri Department of Health and Senior Services; Vital Records Data

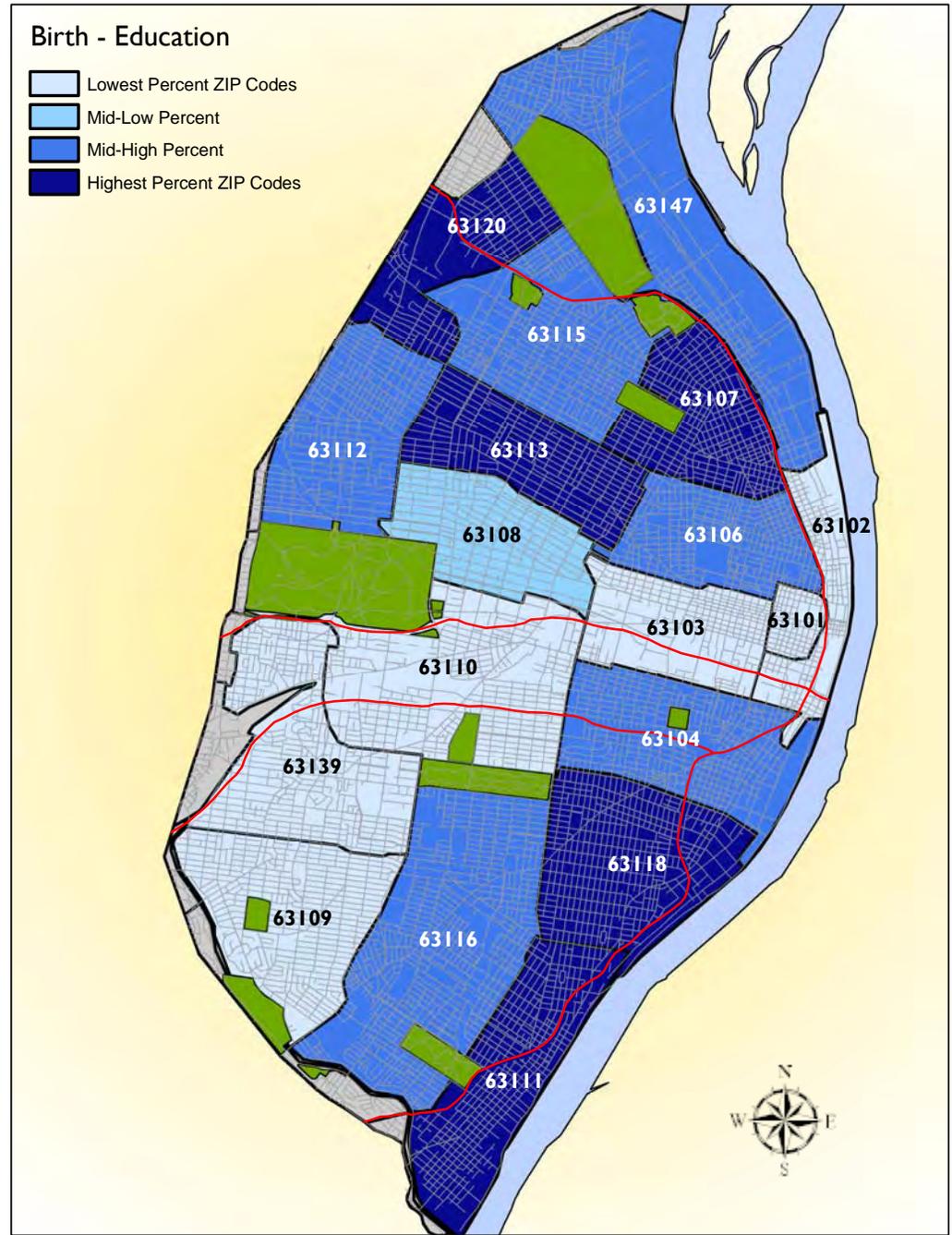
% of Live Births

ZIP Code	Birth Educat	Map Quartile
63107	39.0%	4
63111	37.1%	4
63118	35.5%	4
63120	35.4%	4
63113	31.7%	4
63106	31.4%	3
63115	30.4%	3
63116	27.2%	3
63112	27.0%	3
63147	26.8%	3
63104	24.6%	3
63108	19.8%	2
63110	16.7%	1
63103	13.4%	1*
63101**	13.2%	1*
63102**	11.5%	1*
63139	10.1%	1
63109	9.7%	1

STL City	26.7%
STL Black	31.8%
STL White	17.8%
MO	18.3%
MO Black	23.9%
MO White	17.2%
US	12.0%
US Black	12.3%
US White	12.6%

**small population-interpret with caution

* < 20 health events-interpret with caution



Birth - Education

