



public  
**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  
November 2004

THE CITY OF SAINT LOUIS DEPARTMENT OF HEALTH

# acknowledgments

## Prepared by:

The City of Saint Louis Department of Health  
Louise C. Quesada, MPH  
Health Planning Executive

## Acknowledgements:

Allan C. Halfar, MHA  
The City of Saint Louis Department of Health

Rebecca Diekemper, MPH  
The City of Saint Louis Department of Health

## Special Thanks To:

The Regional Health Commission

Core Public Health Functions Contract  
Missouri Department of Health and Senior Services



Francis G. Slay  
Mayor



Melba R. Moore, MS  
Commissioner of Health



# executive summary

Three years ago, in 2001, the City of Saint Louis Department of Health published its first ZIP Code by ZIP Code look at the health of our citizens. This well-received report, “Understanding Our Needs,” became a valuable resource for individuals and organizations working to improve conditions within Saint Louis City. We have heard from those who used this data in successful grant applications and from others who applied the information to research and planning that focused on specific health problems.

We are now pleased to provide a new edition of “Understanding Our Needs.” While the original report worked with information from 1993 to 1998, this one takes us from 1999 to 2001. The data can be compared to the last report except for the mortality data. The first report used ICD-9 codes for mortality data whereas the current report uses ICD-10 codes.

The good news is that the data in this new report reveals a number of positive changes. If these encouraging trends continue, we may see our City beginning to turn around some of the problems that have troubled it for many years.

The data in this updated report shows progress in such areas as teen pregnancy, alcohol use during pregnancy, HIV infection, HIV cases, syphilis, gonorrhea, hepatitis A and B, infectious diseases in general, and homicides. Even more significant, perhaps, is that it appears that there are improvements in the ZIP Codes that were most in need of improvement. The improvements may be modest but none the less encouraging.

As we noted in the previous report, Saint 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. The primarily white ZIP Codes of 63109, 63139 and 63116 continue to rank as the healthiest areas in Saint Louis City. And once again, the primarily black ZIP Codes of 63106, 63107 and 63113 emerge as the areas of most concern as in the last report.

As in the previous report, this version of “Understanding Our Needs” contains data on infant mortality rates, heart disease and cancer mortality, homicides and accidents, lead poisoning, and numerous other health indicators. We also look at socioeconomic concerns such as unemployment, poverty and income. Also included are access to health care indicators as well as other factors that can affect health including environmental issues.

New to this report is a disparity index comparing rates for blacks and whites in the various health indicators. Also new to this report is a look at “life expectancy in years” by ZIP Code.

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



# 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 of Saint Louis city limits. 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. All birth and mortality data are defined as ZIP Code Tabulation Areas or ZCTAs (see glossary).

## Fringe ZIP Codes

The City of Saint Louis includes small portions of 10 ZIP Codes that are shared with, but primarily located in Saint Louis County. The last report included information by these grouped partial Zip Codes. 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 and 63137; (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 in the sample (also known as a 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 an asterisk indicate that there is a small population and/or the number of health events is <20 and therefore should be viewed with caution.**

## Descriptive statistics

This report uses tables, graphs, maps and narrative to statistically describe the factors that affect the health of people in the City of Saint 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 for the 1999 through 2001 time period. The previous report covered the time span from 1993 through 1998. All demographic data is from the 2000 U.S. Census

## 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 most concern and those ZIP Codes that fall in the bottom quartile represent the most favorable areas. The map that is displayed 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" being the most favorable. The rating was reached by averaging the quartile assignments for each of the ZIP Code's variables that were ratable. The variables were not weighted.

## Age-adjusted death rates

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

## Comparative data for U.S. and Missouri

Whenever possible, this report includes comparative data for Saint Louis County, Missouri and the United States. Generally this data also includes separate statistics for the African-American and white population.

## Disparity Ratio

A "disparity ratio" has been added to this update. For each appropriate indicator, the rate for the Saint Louis City African-American population is divided by the rate for the Saint Louis City white population. When the resulting ratio is greater than 1.0, it means that the rate for the African-American population for that indicator is that much greater than the Saint Louis white population. When the ratio is lower than 1.0, it means that the rate for the Saint Louis City African-American population is that much lower than the white rate.

## Focus groups

In the late 1990s, two sets of focus groups and numerous individual interviews provided extensive information on what individuals see as the major issues impacting health in the City of Saint Louis. One set of focus groups concentrated on community leaders and representatives of community-based organizations with a total of more than 100 persons representing healthcare providers, church leaders, ethnic minorities, African Americans, those with special health needs, neighborhood stabilization officers, women, children and youth, the homeless, refugees, the unemployed, public safety, the United Way, school officials, the Department of Health, business leaders and the media. The second set included focus groups with community members as well as interviews with key individuals. Those interviewed included senior citizens, youth (teenagers), Health Department employees, refugees, single mothers, and a cross section of residents from neighborhoods in both north and south Saint Louis City.

These same comments and concerns are in the original Understanding Our Needs report published in 2001. New focus groups have not been conducted since then but the comments and concerns are still pertinent and therefore have been included again in this edition.

# table of contents

<b>I. Overall ZIP Code Rating</b>	2,3
<b>II. Demographic</b>	
i. Overall Population	6,7
ii. Population Change	8,9
iii. 0 to 4 Age Cohort	10,11
iv. 15 to 24 Age Cohort	12,13
v. 65+ Age Cohort	14,15
vi. 15 to 44 Female Age Cohort	16,17
vii. Crude Birth Rate	18,19
viii. Fertility Rate	20,21
ix. Crude Death Rate	22,23
x. Refugees Processed	24,25
xi. Racial Polarization	26,27
<b>III. Socio-Economic</b>	
i. Average Household Income	30,31
ii. Households Below Poverty	32,33
iii. Female Head of Household	34,35
iv. Education Level	36,37
v. Unemployment Rates	38,39
vi. Crimes Against Property	40,41
vii. Crimes Against Persons	42,43
viii. Vacant Lots	44,45
<b>IV. Quality/Access</b>	
i. Clinics	48,49
ii. Primary Care Physicians	50,51
iii. Hospital Admission Rates	52,53
iv. Avoidable Hospitalizations	54,55
v. Emergency Room Visits	56,57
vi. Medicaid Eligible	58,59
vii. Prenatal Care	60,61
viii. Low Birth Weight	62,63
ix. Teen Pregnancy 10 to 17	64,65
x. Teen Pregnancy 10 to 14	66,67
xi. Infant Mortality	68,69

xii. Out-of-Wedlock Births	70,71
xiii. Teen Abortions 10 to 17	72,73
xiv. Birth – Medicaid	74,75
xv. Birth – WIC	76,77
xvi. Birth – Food Stamps	78,79
xvii. Birth – Smoking	80,81
xviii. Birth – Alcohol	82,83
xix. Birth – Education	84,85

## V. Epidemics

i. HIV Infection	88,89
ii. AIDS Cases	90,91
iii. AIDS Mortality	92,93
iv. Syphilis	94,95
v. Gonorrhea	96,97
vi. Chlamydia	98,99
vii. TB Cases	100,101
viii. Hepatitis A	102,103
ix. Hepatitis B	104,105

## VI. Environmental

i. Lead Poisoning	108,109
ii. Asthma	110,111
iii. Foodborne Illness	112,113

## VII. Injury

i. Motor Vehicle Accident Mortality	116,117
ii. Non-motor Vehicle Accident	118,119
iii. Overall Accident Mortality	120,121

## VIII. Behavior

i. Homicide	124,125
ii. Suicide	126,127
iii. Leading Causes of Death	128,129
iv. Overall Mortality	130,131
v. Heart Disease Mortality	132,133
vi. Cancer Mortality	134,135
vii. CVA Mortality	136,137
viii. Influenza and Pneumonia	138,139
ix. COPD Mortality	140,141
x. Diabetes Mortality	142,143
xi. Life Expectancy in years	144,145

<b>IX. Glossary</b>	146, 147
---------------------	----------

<b>X. Appendix</b>	148
--------------------	-----

# overall zip code rating

## Definition

This needs assessment looks at 64 different indicators and factors that impact health 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 Saint Louis. There are 10 ZIP Codes that are shared with Saint Louis County. 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. Fifty-six of the 64 variables have been collapsed into a single summary statistic for each ZIP Code and assigned a rating of 1 through 4 with “1” being the most favorable rating and “4” assigned to areas of most concern. See Appendix A for ZIP Code listing.

## Public Health Implications

The overarching public health implication is that the health of any community of people depends on much more than the quality or availability of doctors and hospitals or the services public health provides. Jobs, housing, income levels, schools, the environment and crime are among the factors that directly and indirectly impact health. Successful strategies to improve public health in the City of Saint Louis must reach beyond the medical and public health establishments to embrace all factors that contribute to making a neighborhood a place where its residents can be healthy. Strategies must also target neighborhoods according to their needs rather than attempting to find one solution that will work citywide.

## Saint Louis Rates and Comparative Info

Where comparative data are available, the City of Saint Louis health indicator rates are usually worse than those for the State of Missouri or the United States. When the variables are summarized, the ZIP Codes of most concern are 63106, 63107 and 63113. The most favorable ZIP Codes are 63109, 63139 and 63116. These rankings have not changed since the last report with 1993-1998 data.

## Black/white Disparity

The summary statistics show that the African-American population in the City of Saint Louis has less favorable rates for almost all of the indicators than those of the white population. The white population showed less favorable rates in the following areas: percent of the population over age 65, drinking alcohol during pregnancy, smoking during pregnancy, flu and pneumonia mortality, chronic lower respiratory disease mortality and suicide. Where comparative data are available, the health indicator rates for the Saint Louis City African-American population are generally less favorable than the U.S. African-American population. The ZIP Codes with the less favorable summary statistics are predominately African American. The ZIP Codes with the most favorable summary statistics are predominately white.

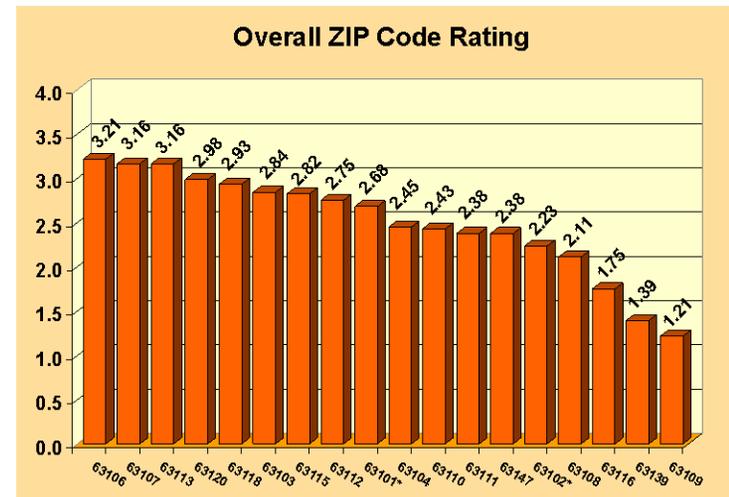
## Focus Group Comments/Concerns

“STD’s” “TB” “Teen pregnancy” “Infant mortality” “Refugees” “HIV/AIDS” “Violence” “Drugs” “Smoking” “Sanitation” “Taking the Health Department seriously and recognizing it as a serious entity.” “Fragmented efforts – no one monitoring outcomes.” “Racial tension underlies everything.” “Poverty is the greatest challenge; everything else flows from that.” “Lack of coordination across different jurisdictions, interest groups and constituents.” “Without data, there is no way to do an overhaul of the system – there aren’t enough resources available to do a flavor-of-the-month approach.” “Disintegration of infrastructure – roads, sewers, water, housing.” “People abandoning the city - loss of population and businesses.” “There is no organized effort.” “There isn’t a connectedness or collaboration.” “We are beginning to look at problems in a holistic way.” “The City needs to commit resources strategically.” “All problems are system problems.” “The Department of Health can’t be a panacea for everything.”

## Potential Public Health Interventions

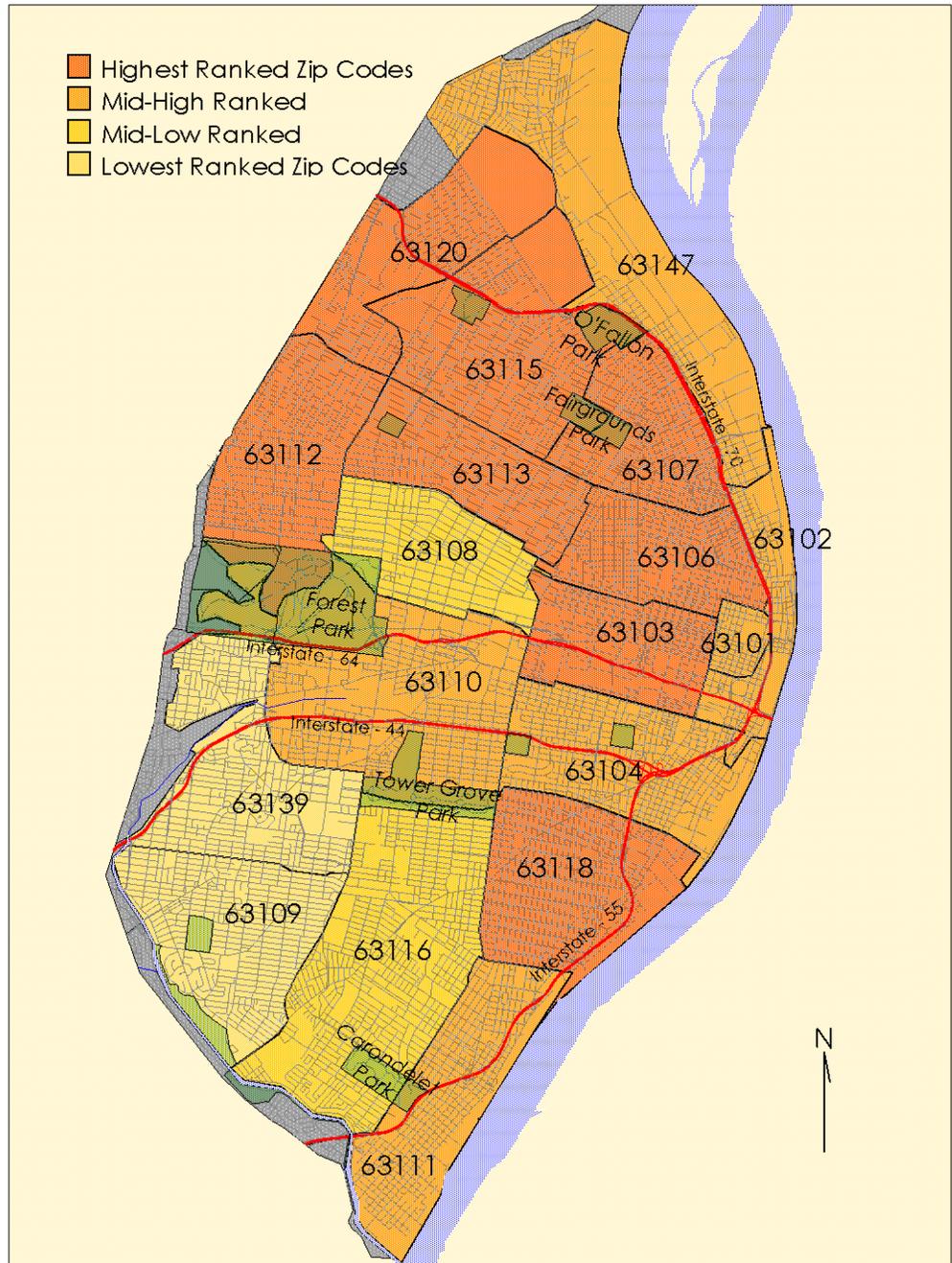
The possible interventions listed throughout this report are among some of the strategies and approaches that might address specific public health concerns in our community. They are not intended to be a complete list of all possible interventions that could be undertaken individually or collaboratively 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, continual community assessment, surveillance, education, planning, epidemiological studies, infrastructure development, policy development, program development and assurance that programs and services are provided.

Overall ZIP Code Rating



# Overall ZIP Code Rating

ZIP Code	Overall ZIP Code Rating	Map Quartile
63106	3.21	4
63107	3.16	4
63113	3.16	4
63120	2.98	4
63118	2.93	4
63103	2.84	4
63115	2.82	4
63112	2.75	4
63101*	2.68	3
63104	2.45	3
63110	2.43	3
63111	2.38	3
63147	2.38	3
63102*	2.23	3
63108	2.11	2
63116	1.75	2
63139	1.39	1
63109	1.21	1



overall zip code rating



# DEMOGRAPHIC



# overall population

## Definition

Population is based on the 2000 U.S. Census. The 2000 U.S. Census data shows a total population of 348,189 for the City of Saint Louis. The total population in Saint Louis has been declining in the past decade.

## 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, lead poisoning as well as environmental issues that result from abandoned buildings and vacant lots to name a few.

## Saint Louis Rates and Comparative Info

The 2000 U.S. Census shows that 75.1% of the population is “white alone”; 12.3%, “African American alone”; 3.5%, “Asian alone”; 0.9%, “American Indian and Alaska Native alone”; 0.1%, “Native Hawaiian and Other Pacific Islander alone”; 5.5%, “some other race alone” and 2.4%, “two or more races”. In Saint Louis City, ZIP Code 63116 contains the largest population with over 47,000 people.

Zip Code (ZCTA)	US Census 2000 Population	Map Quartile
63116	47,017	4
63118	30,222	3
63109	29,264	3
63115	25,238	3
63139	24,364	3
63112	22,678	2
63111	21,583	2
63108	20,890	2
63110	20,163	2
63104	19,088	2
63107	16,313	2
63113	16,101	2
63120	13,268	2
63147	13,190	2
63106	10,553	1
63103	4,603	1
63101*	1,327	1
63102*	1,311	1

## Black/white Disparity

The 2000 U.S. Census shows that in Saint Louis City, 43.8% of the population is “white alone”; 51.2%, “African American alone”; 2.0%, “Asian alone”; 0.3%, “American Indian and Alaska Native alone”; 0.03%, “Native Hawaiian and Other Pacific Islander alone”; 0.8%, “some other race alone” and 1.9%, “two or more races”.

## Focus Group Comments/Concerns

“Out migration of the City’s population.” “The City’s infrastructure is deteriorating as residents leave the City. Buildings are abandoned, garbage is thrown into vacant lots and the sewer system is antiquated.” “Urban flight – over the past ten years the City has lost half of its population.”

## Potential Public Health Interventions

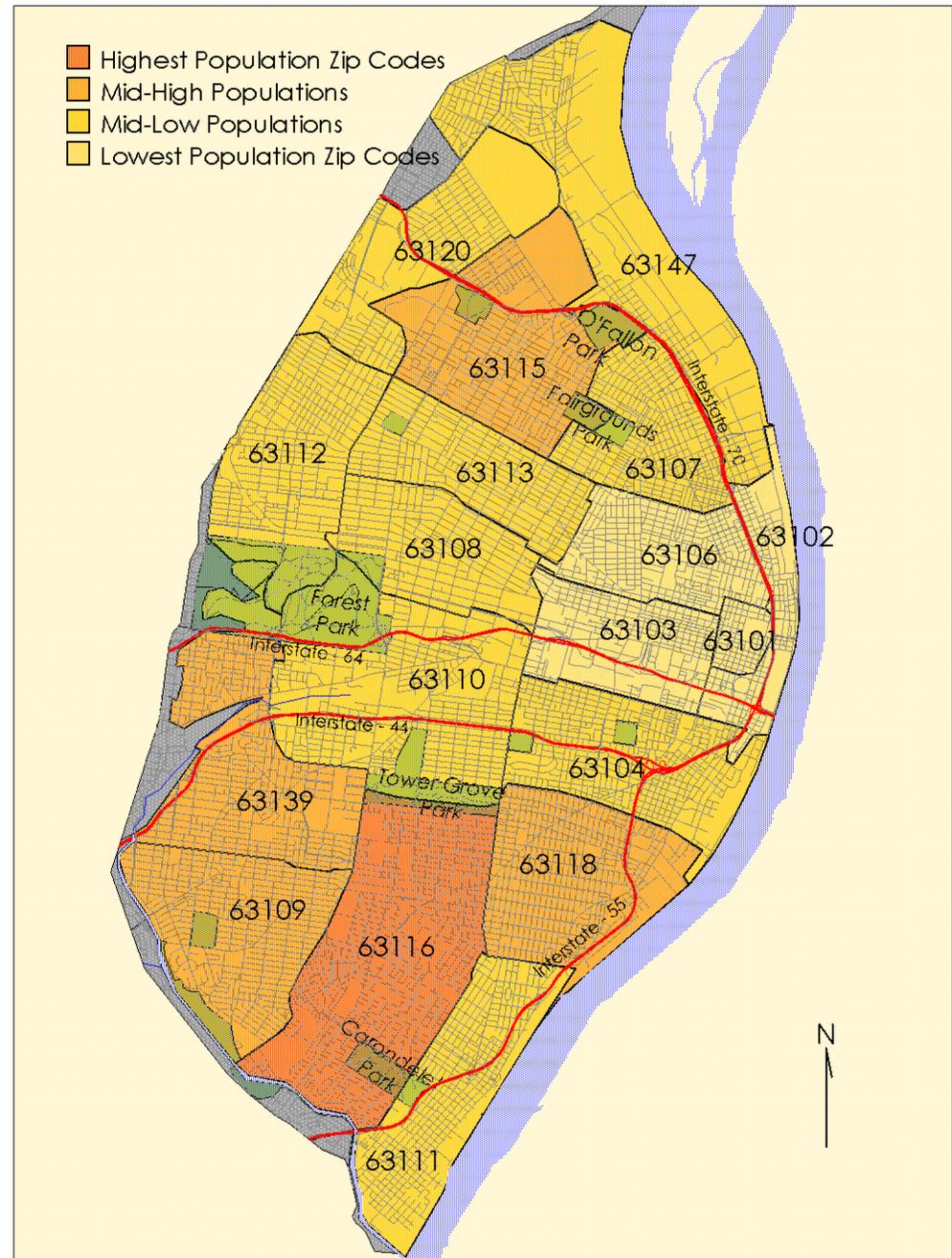
The Health Department must enhance the data and information infrastructure to identify the problems and target populations and then develop programs and/or partner with other agencies and organizations to address the issues.

## Data Source

2000 U.S. Census  
Claritas, Inc.

## 2000 Population

Stl City	348,189
Stl County	1,016,315
Stl City/Co	1,364,504
MO	5,595,211
US	281,421,906
Stl City Black	178,266
Stl City White	152,666
Stl Co Black	193,306
Stl Co White	780,830
Stl City/Co Black	371,572
Stl City/Co White	933,496
MO Black	629,391
MO White	4,748,083
US Black	34,658,190
US White	211,460,626



overall population

# population change

## Definition

The percent changes in population were calculated by subtracting 1990 Census population data from 2000 U.S. Census data. The City has experienced enormous decreases in population since the 1950's when the population exceeded 800,000. The 2000 population is 348,189 for the City of Saint Louis.

## 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.

## Saint Louis Rates and Comparative Info

Saint Louis City experienced a population decrease of 12.2 % between 1990 and 2000. Saint Louis County, in the same time period, saw a 2.3 % increase. Missouri and the United States also experienced increases, 9.3 % and 13.2 % respectively.

Zip Code (ZCTA)	'90 to '00 Percent Population Change	Map Quartile
63103	-31.4%	4
63113	-31.1%	4
63106	-30.4%	4
63107	-29.9%	4
63120	-25.5%	4
63112	-21.4%	3
63115	-17.9%	3
63110	-14.9%	2
63118	-9.1%	2
63104	-8.6%	2
63111	-5.1%	1
63116	-4.1%	1
63139	-3.7%	1
63109	-2.5%	1
63108	-0.5%	1
63147	0.0%	1
63101*	42.5%	1
63102*	79.3%	1

## Black/white Disparity

Predominately African-American ZIP Codes are experiencing, and are projected to experience, greater decreases in population than those Zips that are predominately white. The three ZIP Codes experiencing the greatest decline in population are 63103, 63113 and 63106 with greater than 30 percent drops.

## Focus Group Comments/Concerns

"Urban flight – over the last ten years the City has lost half its population." "People abandoning the City – loss of population and businesses." "A healthy community should be growing."

## Potential Public Health Interventions

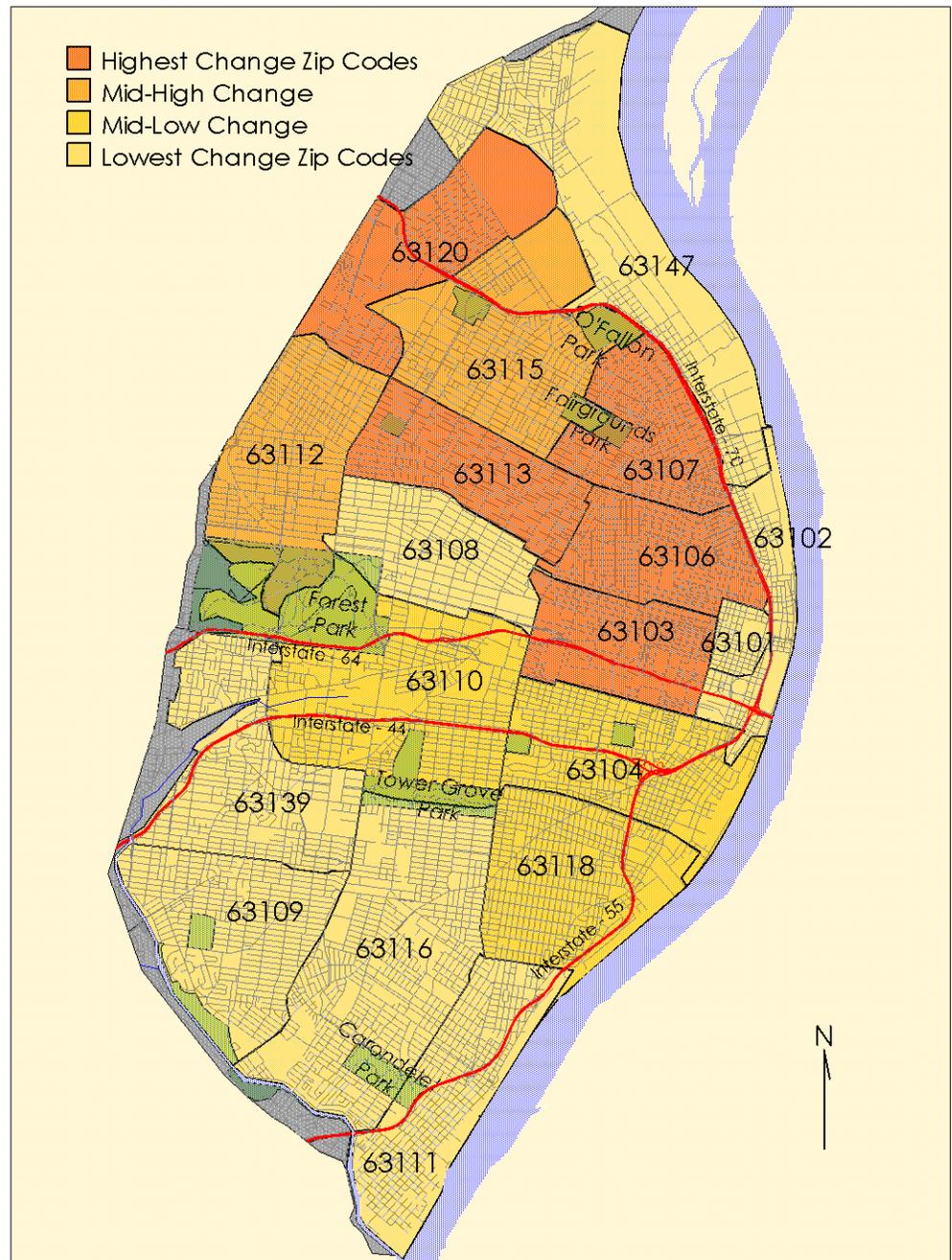
Within budget constraints, assess, determine and prioritize the most pressing public health needs in the City of Saint Louis.

## Data Source

2000 U.S. Census

## Population Changes 1990 - 2000

Stl City	-12.2
Stl County	2.3
Stl City/Co	-1.8
MO	9.3
US	13.2
Stl City Black	-5.4
<b>Stl City White</b>	<b>-24.5</b>
Stl Co Black	38.8
Stl Co White	-6.6
Stl City/Co Black	13.4
Stl City/Co White	-10.1
MO Black	14.8
MO White	5.8
US Black	15.6
US White	5.9



population change

# 0 to 4 age cohort

## Definition

This cohort consists of the 2000 U.S. Census population in Saint Louis City from birth through 4 years of age. It is expressed as a percent of the total population.

## 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.

## Saint Louis Rates and Comparative Info

The City of Saint Louis has about the same percentage of birth to 4 year olds as compared to Missouri or the U.S., 6.7% vs. 6.6% and 6.8% respectively. In 2000 there was about 23,500 children in this birth through 4 years of age cohort in the City of Saint Louis. The ZIP Codes with the highest percentages of 0-4 year olds are 63106 and 63118. The ZIP Code with the lowest percentage is 63102\*.

Zip Code (ZCTA)	US Census 2000 Population Under Age 5 Years	US Census 2000 Population Under Age 5 Years	Map Quartile
63106	1,129	10.7%	4
63118	2,641	8.7%	4
63104	1,565	8.2%	3
63107	1,272	7.8%	3
63120	1,001	7.5%	3
63111	1,612	7.5%	3
63110	1,485	7.4%	3
63116	3,418	7.3%	3
63115	1,671	6.6%	3
63112	1,447	6.4%	3
63113	995	6.2%	3
63109	1,750	6.0%	3
63147	753	5.7%	2
63139	1,331	5.5%	2
63101*	69	5.2%	2
63108	614	2.9%	1
63103	129	2.8%	1
63102*	19	1.4%	1

## Black/white Disparity

The African-American population in the City of Saint Louis is younger than the white population. Birth to 4 year olds comprise 8.1% of the African-American population while only 4.8% of the white population is under 5 years of age.

**Disparity Ratio: 1.7**

## Focus Group Comments/Concerns

“We have to address kids in a holistic way - addressing the needs of the whole family.”  
 “Have to look at how kids access health insurance.” “Abused and neglected children.”  
 “Low rates of immunization.” “Children living in poverty.”

## Potential Public Health Interventions

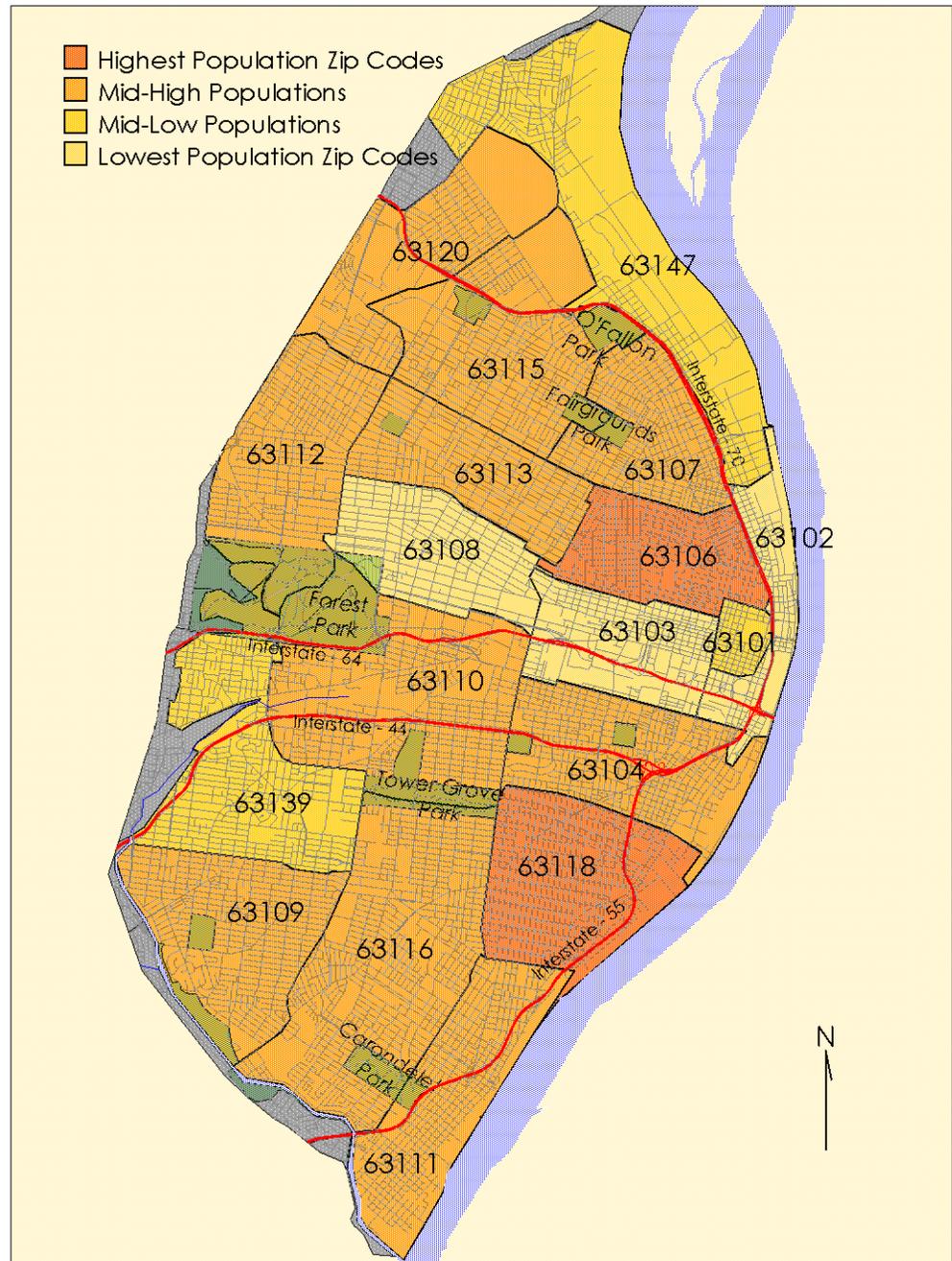
Lead poisoning prevention programs including lead remediation, immunizations, access to MC+ (Medicaid) assistance, day care licensure and injury prevention programs

## Data Source

2000 U.S. Census

## 0-4 Age Cohort 2000

Stl City	6.7
Stl County	6.3
Stl City/Co	6.4
MO	6.6
US	6.8
<b>Stl City Black</b>	<b>8.1</b>
<b>Stl City White</b>	<b>4.8</b>
Stl Co Black	8.1
Stl Co White	5.6
Stl City/Co Black	8.1
Stl City/Co White	5.5
MO Black	8.1
MO White	6.2
US Black	8.0
US White	6.1



0 to 4 age cohort

# 15 to 24 age cohort

## Definition

This category consists of the population 15 to 24 years of age in the City of Saint Louis. The data are from the 2000 U.S. Census. 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.

## Saint Louis Rates and Comparative Info

The City of Saint Louis has a slightly higher percentage of this age group as compared to Missouri and the U.S., 14.7% vs. 14.0% and 13.9%, respectively. In 2000 there were an estimated 51,300 people in this age cohort in the City of Saint Louis. The ZIP Codes with the highest percentages of 15-24 year olds are 63103 and 63108. The ZIP Codes with the lowest percentages are 63101\*, 63109 and 63102\*.

ZIP Code	US Census 2000 Population Age 15-24	Percent US Census 2000 Population Age 15-24	Map Quartile
63103	1,229	26.7%	4
63108	4,755	22.8%	4
63120	2,341	17.6%	3
63110	3,406	16.9%	3
63147	2,215	16.8%	3
63112	3,730	16.4%	3
63118	4,754	15.7%	2
63106	1,585	15.0%	2
63107	2,437	14.9%	2
63111	3,005	13.9%	2
63104	2,582	13.5%	2
63113	2,169	13.5%	2
63116	6,122	13.0%	2
63115	3,284	13.0%	2
63139	2,947	12.1%	1
63102*	137	10.5%	1
63109	3,026	10.3%	1
63101*	126	9.5%	1

## Black/white Disparity

The African-American population in Saint Louis has a slightly higher percentage of this cohort as compared to the white population, 15.1% vs. 13.9%.

**Disparity Ratio: 1.09**

## Focus Group Comments/Concerns

“Violence, abuse of drugs, teen pregnancy and illiteracy are interwoven in the city and compound the difficulty of addressing issues.”

## Potential Public Health Interventions

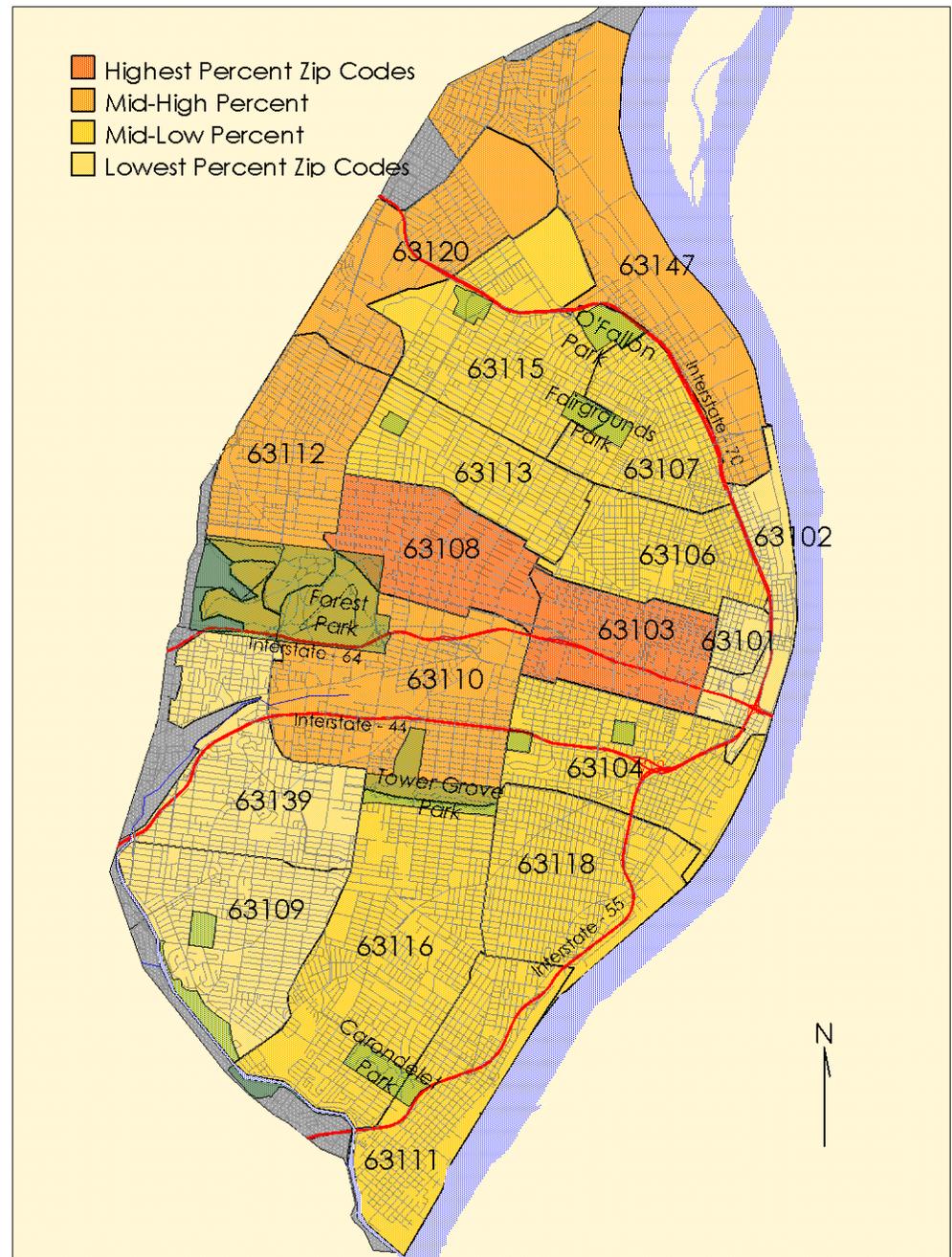
Programs focusing on STD's, HIV/AIDS, drug and alcohol abuse, tobacco use, teen pregnancy and education regarding other risky behaviors.

## Data Source

2000 U.S. Census

## 15-24 Age Cohort 2000

Stl City	14.7
Stl County	12.7
Stl City/Co	13.2
MO	14.0
US	13.9
<b>Stl City Black</b>	<b>15.1</b>
<b>Stl City White</b>	<b>13.8</b>
Stl Co Black	15.2
Stl Co White	11.8
Stl City/Co Black	15.2
Stl City/Co White	12.2
MO Black	16.0
MO White	13.5
US Black	16.0
US White	12.9



15 to 24 age cohort

# 65+ age cohort

## Definition

This cohort consists of the Saint Louis population that is 65 years of age and older based on the 2000 U.S. Census. 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 West Nile Virus vulnerability are some issues that affect the older population.

## Saint Louis Rates and Comparative Info

The City of Saint Louis has a slightly higher percentage of elderly population as compared to the U.S., 13.7% vs.12.4%. Missouri has about the same percentage at 13.5%. According to the 2000 U.S. Census, there were over 47,800 people in the 65+ age cohort in the City of Saint Louis. The ZIP Codes with the highest percentages of elderly are 63101\* and 63103. The ZIP Codes with the lowest percentages are 63104, 63118, 63102\* and 63110.

Zip Code (ZCTA)	US Census 2000	Percent of US Census 2000	Map Quartile
	Population Over Age 65 Years	Population Over Age 65 Years	
63101*	399	30.1%	4
63103	985	21.4%	4
63115	4,514	17.9%	3
63113	2,868	17.8%	3
63109	5,187	17.7%	3
63139	3,915	16.1%	3
63108	3,179	15.2%	3
63111	3,133	14.5%	2
63112	3,224	14.2%	2
63106	1,372	13.0%	2
63116	6,014	12.8%	2
63107	2,053	12.6%	2
63147	1,580	12.0%	2
63120	1,569	11.8%	2
63110	1,931	9.6%	1
63102*	123	9.4%	1
63118	2,501	8.3%	1
63104	1,569	8.2%	1

## Black/white Disparity

In the City of Saint Louis the white population has a higher percentage of elderly as compared to the younger African-American population. The white elderly population comprises 17.1% of the white population whereas the African-American elderly population constitutes only 11.8% of the total African-American population.

**Disparity Ratio: .7**

## Focus Group Comments/Concerns

“Are particularly worried about the elderly who are often in their homes because they are frail and fearful of their safety if they leave home.”  
“Lifestyle issues with the elderly.”

## 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.

Prevention programs

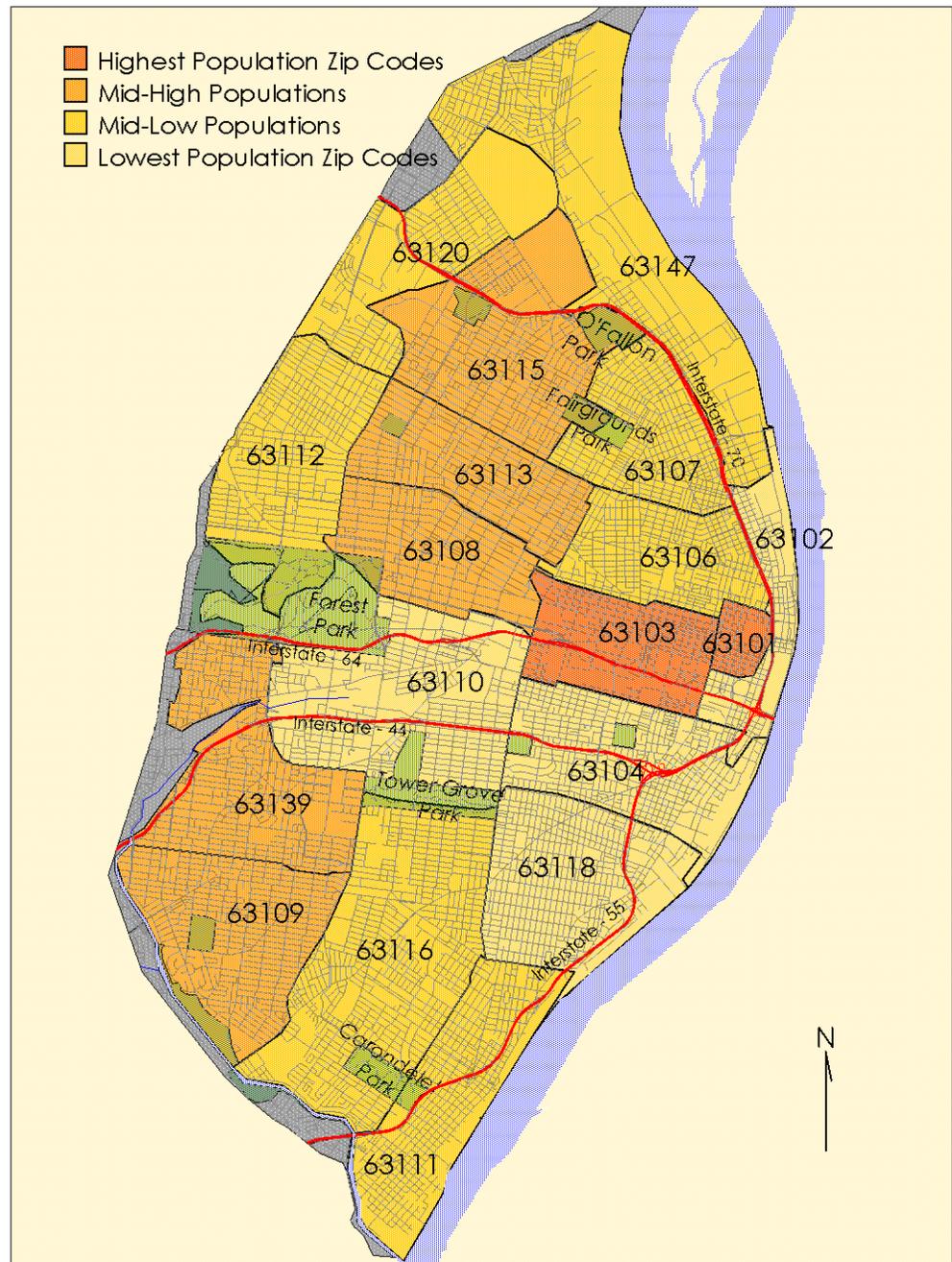
Adult immunization programs

## Data Source

2000 U.S. Census

## 65+ Age Cohort 2000

Stl City	13.7
Stl County	14.1
Stl City/Co	14.0
MO	13.5
US	12.4
Stl City Black	11.8
Stl City White	17.1
Stl Co Black	6.7
Stl Co White	16.5
Stl City/Co Black	9.1
Stl City/Co White	16.6
MO Black	8.6
MO White	14.6
US Black	8.2
US White	14.4



65+ age cohort

# 15 to 44 female age 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 based on the 2000 U.S. Census.

## 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 to name a few.

## Saint Louis Rates and Comparative Info

The City of Saint Louis has a slightly higher percentage of females 15-44 years of age when compared to Missouri and the U.S., 23.4% vs. 21.6% and 21.9% respectively. According to the 2000 U.S. Census there were close to 81,400 females in this age cohort in the City of Saint Louis. The ZIP Codes with the highest percentage of females 15 to 44 years of age are 63108 and 63110. The ZIP Code with the lowest percentage is 63102\*.

Zip Code (ZCTA)	Percent of US Census 2000 Population Females		Map Quartile
	Age 15-44 Years	Age 15-44 Years	
63108	5,626	26.9%	4
63110	5,142	25.5%	4
63103	1,151	25.0%	3
63118	7,470	24.7%	3
63104	4,703	24.6%	3
63112	5,452	24.0%	3
63139	5,812	23.9%	3
63106	2,516	23.8%	3
63109	6,939	23.7%	3
63116	11,042	23.5%	3
63107	3,648	22.4%	2
63120	2,965	22.3%	2
63111	4,732	21.9%	2
63147	2,798	21.2%	1
63115	5,251	20.8%	1
63113	3,230	20.1%	1
63101*	252	19.0%	1
63102*	211	16.1%	1

## Black/white Disparity

Although the overall percentage for this cohort in the City of Saint Louis is similar to Missouri and the U.S., the African-American population in the City of Saint Louis has a slightly higher percentage than the white population, 23.6% vs. 22.9%.

**Disparity Ratio: 1.03**

## Focus Group Comments/Concerns

"Prenatal care and education..." "Maternal and child health."

## Potential Public Health Interventions

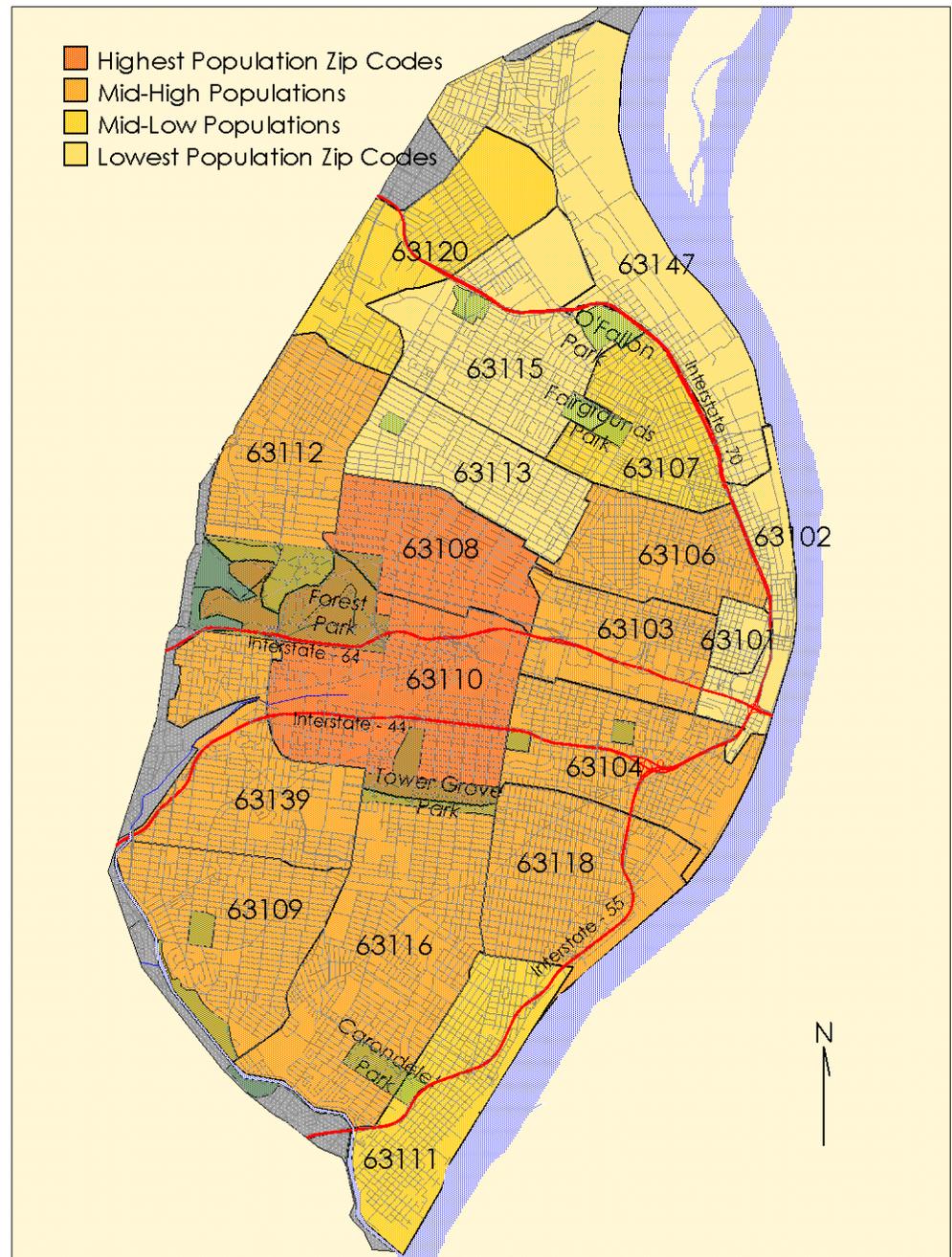
Educational programs relating to maternal, child and family health; breast and cervical cancer screening; access to care assistance; HIV/AIDS, smoking cessation and sexually transmitted disease programs

## Data Source

2000 U.S. Census

Female 15-44  
Age Cohort - 2000

Stl City	23.4
Stl County	21.5
Stl City/Co	22.0
MO	21.6
US	21.9
Stl City Black	23.6
Stl City White	22.9
Stl Co Black	25.9
Stl Co White	20.2
Stl City/Co Black	24.8
Stl City/Co White	20.6
MO Black	24.5
MO White	21.1
US Black	24.4
US White	21.0



# crude birth rate

## Definition

Crude birth rate is the number of live births divided by the estimated 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 estimated population.

## Public Health Implications

Crude birth rates give an indication of where the population may be growing naturally and what areas of the city may have more infants.

## Saint Louis Rates and Comparative Info

The 1999 through 2001 average crude birth rate in the City of Saint Louis is slightly higher than the averaged rates in Missouri and the U.S. for the same time period, 15.6 vs.13.5 and 14.6 respectively. In 2001 there were 5,267 births in the City of Saint Louis. The ZIP Codes with the highest averaged crude birth rate are 63101\* and 63106. The ZIP Codes with the lowest averaged rates are 63102\*, 63103 and 63108.

Zip Code (ZCTA)	Births per 1000 Population (Crude Birth Rate)	Map Quartile
63101*	24.3	4*
63106	22.7	4
63107	19.1	4
63120	19.0	4
63111	19.0	4
63118	18.7	4
63104	16.6	3
63110	16.4	3
63113	15.7	3
63115	15.5	3
63112	15.3	3
63116	14.8	3
63147	14.3	2
63109	13.5	2
63139	12.9	2
63108	8.4	1
63103	6.1	1*
63102*	3.0	1*

## Black/white Disparity

The 1999 through 2001 average crude birth rate is higher in the African-American community in Saint Louis City than in the white Community, 18.7 vs. 12.6 or 50% higher .

## Focus Group Comments/Concerns

“Urban flight...over the past ten years the city has lost half of its population.” “People abandoning the city...loss of population and businesses.”

## Potential Public Health Interventions

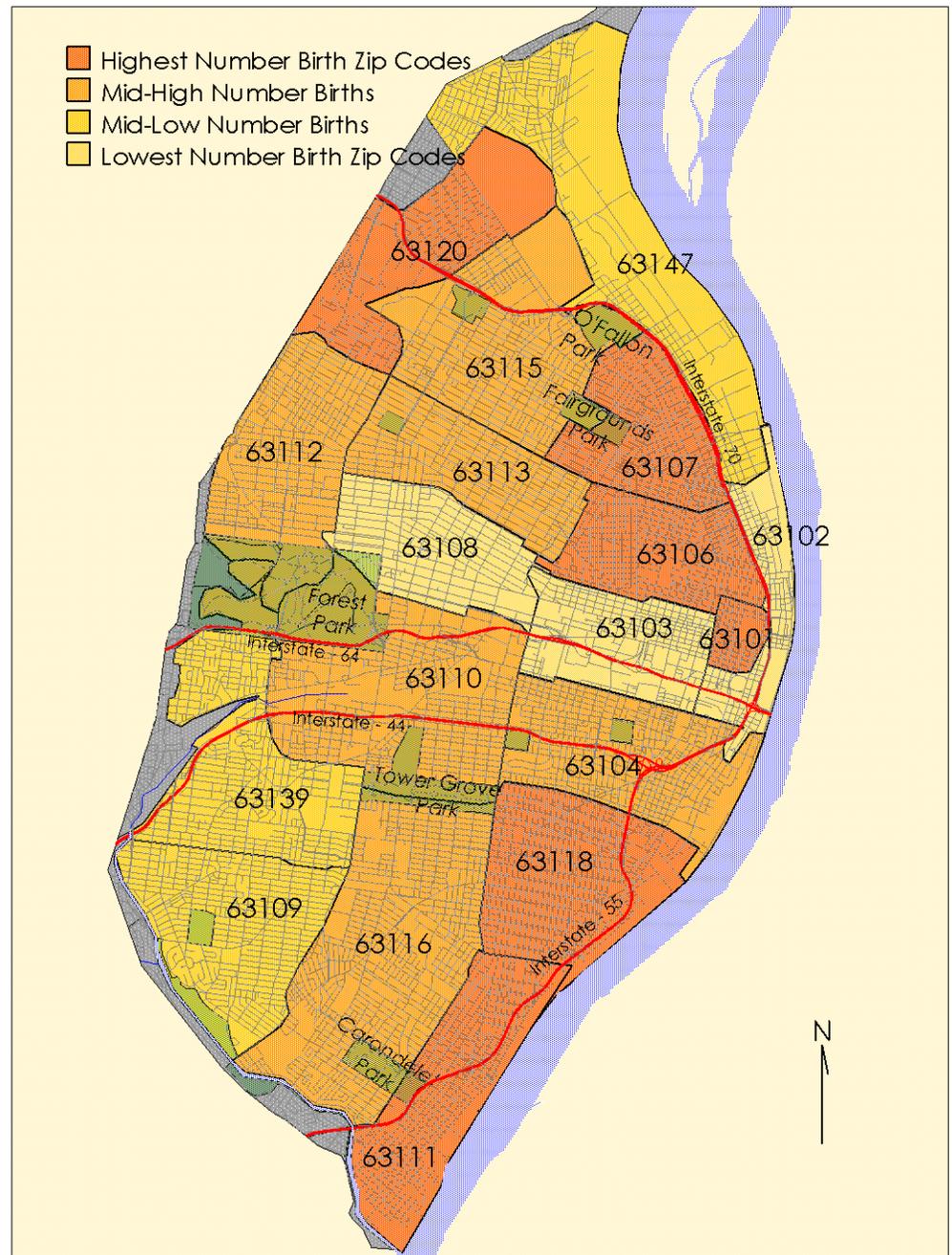
This rate is an indication of the natural increase in a population. Specific public health interventions are not indicated.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Crude Birth Rates  
live births/1000 population 99-01 average

Stl City	15.6
Stl County	12.3
Stl City/Co	13.1
MO	13.5
US	14.6
<b>Stl City Black</b>	<b>18.7</b>
<b>Stl City White</b>	<b>12.6</b>
Stl Co Black	17.2
Stl Co White	11.1
Stl City/Co Black	17.9
Stl City/Co White	11.3
MO Black	18.1
MO White	13.1
US Black	17.3
US White	14.0



crude birth rate

# fertility rate

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

## Saint Louis Rates and Comparative Info

The 1999 through 2001 average fertility rate in the City of Saint Louis is slightly higher than the averaged rates in Missouri and the U.S. for the same time period, 65.3 vs. 62.6 and 56.3 respectively. In 2001 there were 5,267 births in the City of Saint Louis. The ZIP Codes with the highest average fertility rate for the time period 1999 through 2001 are 63106, 63111 and 63107. The ZIP Codes with the lowest rates are 63102\*, 63103 and 63108.

Zip Code (ZCTA)	Births per 1,000 Women 15 to 44 (Fertility Rate)	Map Quartile
63106	96.2	4
63111	86.3	4
63107	85.3	4
63113	77.0	3
63101*	76.7	3*
63120	76.6	3
63118	76.3	3
63115	74.2	3
63147	67.3	3
63110	65.8	3
63104	64.6	3
63116	63.6	3
63112	62.4	3
63109	56.5	2
63139	53.6	2
63108	31.2	1
63103	25.8	1*
63102*	17.4	1*

## Black/white Disparity

In Saint Louis City the 1999 through 2001 average fertility rate is higher in the African-American community than in the white population, 79.4 vs. 52.7 or 50 percent higher.

## Focus Group Comments/Concerns

“Urban flight...over the past ten years the city has lost half of its population.” “People abandoning the city...loss of population and businesses.”

## Potential Public Health Interventions

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

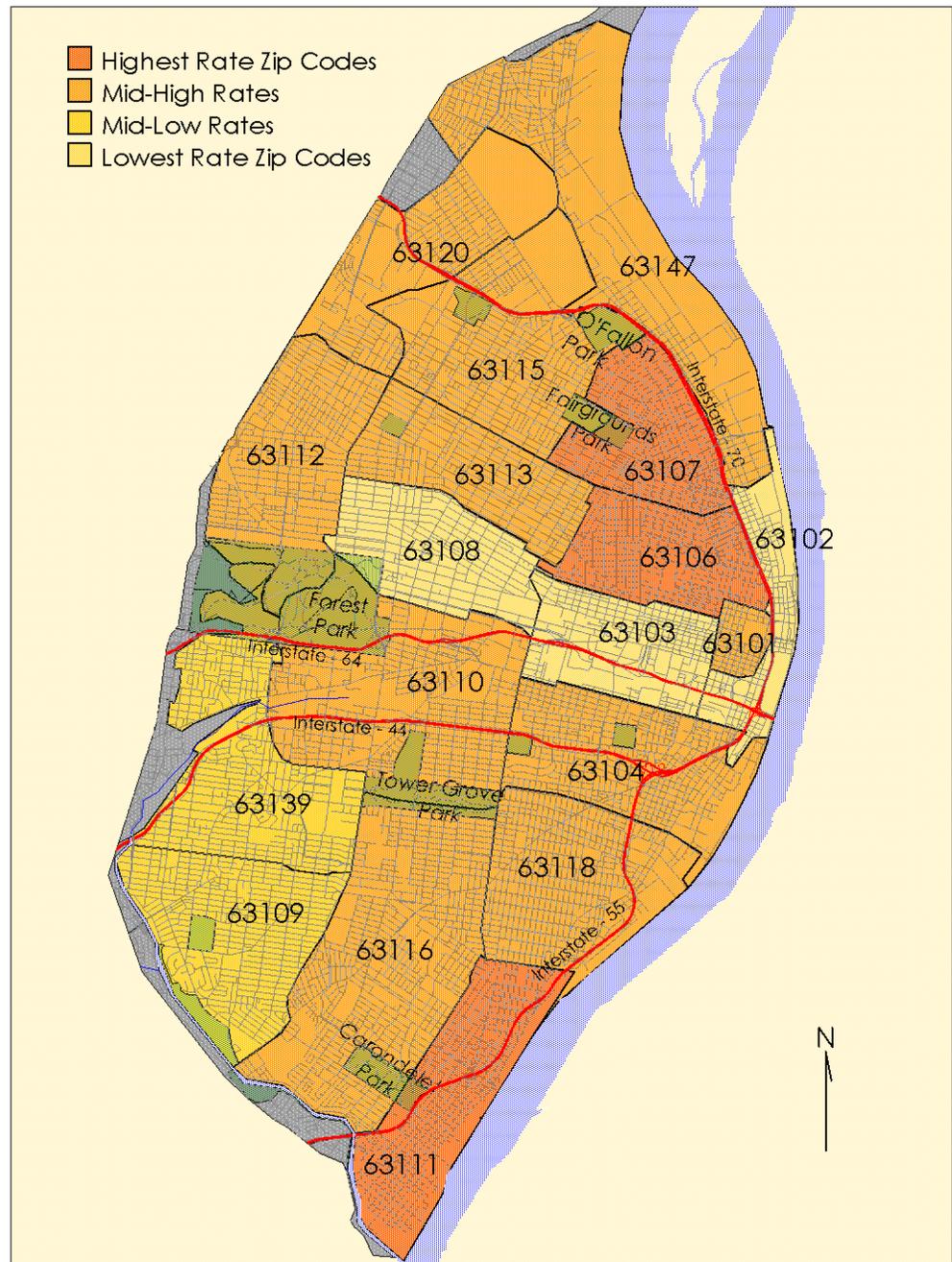
## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Fertility Rates

live births/1000 females 15-44 99-01 average

Stl City	65.3
Stl County	57.3
Stl City/Co	59.5
MO	62.6
US	56.3
<b>Stl City Black</b>	<b>79.4</b>
<b>Stl City White</b>	<b>52.7</b>
Stl Co Black	66.3
Stl Co White	55.0
Stl City/Co Black	72.3
Stl City/Co White	54.6
MO Black	73.9
MO White	62.2
US Black	69.0
US White	61.5



f e r t i l i t y   r a t e

# crude death rate

## Definition

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

## Saint Louis Rates and Comparative Info

The 1999 through 2001 averaged crude death rate in Saint Louis City is 20 percent higher than the averaged rate for Missouri and 40% higher than the averaged U.S. rate in the same time period. In 2001 there were 4,143 deaths in the City of Saint Louis. The ZIP Codes with the highest averaged crude death rate are 63101\*, 63103 and 63113. The ZIP Codes with the lowest averaged rates are 63102\*, 63118 and 63104.

Zip Code (ZCTA)	Crude Death Rate (Deaths per 100K Pop)	Map Quartile
63101*	2,379.2	4
63103	2,018.4	4
63113	1,774.3	4
63115	1,490.0	3
63111	1,475.2	3
63106	1,434.0	2
63107	1,402.4	2
63147	1,311.4	2
63139	1,253.6	2
63108	1,251.2	2
63120	1,192.6	2
63112	1,153.4	1
63109	1,121.1	1
63116	1,057.4	1
63110	958.2	1
63104	917.0	1
63118	913.9	1
63102*	856.7	1

## Black/White Disparity

The Saint Louis City white population has an average crude death rate 20 percent higher than the averaged rate for the Saint Louis City African-American community for the time period 1999 through 2001. This is most likely due to the higher percentage of those 65 years of age and older in the white population.

## Potential Public Health Interventions

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

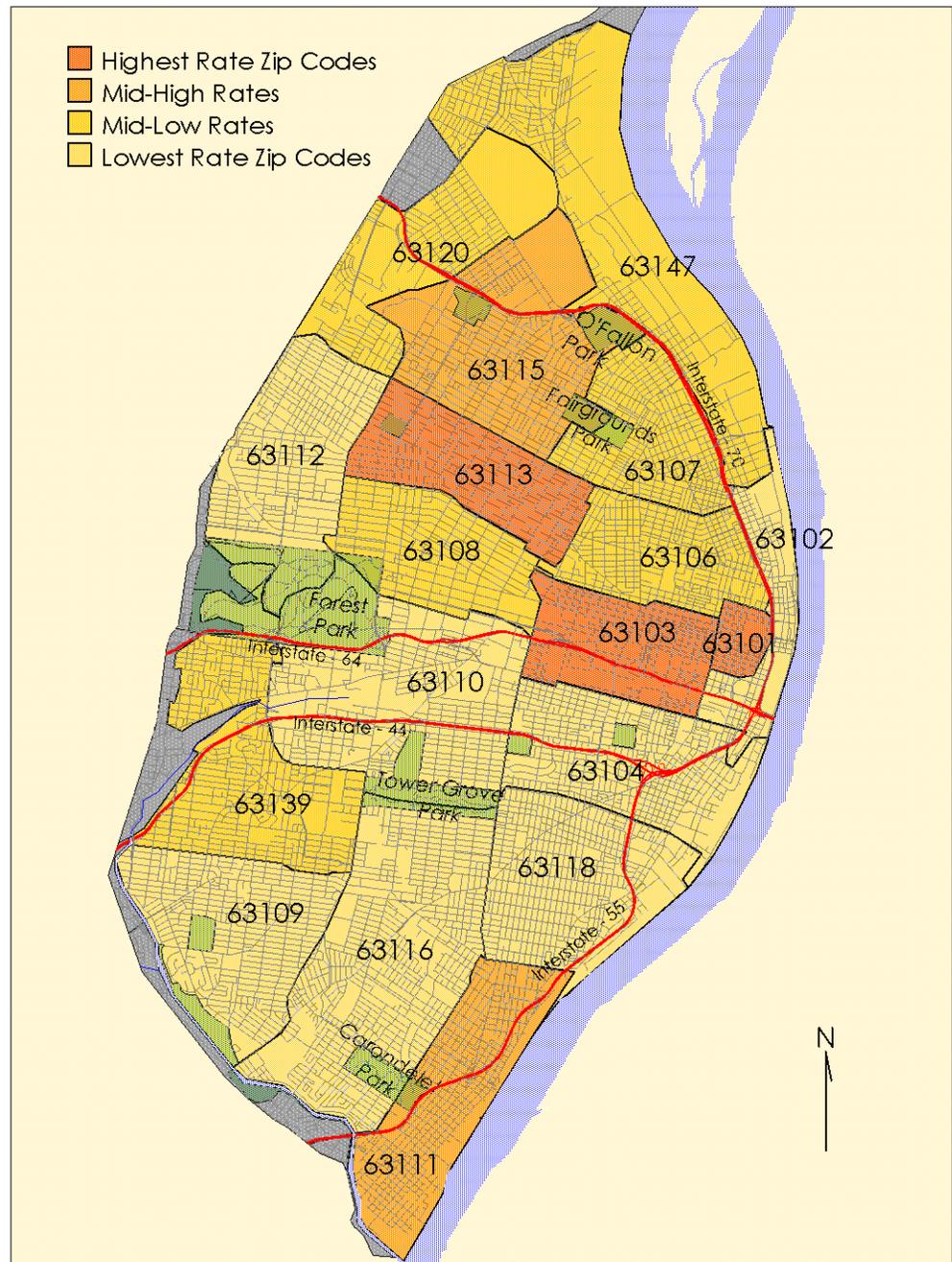
## Data Source

2000 U.S. Census

## Crude Death Rates

deaths/100,000 population 99-01 average

Stl City	1,211.1
Stl County	953.8
Stl City/Co	1,019.4
MO	982.6
US	854.3
Stl City Black	1,165.9
Stl City White	1,394.4
Stl Co Black	712.6
Stl Co White	1,059.5
Stl City/Co Black	930.3
Stl City/Co White	1,114.2
MO Black	900.4
MO White	1,035.1
US Black	832.3
US White	980.1



crude death rate

# refugees processed

## Definition

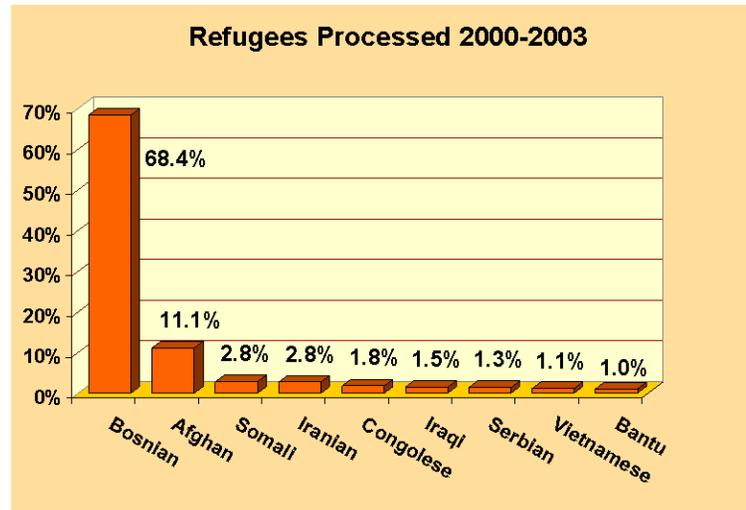
A refugee is defined as “any person who is outside any country nationality of such person’s nationality or, in the case of a person having no nationality, is outside any country in which such person last habitually resided, and who is unable or willing to return to, and is unable or unwilling to avail 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)

## Saint Louis Rates and Comparative Info

The largest group of refugees processed in the City of Saint Louis from 2000 through 2003 is Bosnian. In that 3-year time period 68% of all the refugees processed were Bosnian. The next three largest groups processed were Afghan (11.1%), Somali (2.8%) and Iranian (2.8%).



## Black/white Disparity

Not applicable.

## Focus Group Comments/Concerns

“In general, immigrant health has many difficulties.” “Refugee groups as well as more established immigrant populations are falling through the cracks.” “Differences in cultural mores, languages and literacy rates must be considered as programs are designed and communicated.”

## Potential Public Health Interventions

Epidemiological and descriptive studies to determine additional unique needs of the immigrant/refugee populations in Saint Louis City

Development of culturally sensitive educational materials

Collaboration with agencies that serve the refugee population

## Data Source

International Institute, Saint Louis

## Refugees Processed 2000-2003

Nationality	% of Total
Bosnian	68.37%
Afghan	11.12%
Somali	2.81%
Iranian	2.75%
Congolese	1.78%
Iraqi	1.50%
Serbian	1.35%
Vietnamese	1.13%
Bantu	1.04%
Kosovar	0.90%
Columbian	0.88%
Ethiopian	0.82%
Nigerian	0.76%
Albanian	0.68%
Russian	0.59%
Croatian	0.49%
Ukraine	0.43%
Sierra Leone	0.39%
Liberian	0.37%
Haitian	0.27%
Uzbekistani	0.23%
Azerbaijani	0.18%
Kyrgyzstan	0.14%
Sudanese	0.12%

Nationality	% of Total
Bulgarian	0.10%
Cuban	0.08%
Pakistani	0.08%
Indian	0.06%
Jordanian	0.06%
Kurdish	0.06%
Tadzhikstani	0.06%
Togolese	0.06%
Egyptian	0.04%
Romanian	0.04%
Algerian	0.02%
Angolan	0.02%
Bolivian	0.02%
Chinese	0.02%
Eritrean	0.02%
Gambian	0.02%
Kazakhstan	0.02%
Kenyan	0.02%
Latvia	0.02%
Mauritanian	0.02%
Mexican	0.02%
Panamanian	0.02%
Peruvian	0.02%
Ugandan	0.02%

r e f u g e e s   p r o c e s s e d

# racial polarization

## Definition

The demographic distribution in Saint Louis shows extreme racial imbalance in many ZIP Codes. For purposes of this analysis, all ZIP Codes with greater than 75% African-American population are considered racially isolated. 2000 U.S. Census data are used. The City of Saint Louis has a history of being geographically racially divided.

## Public Health Implications

In the City of Saint Louis, the ZIP Codes that are identified as being racially isolated are consistently associated with less desirable rates with regard to the various health indicators. Racial polarization is also associated with poverty and diminished economic opportunity.

## Saint Louis Rates and Comparative Info

According to the 2000 U.S. Census, the City of Saint Louis is 51.2% African American and 43.8% white. Nationally, African Americans represent about 12% of the population and the white population represents about 75% of the population.

Zip Code (ZCTA)	African Americans - Percent of Total Population	Map Quartile	Whites - Percent of Total Population	Other Race - Percent of Total Population
63115	98.0%	4	0.8%	1.2%
63113	97.7%	4	1.0%	1.3%
63120	95.3%	4	3.5%	1.2%
63106	94.8%	4	3.6%	1.6%
63107	90.4%	4	7.8%	1.8%
63147	88.5%	4	10.1%	1.4%
63112	80.2%	4	15.8%	4.0%
63101*	69.9%	3	28.3%	1.8%
63104	55.5%	3	40.4%	4.1%
63110	53.9%	3	41.4%	4.7%
63118	52.7%	3	38.3%	9.0%
63103	51.2%	3	41.5%	7.3%
63108	44.8%	2	48.4%	6.8%
63102*	37.6%	2	57.5%	4.9%
63111	23.8%	1	68.5%	7.7%
63116	17.6%	1	72.8%	9.6%
63139	6.3%	1	88.7%	5.0%
63109	2.8%	1	93.6%	3.6%

## Black/white Disparity

The percentage of African Americans in individual ZIP Codes ranges from 98% to only 2.8%. The ZIP codes that are the most racially isolated in the City of Saint Louis are 63115, 63113, 63120, 63106, 63107, 63147 and 63112, all of which are located in the northern area of the city.

## Focus Group Comments/Concerns

“Racial polarity.” “Racial tension.” “Racism is still first.” “Acute separation between haves and have nots – economic and cultural.”

## 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 such issues as immunization, lead poisoning, sexually transmitted diseases and HIV/AIDS to name a few.

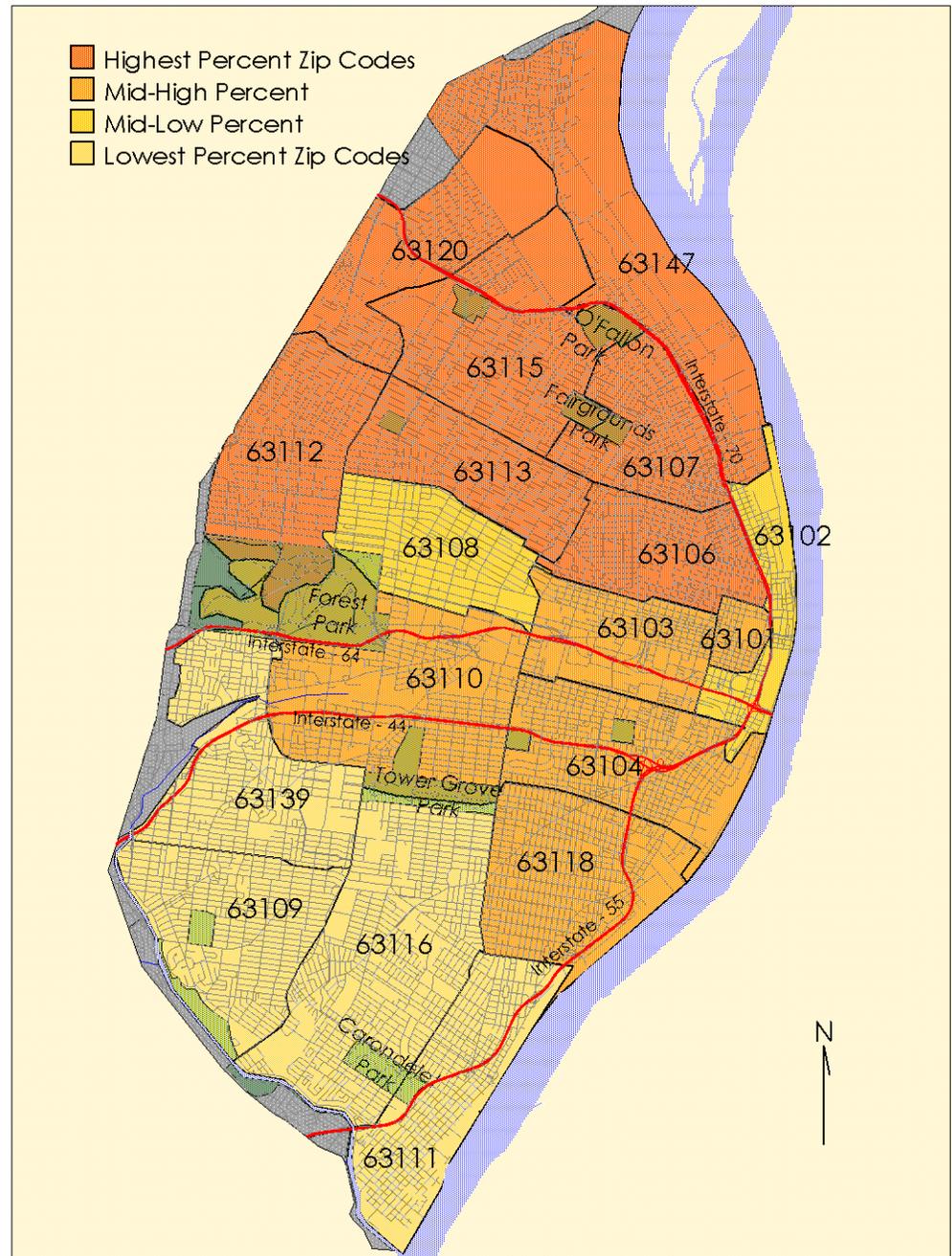
## Data Source

2000 U.S. Census

## Racial Polarization 2000

Population by Race	Black	White	Other*	Total
St. Louis City	51.2%	43.8%	5.0%	100.0%
St. Louis County	19.0%	76.8%	4.2%	100.0%
St. Louis City/County	27.2%	68.4%	4.4%	100.0%
Missouri	11.1%	84.8%	4.0%	100.0%
US	12.2%	75.1%	12.7%	100.0%

\*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 such indicators as lead poisoning, infant mortality, sexually transmitted diseases, mortality and morbidity rates and environmental conditions.

## Saint Louis Rates and Comparative Info

According to the 2000 U.S. Census, the average household income in the U.S. is 50% higher than that in the City of Saint Louis. The ZIP Codes with the lowest average household income are 63106 and 63101\*. Those with the highest average household income are 63109, 63102\*, 63104 and 63108.

Zip Code (ZCTA)	Average Household Income	Map Quartile
63106	\$18,615	4
63101*	\$23,106	4
63107	\$28,351	3
63103	\$28,508	3
63113	\$29,530	3
63120	\$29,547	3
63111	\$30,372	3
63118	\$32,150	3
63115	\$34,225	3
63112	\$35,582	2
63110	\$37,070	2
63147	\$37,466	2
63116	\$38,022	2
63139	\$42,528	1
63108	\$43,295	1
63104	\$43,605	1
63102*	\$48,655	1
63109	\$50,033	1

## Black/white Disparity

According to the 2000 U.S. Census, the average household income in the white community is 31% higher than the average household income in the African-American population, \$44,000 vs. a little over \$30,000.

**Disparity Ratio:** .7

## Focus Group Comments/Concerns

"A major concern is low income – not on welfare but earning low wages." "Working poor – uninformed about services to access." "Middle and upper income families have been driven from the city."

## Potential Public Health Interventions

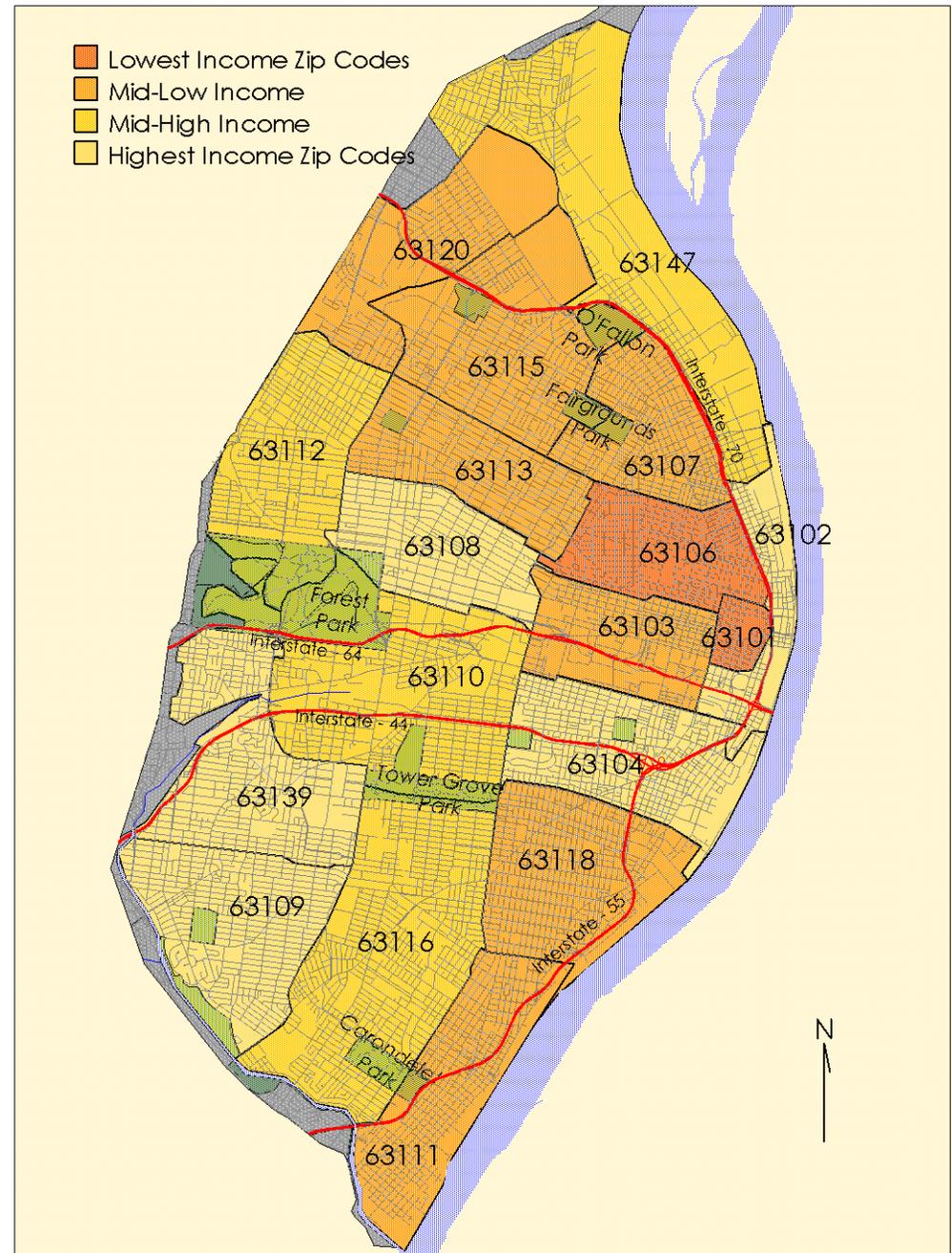
Epidemiological studies to determine target populations and areas of the city for public health policy and program development

## Data Source

2000 U.S. Census

## Average Household Income 2000

Stl City	37,455
Stl County	68,509
Stl City/Co	60,283
MO	50,016
US	56,675
<b>Stl City Black</b>	<b>30,270</b>
Stl City White	43,860
Stl Co Black	45,704
Stl Co White	73,471
Stl City/Co Black	38,183
Stl City/Co White	67,895
MO Black	37,453
MO White	51,601
US Black	39,774
US White	59,649



# population below poverty

## Definition

2000 U.S. Census poverty data were used to determine the percentage of persons that are 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.

## Saint Louis Rates and Comparative Info

According to the 2000 U.S. Census, persons living below poverty in Saint Louis City was two times that for the US and Missouri. The ZIP Code with the highest percentage of persons living below poverty is 63106. Those Zips with the lowest percentages of persons living below poverty are 63109, 63139 and 63116.

Zip Code (ZCTA)	Percent of Population Living Below Poverty (Persons)	Map Quartile
63106	52.7%	4
63107	39.3%	3
63120	37.3%	3
63102*	35.1%	3
63112	34.7%	3
63103	34.1%	3
63118	32.1%	3
63113	31.2%	3
63101*	30.7%	3
63104	28.1%	2
63108	25.9%	2
63115	25.5%	2
63111	25.1%	2
63110	24.3%	2
63147	21.4%	2
63116	16.7%	1
63139	9.1%	1
63109	6.5%	1

## Black/white Disparity

The percentage of those living below poverty in the African-American community in Saint Louis City is 2.6 times that in the white community.

**Disparity Ratio: 2.6**

## Focus Group Comments/Concerns

“Saint Louis has a number of concentrated, underclass neighborhoods that are ineffective or incapable of accessing resources.” “Poverty is the greatest challenge. Everything else flows from that.” “All the social issues that come with poverty are here.”

## Potential Public Health Interventions

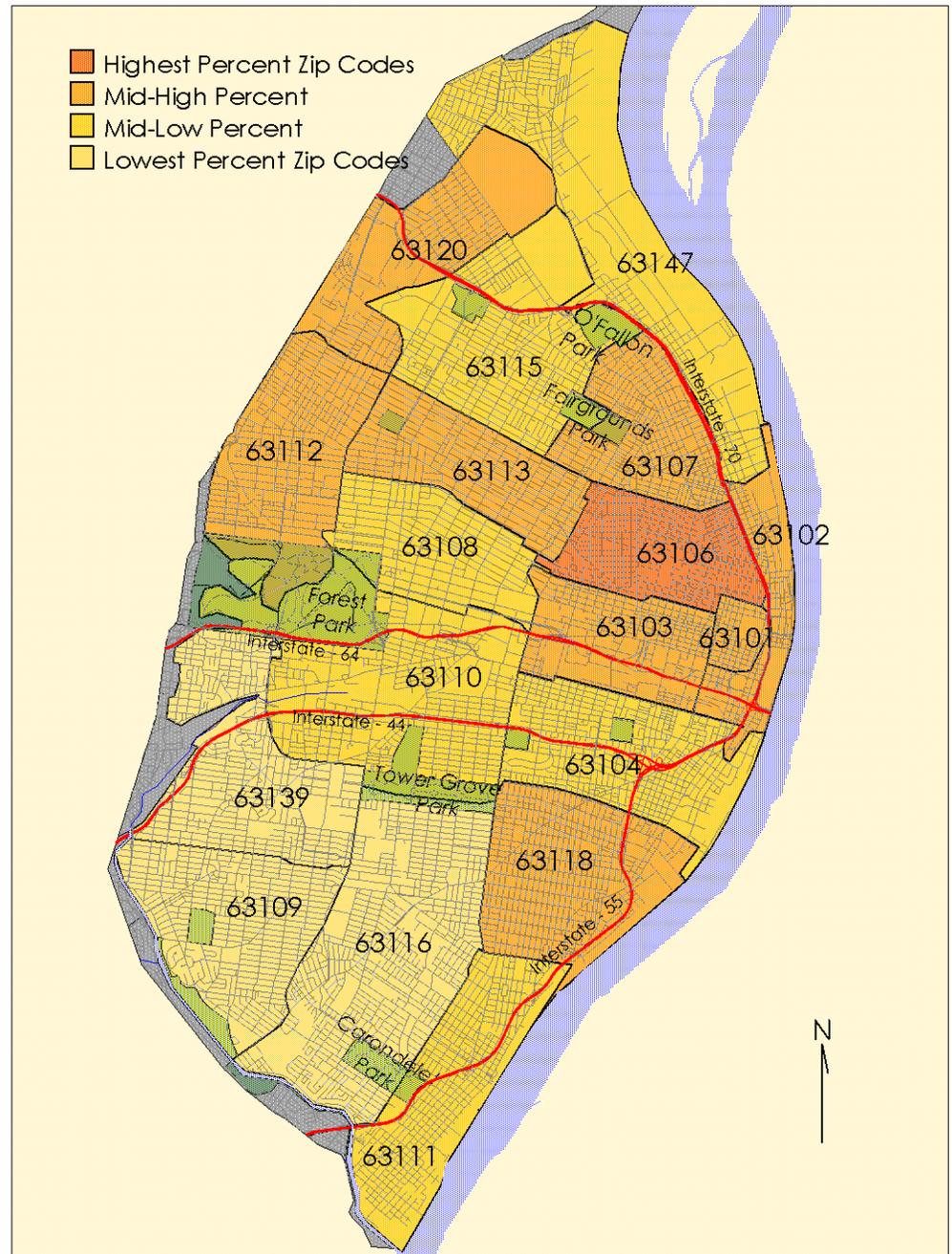
Identification of areas with high rates of poverty and targeting populations with appropriate programs such as immunization, lead poisoning, MC+ enrollment assistance to name a few.

## Data Source

2000 U.S. Census.

## Persons Below Poverty 2000

Stl City	24.3
Stl County	6.7
Stl City/Co	11.1
MO	11.7
US	12.4
<b>Stl City Black</b>	<b>34.1</b>
Stl City White	12.9
Stl Co Black	17.4
Stl Co White	4.1
Stl City/Co Black	25.4
Stl City/Co White	5.5
MO Black	25.5
MO White	9.6
US Black	24.9
US White	9.1



Population below poverty

# female head of household

## Definition

This represents the percent of households that are headed by a female with children. Data are from the 2000 U.S. Census.

## Public Health Implications

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

## Saint Louis Rates and Comparative Info

According to the 2000 U.S. Census the percent of households headed by a female with children in Saint Louis City is over 80 percent higher than the percent for Missouri and the U.S., 12.8 vs. 7.0 for both Missouri and the US. ZIP Codes with the highest percentage of female headed households are 63106, 63120 and 63107. The ZIP Codes with the lowest percent are 63102\*, 63109 and 63103.

Zip Code (ZCTA)	Percent of Households with Female Head	Map Quartile
63106	41.6%	4
63120	41.5%	4
63107	38.7%	4
63113	33.7%	4
63115	33.3%	4
63118	28.8%	3
63147	27.8%	3
63112	26.5%	3
63110	24.3%	2
63104	22.6%	2
63111	19.1%	2
63116	14.8%	1
63101*	13.5%	1
63139	10.0%	1
63108	9.9%	1
63103	9.4%	1
63109	8.6%	1
63102*	2.1%	1

## Black/white Disparity

The percent of the Saint Louis City African-American population with female head of household is 22.4% vs. 4.2% in the white community or 5.3 times the white population percentage.

**Disparity Ratio: 5.3**

## Focus Group Comments/Concerns

“There is the need for recreational facilities and structured activities, games and sports, to engage students outside academic work. This need is even more significant because most of the children are from single-parent households where there are no father figures to guide and support them.”

## Potential Public Health Interventions

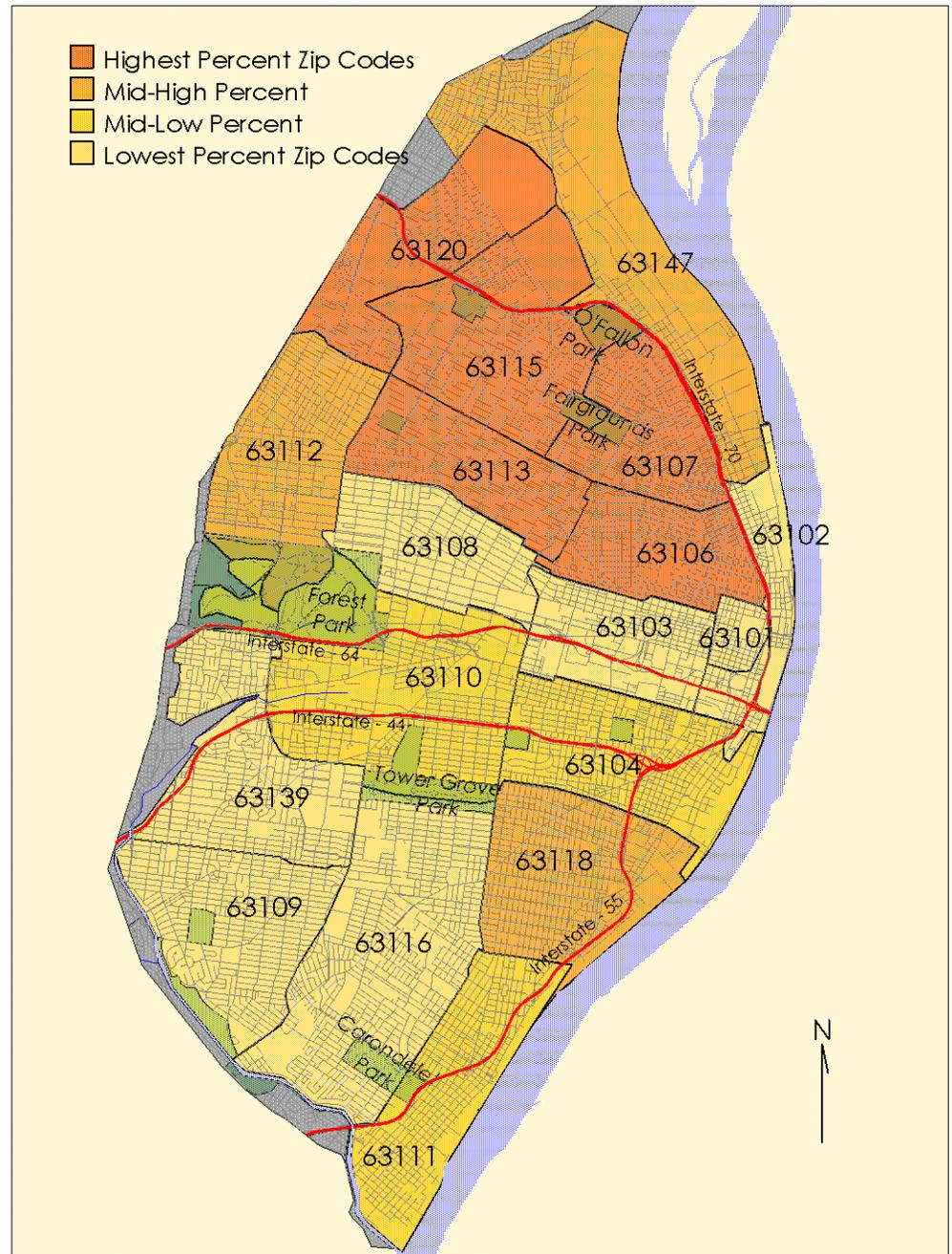
Community surveys to determine needs, MC+ registration and Maternal, Child and Family Health programs to name a few

## Data Source

2000 U.S. Census

## Female Head of Household with Children - 2000

Stl City	12.8
Stl County	7.2
Stl City/Co	8.7
MO	7.0
US	7.0
<b>Stl City Black</b>	<b>22.4</b>
Stl City White	4.2
Stl Co Black	21.6
Stl Co White	4.1
Stl City/Co Black	22.0
Stl City/Co White	4.1
MO Black	21.5
MO White	5.2
US Black	19.2
US White	4.9



female head of household

# education level

## Definition

Education level is determined by the percent of city resident's 25 years of age and older who have completed high school. 2000 U.S. Census data 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 thus all the associated public health and health issues related with poverty.

## Saint Louis Rates and Comparative Info

According to the 2000 U.S. Census, the percent of persons age 25 or older who have a high school degree or GED in Saint Louis City is about 12 percent lower than that for Missouri and the U.S. The ZIP Codes with the lowest graduation rates are 63106, 63120 and 63107. The ZIP Codes with the highest rates are 63109, 63102\*, 63139 and 63108.

Zip Code (ZCTA)	Percent of Persons (25+) with High School or GE Degree	Map Quartile
63106	55.1%	4
63120	57.9%	4
63107	59.3%	4
63111	60.8%	4
63118	60.9%	4
63113	61.3%	4
63101*	65.1%	3
63115	66.8%	3
63112	71.6%	2
63116	72.4%	2
63110	72.7%	2
63147	72.9%	2
63103	73.2%	2
63104	78.5%	1
63108	79.8%	1
63139	79.9%	1
63102*	83.5%	1
63109	85.1%	1

## Black/white Disparity

According to the 2000 U.S. Census, the percent of high school graduates in the white community is 1.2 times the rate in the African-American population, 77.7 percent vs. 64.7 percent.

**Disparity Ratio: .83**

## Focus Group Comments/Concerns

"We have a high drop out rate in high school."  
 "Illiteracy rate is over 22%." "Kids don't have good access to information because they are not in school."

## Potential Public Health Interventions

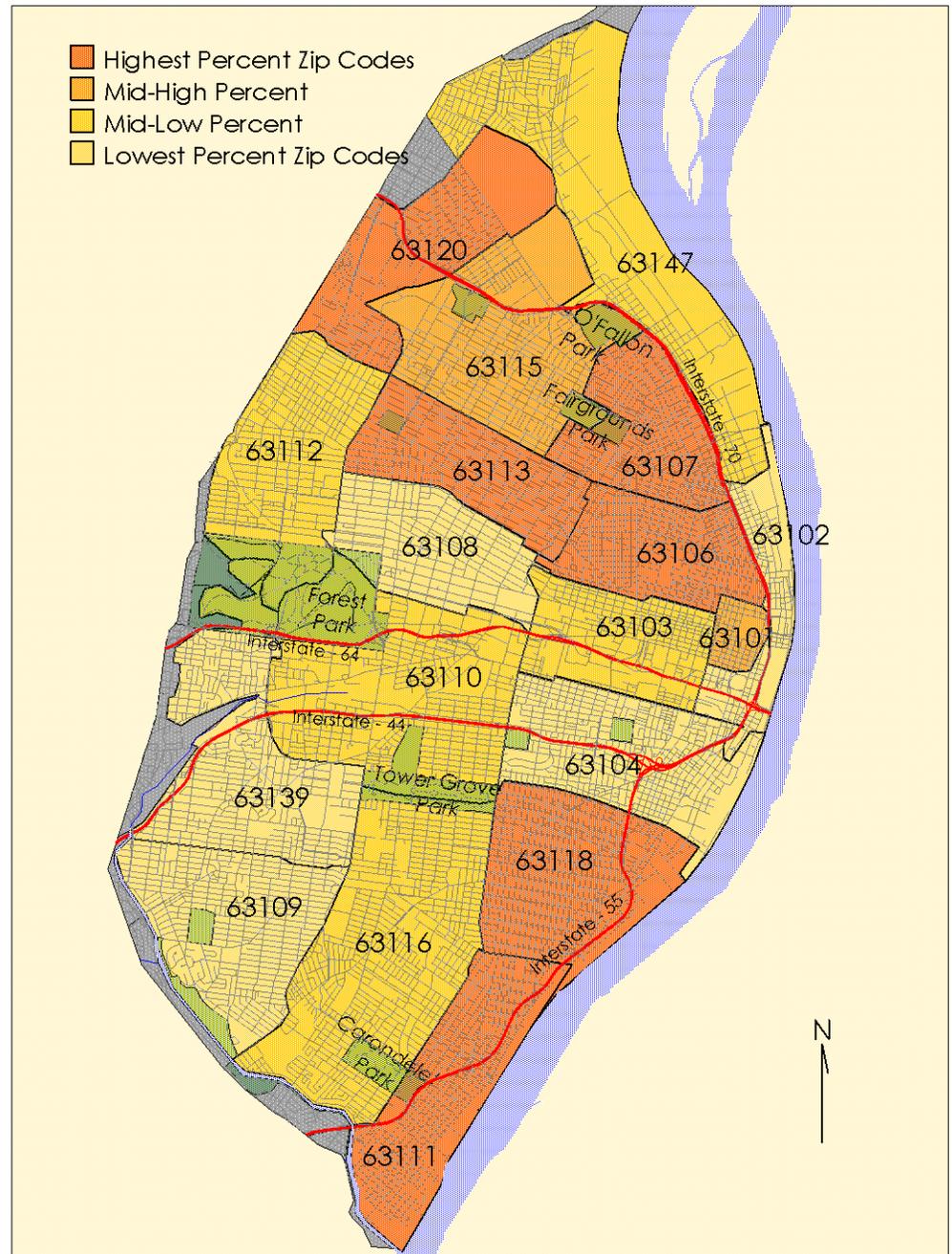
Access to care assistance, culturally sensitive educational literature and programs

## Data Source

2000 U.S. Census

## High School Graduation % > 25 years of age 2000

Stl City	71.5
Stl County	88.0
Stl City/Co	84.0
MO	81.6
US	81.1
<b>Stl City Black</b>	<b>64.7</b>
Stl City White	77.7
Stl Co Black	81.5
Stl Co White	89.3
Stl City/Co Black	73.5
Stl City/Co White	87.4
MO Black	73.9
MO White	82.4
US Black	72.3
US White	83.6



education level

# unemployment rates

## Definition

Unemployment measures the average percent of the civilian, noninstitutional labor force that is unemployed during the year. The rate is expressed as a percent, i.e. the number of unemployed divided by the total civilian labor force. The data are based on the 2000 U.S. Census.

## 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.

## Saint Louis Rates and Comparative Info

The unemployment rate in Saint Louis City, according to the 2000 U.S. Census, is about twice the Missouri and U.S. rates, 11.0 vs. 5.3 and 5.8 respectively. The ZIP Codes with the highest unemployment rates are 63102\*, 63106 and 63120. The ZIP Codes with the lowest rates are 63109, 63139 and 63116.

Zip Code (ZCTA)	Percent of Unemployed Persons in Labor Force	Map Quartile
63102*	49.5%	4
63106	25.1%	4
63120	22.8%	4
63107	22.1%	4
63103	17.2%	3
63113	15.3%	3
63101*	15.2%	3
63115	15.1%	3
63112	14.3%	3
63118	14.1%	2
63110	13.7%	2
63108	12.9%	2
63147	12.3%	2
63111	11.0%	2
63104	9.7%	2
63116	6.1%	1
63139	4.9%	1
63109	3.2%	1

## Black/white Disparity

According to the 2000 U.S. Census, unemployment rates in the African-American community are 2.4 times that in the white community in Saint Louis City, 17 percent vs. 7 percent.

**Disparity Ratio: 2.4**

## Focus Group Comments/Concerns

"Unemployment could become a crisis if not addressed – need economic development, jobs which pay a living wage." "Rates of unemployment." "Under-employment and jobs with no benefits lead to poverty." "For those with minimal skills, opportunities for employment in the city geographic area are limited."

## Potential Public Health Interventions

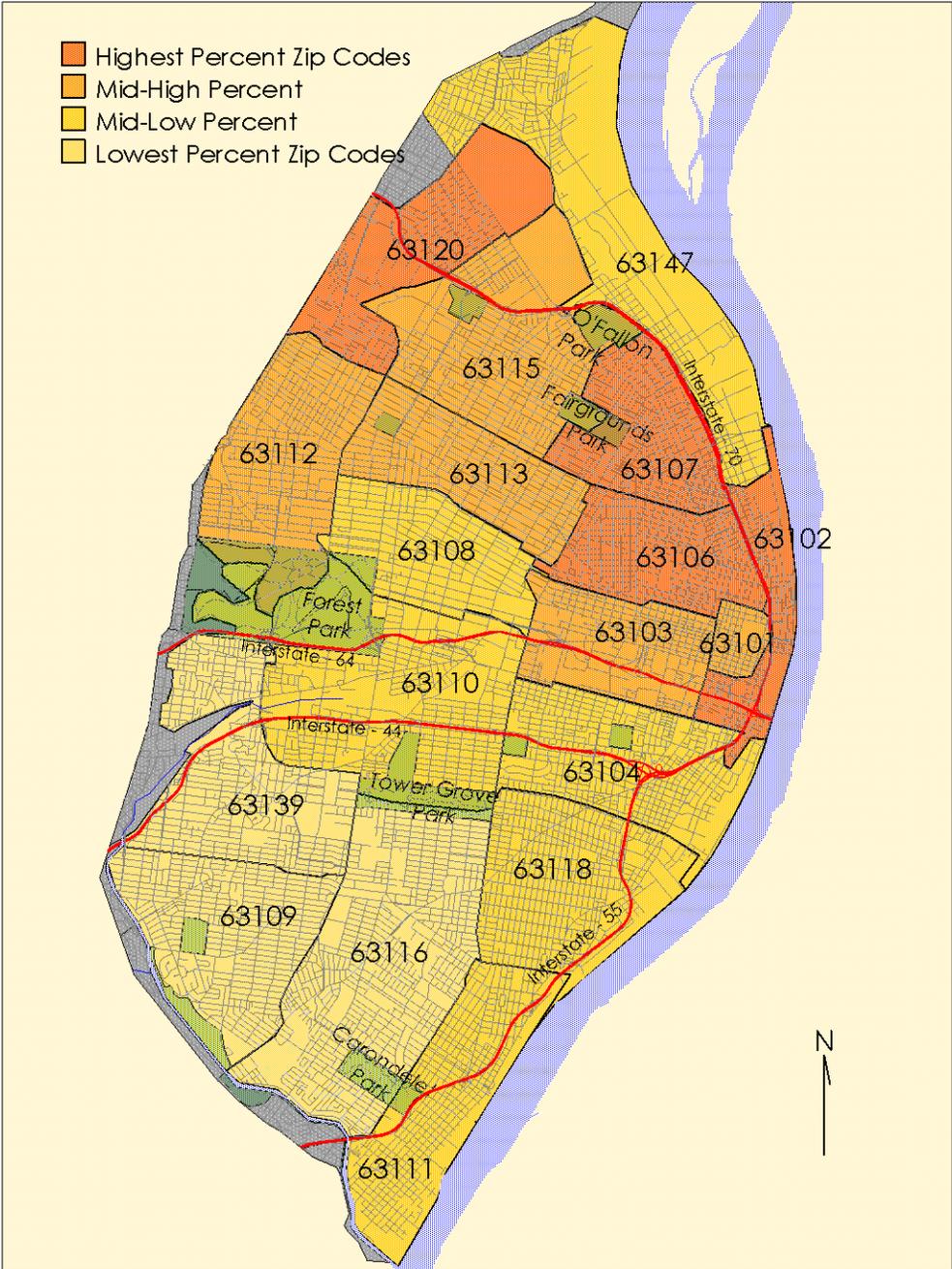
Assisting in enrolling children in the MC+ Medicaid program, assisting the community in access to care

## Data Source

2000 U.S. Census

# Unemployment Rates 2000

Stl City	11.0
Stl County	4.0
Stl City/Co	6.0
MO	5.3
US	5.8
<b>Stl City Black</b>	<b>17.0</b>
Stl City White	7.0
Stl Co Black	9.0
Stl Co White	3.0
Stl City/Co Black	12.0
Stl City/Co White	4.0
MO Black	12.3
MO White	4.4
US Black	11.6
US White	4.6



unemployment rates

# crimes against property

## 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 an average of data from 1999 through 2003 and presented per 1000 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.

## Saint Louis Rates and Comparative Info

Comparative information is not available for this descriptive analysis. ZIP Codes 63101\*, 63102\* and 63103 have small populations and thus the rates appear very high. These ZIP Codes should be looked at with caution.

ZIP Code	Crimes Against Property	Map Quartile
63102*	995.9	4
63101*	852.6	4
63103	446.8	4
63113	147.7	4
63106	146.7	4
63108	142.5	4
63118	133.5	4
63147	133.4	4
63104	123.2	4
63110	122.6	4
63115	120.6	3
63107	110.8	3
63112	101.5	3
63111	93.5	2
63120	92.2	2
63116	73.3	2
63139	65.1	1
63109	40.1	1

## Black/white Disparity

The crime data are not available by race. However, the ZIP Codes with the lowest average property crime rates between 1999 and 2003 are in the predominately white ZIP Codes of 63109 and 63139. The highest averaged rates, disregarding the low population ZIP Codes of 63101\*, 63102\* and 63103, are in the predominately African-American ZIP Codes 63113 and 63106

## Focus Group Comments/Concerns

“Crime, so people don’t want to live in the city.”

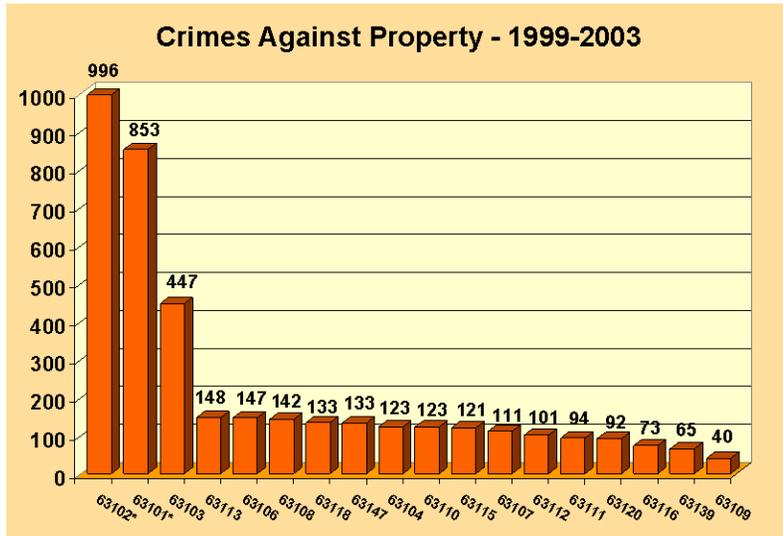
## Potential Public Health Interventions

There is a need for increase funding to address all the public health issues that result from lower socioeconomic status. Services would include lead poisoning screening, environmental awareness, health education and sexually transmitted disease surveillance and services.

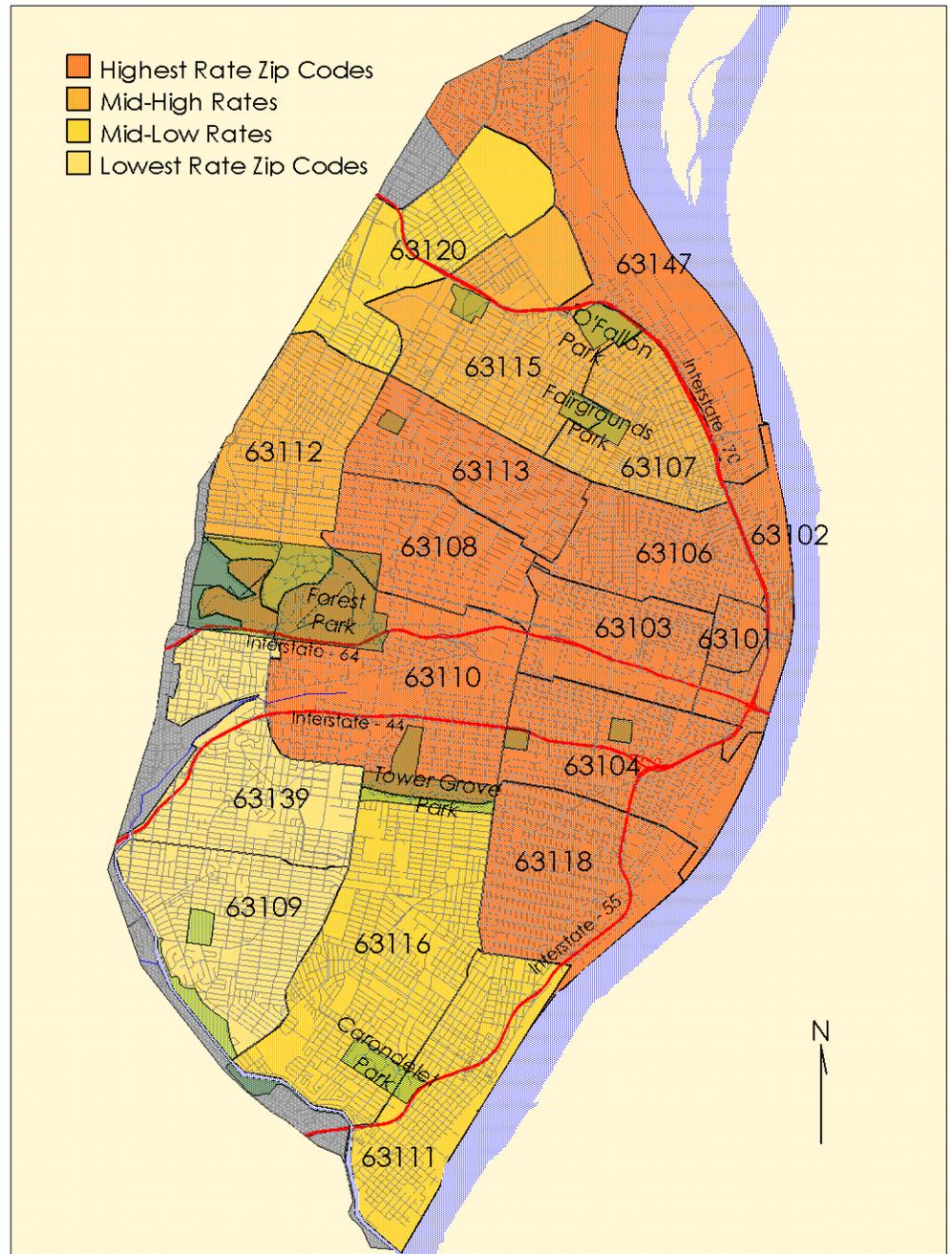
## Data Source

City of Saint Louis Police Department

# Crimes Against Property \*\* /1000 population 1999-2003 average



\*\*Burglary, larceny, auto theft



crimes against property

# crimes against persons

## 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 an average of data from 1999 through 2003. The rate is per 1000 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.

## Saint Louis Rates and Comparative Info

Comparative data are not available for this analysis. ZIP Codes 63102\*, 63101\* and 63103 have low population and thus high rates. These Zip Codes should be looked at with caution.

ZIP Code	Crimes Against Persons	Map Quartile
63102*	94.0	4
63101*	89.2	4
63103	51.1	4
63106	40.0	4
63107	36.3	3
63113	33.6	3
63118	31.8	3
63120	28.4	3
63115	27.3	3
63112	22.3	2
63147	21.6	2
63104	17.5	2
63110	17.1	2
63108	15.5	2
63111	15.1	2
63116	8.9	1
63139	4.5	1
63109	2.8	1

## Black/white Disparity

The crime data are not available by race. However, the ZIP Codes with the rates of most concern, when disregarding the ZIP Codes with very low population, are located in the predominately African-American ZIP Codes of 63106 and 63107 and 63113. The most favorable rates are in 63109, 63139 and 63116 which are predominately white.

## Focus Group Comments/Concerns

“Crime and violence and their effects on quality of community life is of great concern to many residents.” “Violence – pockets of concentrated violence and crime.” “Violence in the schools and community leads to flight from City.” “Our kids are found dead on the corners everyday.”

## Potential Public Health Interventions

Development of surveillance systems to monitor firearm injuries and other violent crimes and related risk behaviors

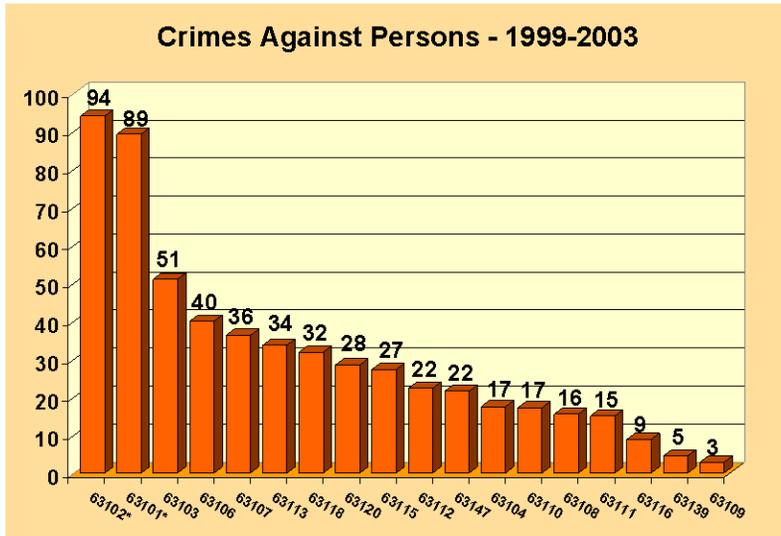
Development of strategies and youth oriented programs designed to prevent and reduce aggressive and violent behavior

Study the epidemiology of youth violence specific to the City of Saint Louis

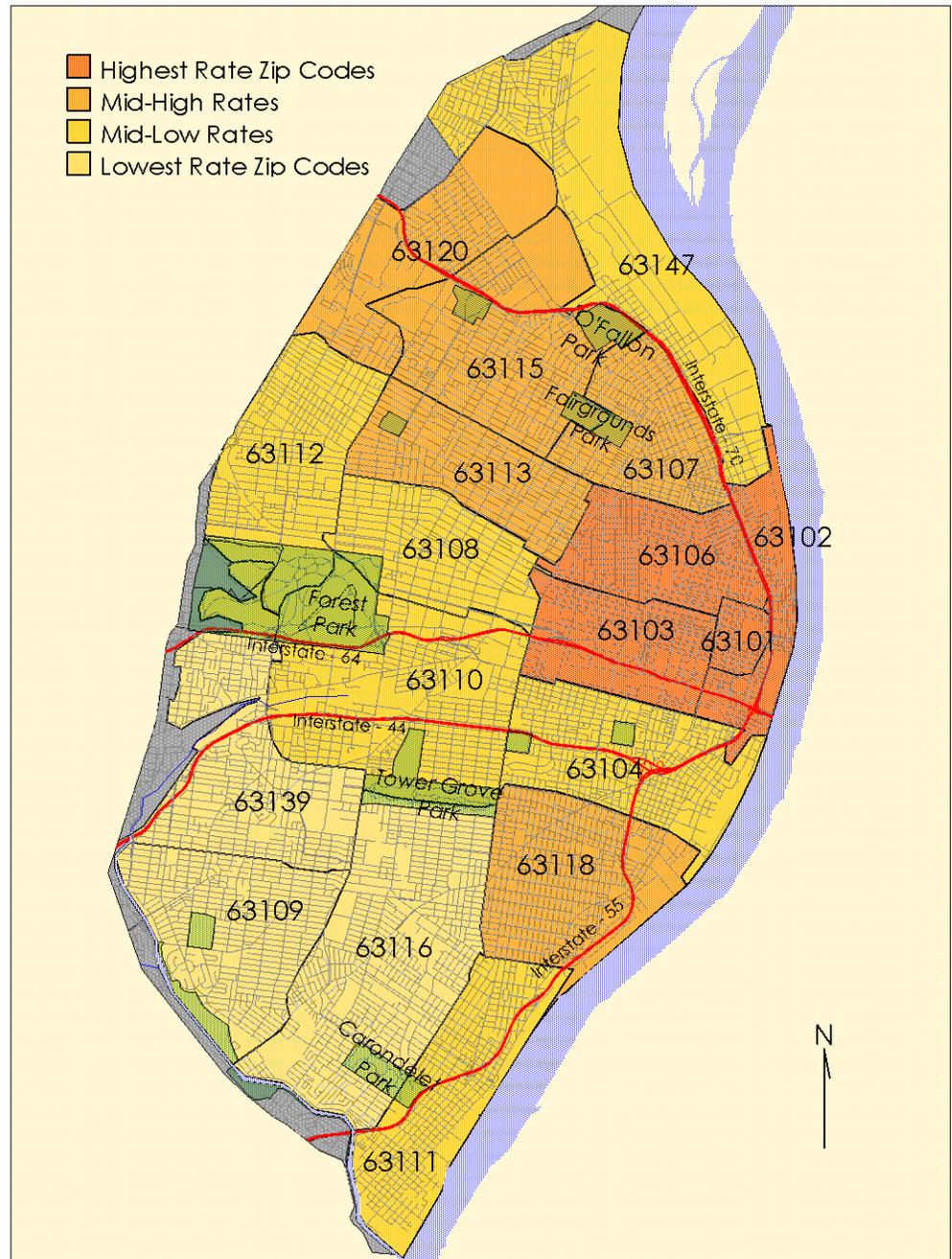
## Data Source

City of Saint Louis Police Department

Crimes Against Persons \*\*  
/ 1,000 population 1999 - 2003 average



\*\*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 decrease tax revenue, create increased sanitation problems and reduce the population. 2003 vacant lot data were used.

## Public Health Implications

This is an indicator of the stability and economic strength of a city. An increase in negative health outcomes due to increased poverty could result. Vacant lots could also lead to sanitation and vector problems.

## Saint Louis Rates and Comparative Info

In 2003 there were an estimated 16,700 vacant lots in the City of Saint Louis. Comparative information is not available.

Zip Code	Vacant Lots per Square Mile	Map Quartile
63113	1058	4
63106	1010	4
63107	933	4
63112	631	3
63120	488	2
63115	447	2
63104	400	2
63108	244	1
63118	182	1
63111	160	1
63110	90	1
63139	64	1
63147	53	1
63103	42	1
63102*	36	1
63116	28	1
63109	19	1
63101*	3	1

## Black/white Disparity

The ZIP Codes with the highest vacant lot ratios in 2003 are 63113 and 63106 and are predominately African American. The ZIP Codes with the lowest ratios in 2003 are 63101\*, 63109 and 63116 where the majority of the population is white.

## Focus Group Comments/Concerns

"...these vacant lots that's surrounding the neighborhood and everything...they should clean these lots. Either put playgrounds on them or build community centers for the kids to come after school." "Vacant property." "Need to clean up the city – trash is illegally dumped on vacant lots."

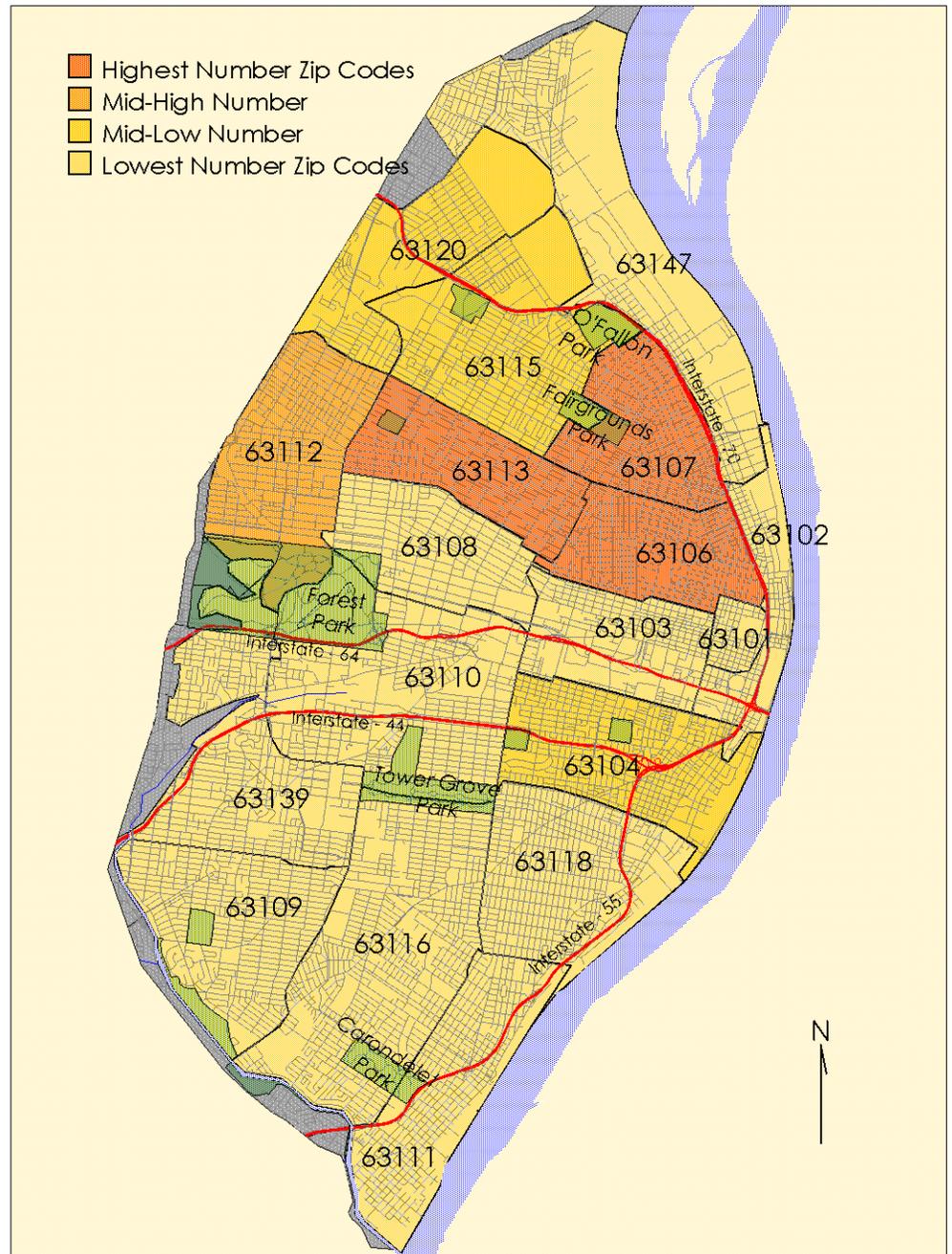
## Potential Public Health Interventions

Increased environmental health services such as sanitation and vector control

## Data Source

City of Saint Louis Assessor's Office

## Vacant Lots per square mile - 2003



vacant lots



# QUALITY / ACCESS



# clinics

## Definition

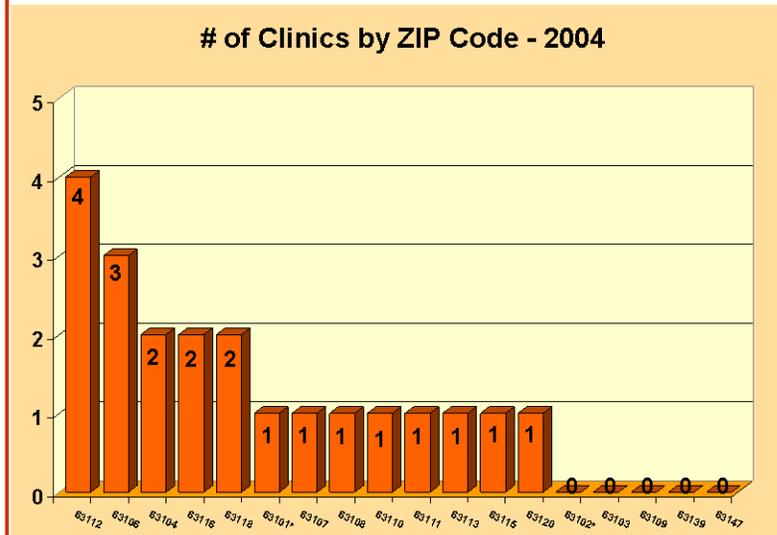
The map identifies clinics located within the City of Saint Louis. The clinics include those operated by ConnectCare, the Federally Qualified Health Centers and independent Health Centers.

## 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.

## Saint Louis Rates and Comparative Info

Not applicable.



## 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 African American.

## Focus Group Comments/Concerns

“Access to health care is of a major concern to the participants. However, people in North Saint Louis, predominately African American, expressed the greatest unmet need.” “Geographic access to health care, especially in North Saint Louis.” “Times clinics are open – we need extended hours.”

## 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

Southwestern Bell Yellow Pages; City of Saint Louis Department of Health



clinics

# primary care physicians

## Definition

Primary care physicians are defined as General Practitioners, Family Practitioners, Internists, Pediatricians ( non-specialists) and Obstetricians/Gynecologists. Inadequate supplies of primary care physicians is considered a barrier to access that results in poor health outcomes.

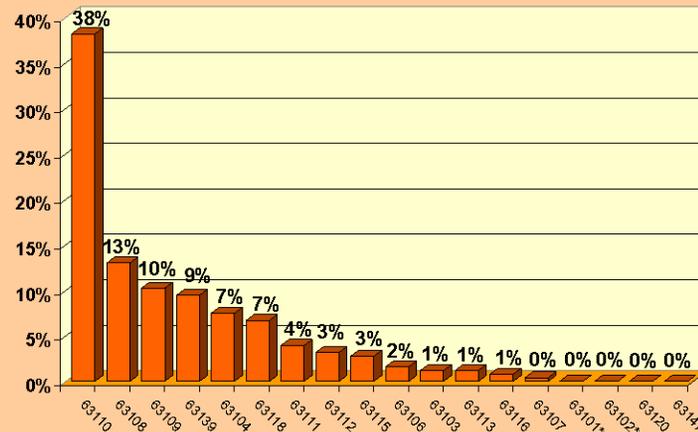
## Public Health Implications

The inability to access primary care physicians contributes to decreased immunizations, chronic disease complications, premature mortality and poorer health outcomes in general.

## Saint Louis Rates and Comparative Info

Not applicable

% of Primary Care Physicians by ZIP Code



## Black/white Disparity

The address mapping and data show that very few primary care providers are located in the predominately African-American, northern areas of the city. 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 Saint Louis University Hospital that are located in 63110 and 63104 and are adjacent to 63108.

## Focus Group Comments/Concerns

"There is little continuity of care with health care providers." "Health care providers operate on provider's convenience."

## 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

The Little Blue Book Physician Directory



primary care physicians

# hospital admission rates

## Definition

Hospital admission rates are a proxy for the amount of morbidity in the community. This is a very crude measure. 2000 data are used. The rate is expressed as hospital admissions per 1000 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.

## Saint Louis Rates and Comparative Info

The hospital admission rate in Saint Louis City is 1.2 times the Missouri rate and 1.18 times the U.S. rate, 136.8 vs. 115.0 and 116.3 respectively. The ZIP Codes with the highest hospital admission rates are 63101\*, 63106 and 63103. The ZIP Codes with the lowest rates are 63109, 63139 and 63116.

Zip Code (ZCTA)	Hospitalization Rates per 1,000 Population (Age-adjusted)	Map Quartile
63101*	258.5	4
63106	237.3	4
63103	225.0	4
63113	212.8	4
63107	195.2	3
63118	186.4	3
63102*	175.6	3
63120	172.9	3
63115	168.3	2
63104	167.0	2
63112	161.9	2
63111	161.2	2
63147	160.9	2
63110	157.3	2
63108	149.3	2
63116	123.7	1
63139	122.7	1
63109	103.3	1

## Black/white Disparity

In Saint Louis City, for African Americans, the averaged hospitalization rate is 1.5 times that of the Saint Louis City white population.

**Disparity Ratio: 1.5**

## Focus Group Comments/Concerns

“Need more focus on the health of the community not just medical care.”

## Potential Public Health Interventions

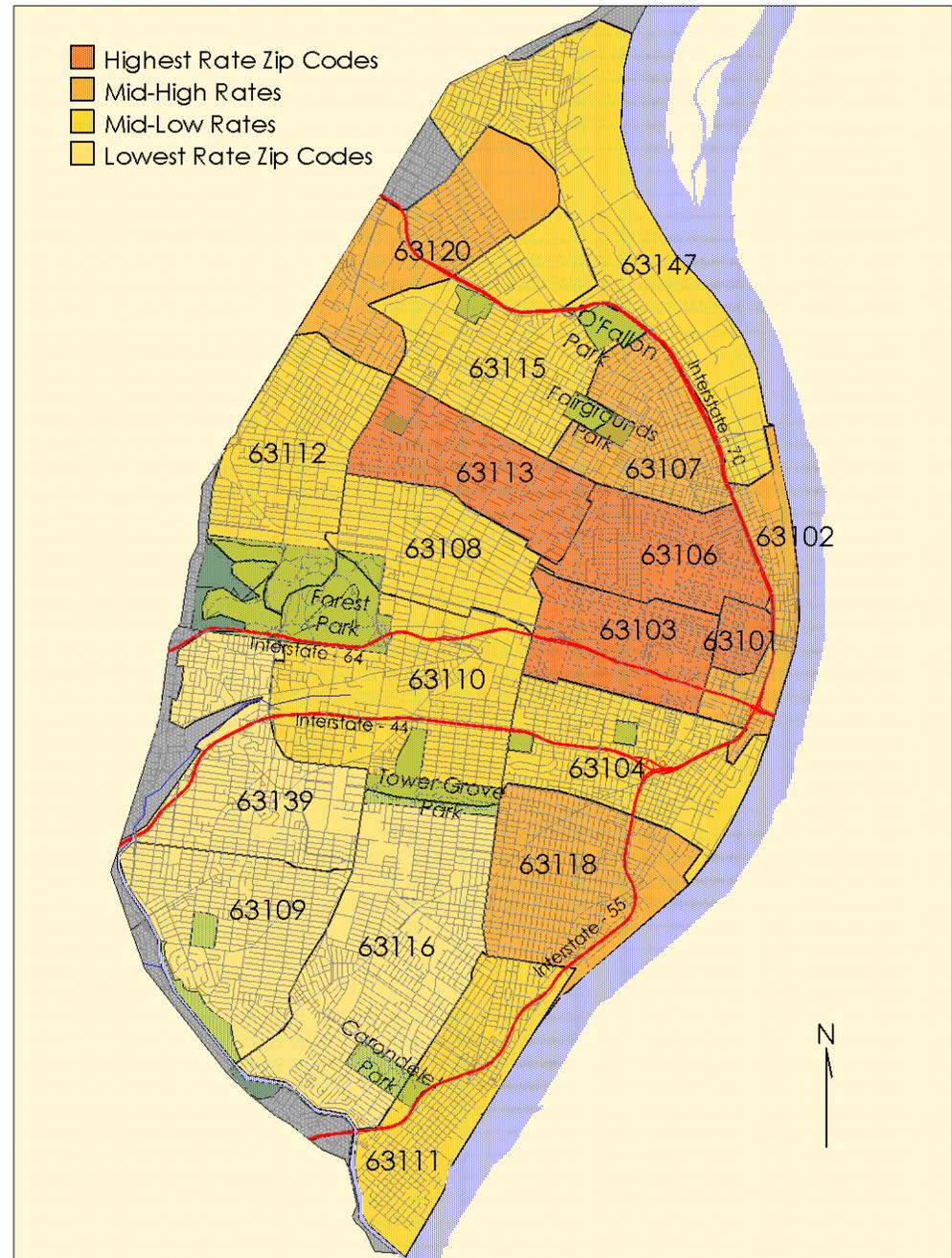
Epidemiological studies, community health surveys, disease surveillance and health education programs

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation

## Hospital Admissions / 1000 population - 2000

Stl City	136.8
Stl County	112.2
Stl City/Co	118.1
MO	115.0
US	116.3
<b>Stl City Black</b>	<b>161.8</b>
Stl City White	107.2
Stl Co Black	170.0
Stl Co White	98.1
Stl City/Co Black	163.9
Stl City/Co White	99.2
MO Black	146.6
MO White	108.8
US Black	n/a
US White	n/a



h o s p i t a l   a d m i s s i o n   r a t e s

# 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 2000.

## Public Health Implications

Hospital admission rates for avoidable hospital conditions 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.

## Saint Louis Rates and Comparative Info

The avoidable hospitalization rate in Saint Louis City is 1.7 times the Missouri rate. U.S. comparative information are not available. The ZIP Codes with the highest hospital admission rates are 63103, 63106 and 63107. The ZIP Codes with the lowest rates are 63109, 63139 and 63116.

Zip Code (ZCTA)	Avoidable Hospitalization Rates per 1,000 Hospitalizations	Map Quartile
63103	64.6	4
63106	36.1	4
63107	29.8	4
63113	28.6	3
63115	25.8	3
63147	24.7	3
63118	24.3	3
63120	23.4	3
63112	23.2	3
63111	21.6	2
63104	21.3	2
63108	17.8	2
63110	15.9	2
63116	14.4	1
63139	9.5	1
63109	8.8	1
63101*	-	
63102*	-	

## Black/white Disparity

The averaged rate in the Saint Louis City African-American population is 2.0 times that seen in the Saint Louis City white population. U.S. comparative data are not available but comparing rates to the Missouri population, the averaged death rate in Saint Louis City African Americans is 1.2 times that seen in the Missouri African-American population.

**Disparity Ratio: 2.0**

## Focus Group Comments/Concerns

“I have a concern about the closing of clinics, closing of Regional and possibly of the clinics, the neighborhood clinics.” “There should be something there for the older, senior citizens and the younger people who need it, to have a way to take care of themselves.”

## Potential Public Health Interventions

Assist in access to primary care through outreach services

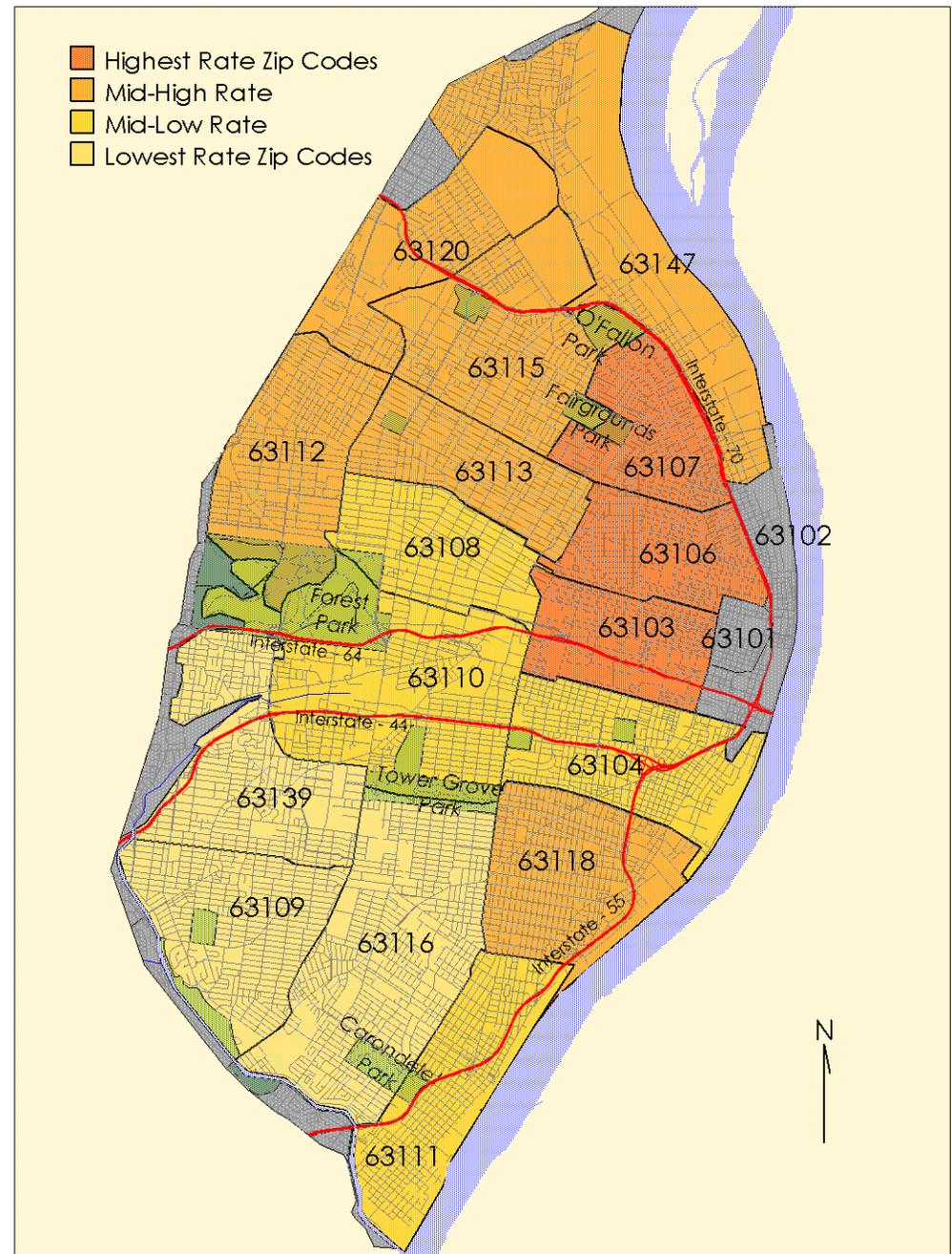
Epidemiological studies to determine primary avoidable conditions and appropriate health education programs

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation

## Avoidable Hospitalizations / 1000 population 2000

Stl City	27.2
Stl County	13.3
Stl City/Co	16.7
MO	16.1
US	n/a
<b>Stl City Black</b>	<b>34.9</b>
<b>Stl City White</b>	<b>17.0</b>
Stl Co Black	29.1
Stl Co White	9.8
Stl City/Co Black	32.0
Stl City/Co White	10.9
MO Black	29.0
MO White	14.2
US Black	n/a
US White	n/a



avoidable hospitalizations

# 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 2000.

## 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.

## Saint Louis Rates and Comparative Info

The emergency room visit rate in Saint Louis City is 1.43 times the Missouri rate and 1.13 times the U.S. rate. The ZIP Codes with the highest hospital admission rates are 63106, 63101\* and 63103. The ZIP Codes with the lowest rates are 63109, 63139 and 63116.

Zip Code (ZCTA)	ED Visit Rates per 1,000	
	Population (Age- adjusted)	Map Quartile
63106	739.0	4
63101*	717.8	4
63103	707.9	4
63113	656.0	4
63102*	608.3	4
63120	596.1	3
63118	565.4	3
63107	564.8	3
63115	531.0	3
63112	507.7	3
63147	458.7	2
63110	451.4	2
63104	427.7	2
63111	417.4	2
63108	352.4	2
63116	296.5	1
63139	218.8	1
63109	183.3	1

## Black/white Disparity

The averaged emergency room visit rate in the Saint Louis City African-American population is 2.2 times that seen in the Saint Louis City white population. When comparing rates to the U.S. population, the averaged emergency room visit rate in Saint Louis City African Americans is about the same as that seen in the U.S. African-American population.

**Disparity Ratio: 2.2**

## Focus Group Comments/Concerns

“People don’t know how to access health services which are available or they don’t follow-up.” “Misuse of emergency system.” Hospitals are primary care providers-the emergency rooms are packed.”

## Potential Public Health Interventions

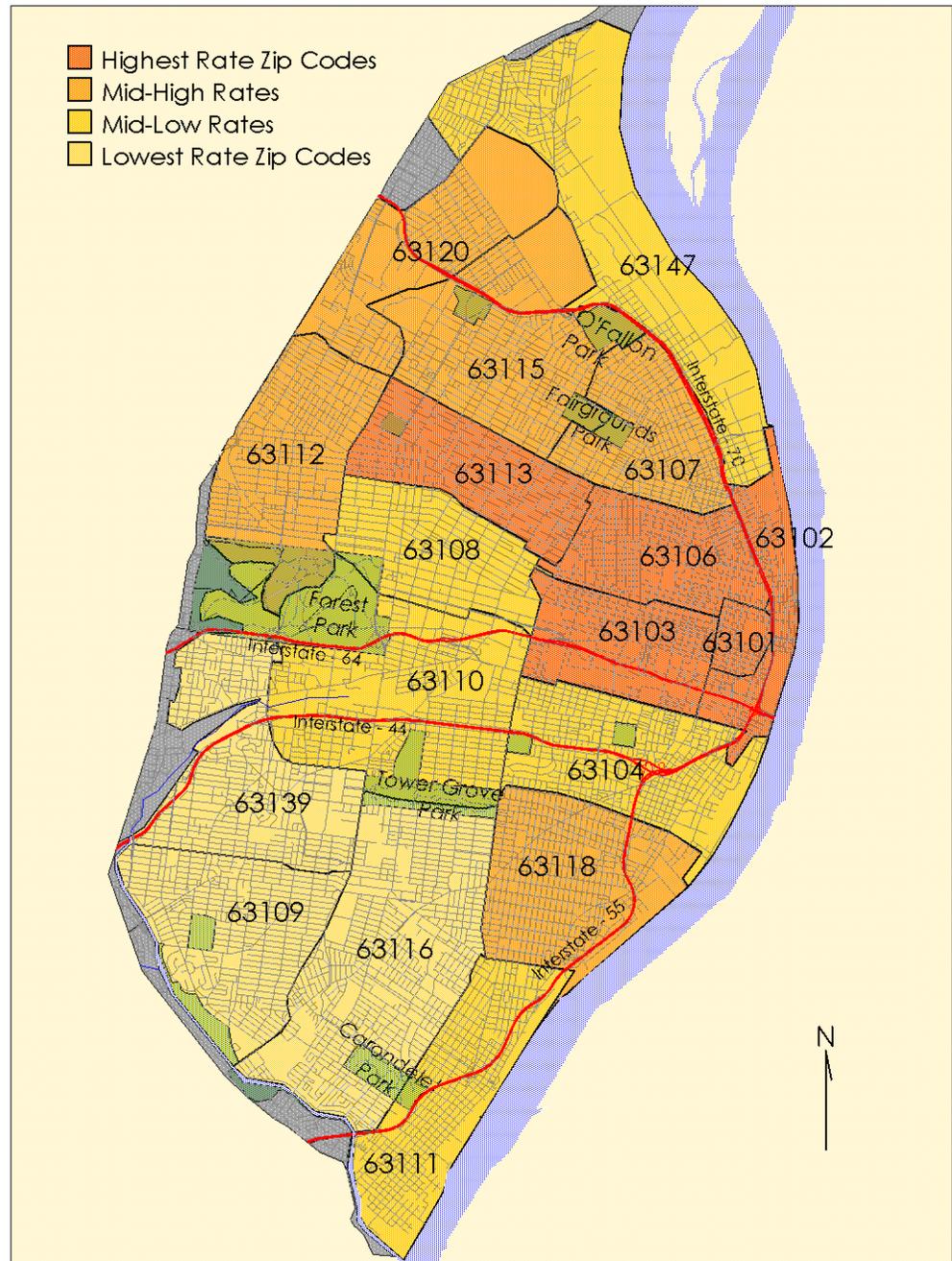
Epidemiological studies to determine primary care access and other programmatic needs

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation

## Emergency Room Visits / 1000 population - 2000

Stl City	445.8
Stl County	254.6
Stl City/Co	304.1
MO	311.7
US	394.0
<b>Stl City Black</b>	<b>585.3</b>
Stl City White	270.7
Stl Co Black	516.0
Stl Co White	194.2
Stl City/Co Black	549.0
Stl City/Co White	206.3
MO Black	504.0
MO White	280.3
US Black	617.0
US White	370.0



emergency room visits

# medicaid MC+ eligible

## Definition

MC+ refers to the statewide (Missouri) assistance program for low income families, pregnant women, children and uninsured parents. MC+ recipients receive their care through either the Fee-for-Service (FFS) delivery system or the Managed Care delivery system, depending on where the individual lives in Missouri. Saint Louis City residents receive their care through the Managed Care delivery system. MC+ for Kids is a subgroup of MC+ and refers to health insurance for uninsured children funded through the State Children's Health Insurance Program (SCHIP).

## Public Health Implications

"MC+ 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.

## Saint Louis Rates and Comparative Info

In 2002, the Saint Louis City MC+ "eligible" percentage was 2 times that seen in the State of Missouri in the same time period. The ZIP Code with the percentage of most concern is 63106. The ZIP Codes with the most favorable percentages are 63109 and 63139.

Zip Code (ZCTA)	Percent of Population Eligible for MC+	Map Quartile
63106	51.4%	4
63101*	45.6%	4
63107	38.5%	3
63120	37.1%	3
63118	35.9%	3
63113	34.9%	3
63115	30.9%	3
63112	29.4%	3
63104	28.1%	2
63147	25.2%	2
63111	25.0%	2
63110	24.6%	2
63116	19.4%	2
63103	12.8%	1
63108	9.3%	1
63139	6.4%	1
63109	6.1%	1
63102*	3.5%	1

## Black/white Disparity

In 2002, the African-American population in Saint Louis City experienced an "eligible" percentage that is 5.6 times that in the white population in Saint Louis City. The Saint Louis City African-American community has an "eligible" percentage that is 1.2 times that of the Missouri African American percentages.

**Disparity Ratio: 5.6**

## Focus Group Comments/Concerns

"Many Medicaid eligibles are not enrolled in the system." "Half of the kids eligible for Medicaid aren't enrolled".

## Potential Public Health Interventions

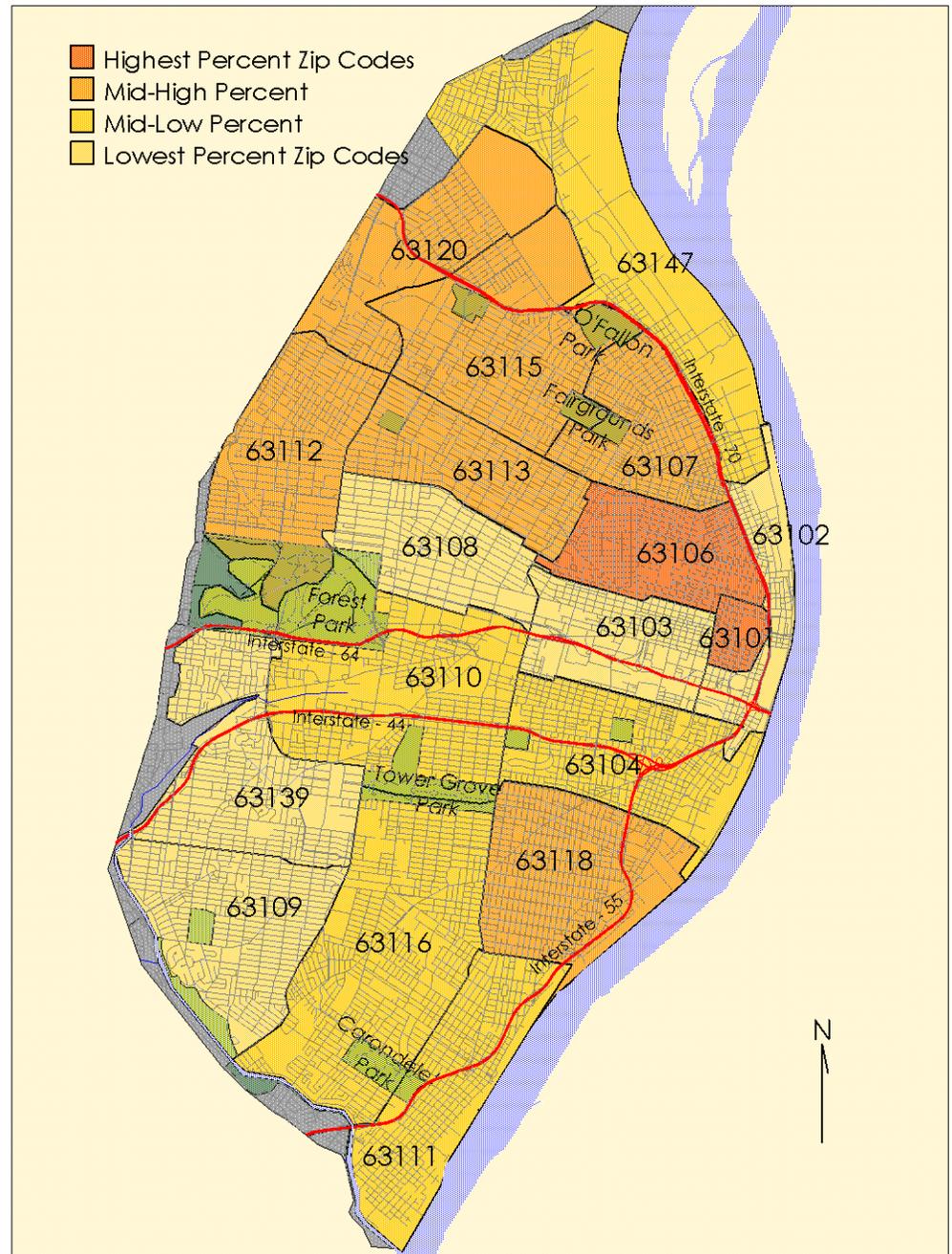
Assistance with the identification and enrollment for Medicaid "eligibles" with emphasis on children

## Data Source

Missouri Department of Social Services, Research and Evaluation Unit

Medicaid MC+ Eligible  
% of population September 2002

Stl City	24.2
Stl County	7.9
Stl City/Co	12.0
MO	12.1
US	n/a
<b>Stl City Black</b>	<b>37.5</b>
Stl City White	6.7
Stl Co Black	26.9
Stl Co White	3.0
Stl City/Co Black	32.0
Stl City/Co White	3.6
MO Black	31.3
MO White	9.6
US Black	n/a
US White	n/a



medicaid MC+ eligible

# prenatal care

## Definition

Prenatal care begins when a physician or other health professional first examines and/or counsels the pregnant woman. 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. U.S. data are averaged for the time period 1999 through 2000.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City averaged percent, from 1999 through 2001, is 1.5 times the Missouri averaged rate and 1.12 times the U.S. averaged rate. In 2002, over 800 pregnant women did not receive 1st trimester prenatal care in the City of Saint Louis out of 5,145 live births. Of those 800, 141 didn't receive any prenatal care. The percentages of most concern are in 63113, 63120 and 63147. The most favorable percentages are in 63109 and 63139.

Zip Code (ZCTA)	Percent of Live Births without 1st Trimester Prenatal Care	Map Quartile
63102*	45.5%	4*
63113	27.1%	4
63120	26.1%	4
63147	25.5%	4
63106	23.8%	4
63107	23.7%	4
63115	22.5%	4
63112	21.1%	3
63118	21.0%	3
63111	20.2%	3
63104	18.7%	3
63110	18.6%	3
63103	16.9%	3*
63108	16.5%	3
63116	12.3%	2
63101*	12.1%	2*
63139	6.3%	1
63109	4.5%	1

## Black/white Disparity

The averaged African-American percent is 2.6 times the white averaged percent in Saint Louis City. The African-American rate for Saint Louis City is slightly lower than the averaged African-American percent for the U.S.

**Disparity Ratio: 2.6**

## Focus Group Comments/Concerns

"The state and availability of prenatal care for mothers is unsatisfactory to many residents." "Lack of prenatal care is at a crisis level."

## Potential Public Health Interventions

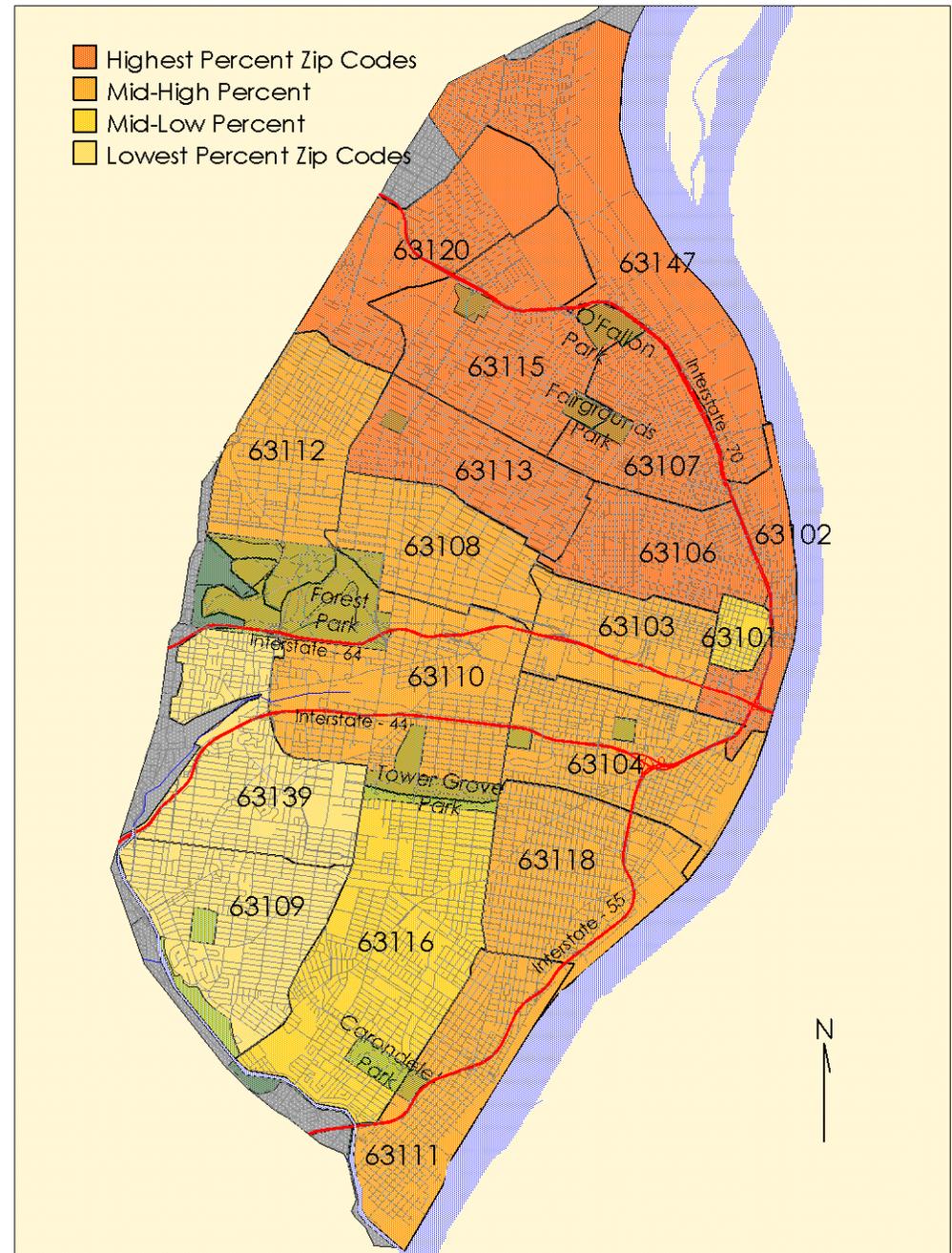
Outreach services for pregnant women including educational programs

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Birth Mothers - % No 1st Trimester Prenatal Care 99-01 average

Stl City	18.3%
Stl County	8.0%
Stl City/Co	11.1%
MO	12.2%
US	16.3%
<b>Stl City Black</b>	<b>23.7%</b>
Stl City White	9.2%
Stl Co Black	18.3%
Stl Co White	4.2%
Stl City/Co Black	21.0%
Stl City/Co White	5.1%
MO Black	20.9%
MO White	10.5%
US Black	24.7%
US White	14.6%



prenatal care

# low birth weight

## 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. The U.S. data are averaged for the time period 1999 through 2000.

## Public Health Implications

Low-birth weight infants are at 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.

## Saint Louis Rates and Comparative Info

The average 1999 through 2001 low-birth weight rate in Saint Louis City is about 1.5 times the averaged rates for Missouri and the U.S. In 2002, about 640 babies were born weighing less than 2,500 grams in the City of Saint Louis out of about 5,145 births. This represented 12.4% of all births in 2002. The ZIP Codes with rates of most concern are 63107, 63120 and 63112. The most favorable rates are in 63109, 63139 and 63116.

Zip Code (ZCTA)	Percent of Live Births Weighing less than 5.5 Lbs	Map Quartile
63102*	27.3%	4*
63103	21.3%	4*
63101*	17.2%	4*
63107	15.8%	4
63120	15.6%	4
63112	15.4%	4
63113	14.1%	4
63147	13.3%	3
63115	12.7%	3
63118	12.6%	3
63106	12.4%	3
63110	12.2%	3
63108	11.8%	3
63111	11.4%	3
63104	11.2%	3
63116	8.0%	1
63139	7.7%	1
63109	5.9%	1

## Black/white Disparity

The averaged 1999-2001 low-birth weight rate for African-American births in Saint Louis City is 1.9 times the averaged rate for white births in Saint Louis City. The averaged rate for African-American low-birth weight babies in Saint Louis City is similar to the averaged African-American rates for Missouri and U.S.

**Disparity Ratio: 1.9**

## Focus Group Comments/Concerns

"Prenatal care is a very high priority."  
 "Prenatal care through churches in specific ZIP Codes."  
 "We are seeing a real serious issue with low-birth weight babies."  
 "Lack of prenatal care is at a crisis level."

## Potential Public Health Interventions

Assisting in enrolling pregnant women in WIC and food stamp programs

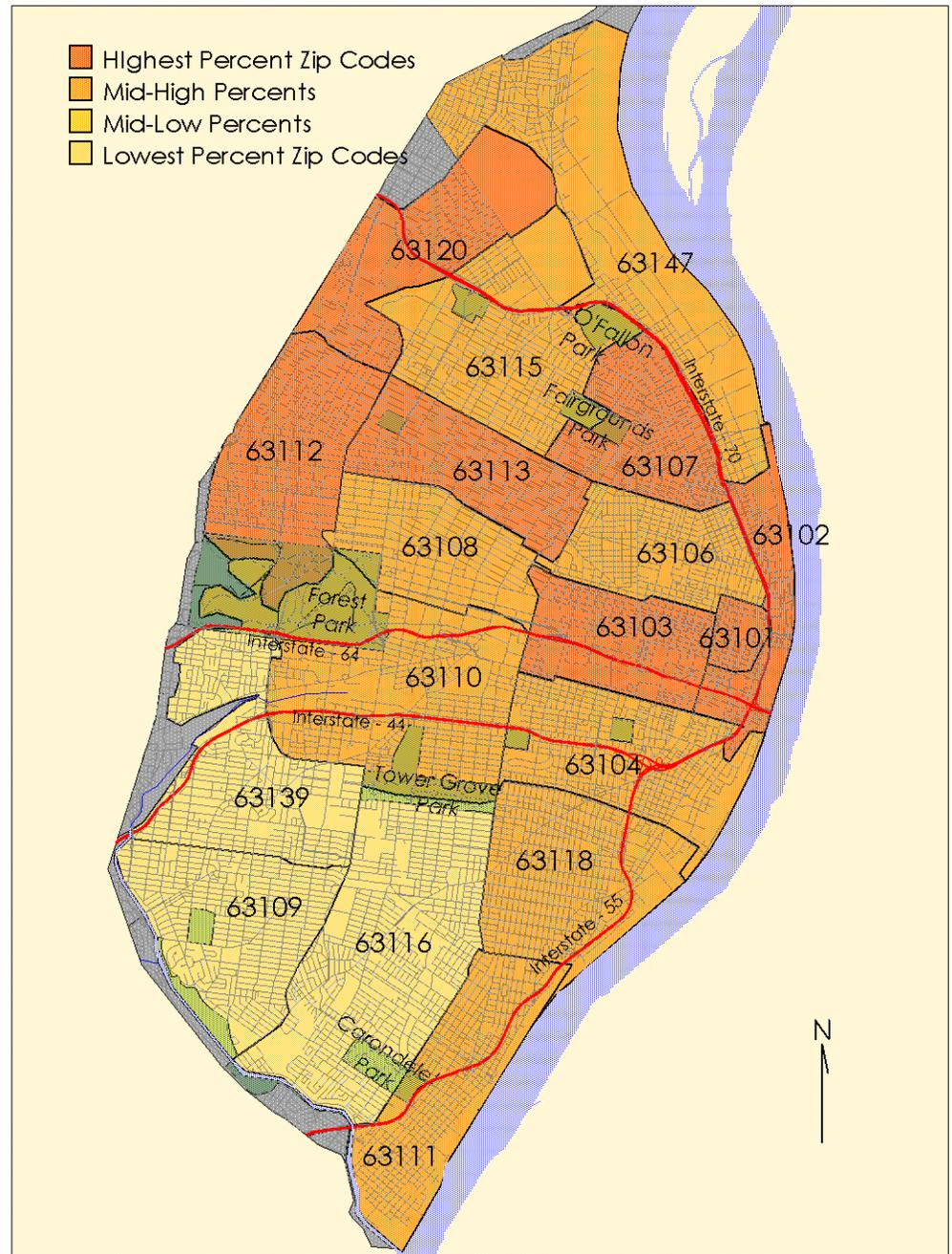
Identifying pregnant women and referring to prenatal care services.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Low Birth Weight <2,500 grams  
 % of live births 99-01 average

Stl City	11.6%
Stl County	8.2%
Stl City/Co	9.2%
MO	7.7%
US	7.6%
<b>Stl City Black</b>	<b>14.3%</b>
Stl City White	7.5%
Stl Co Black	12.9%
Stl Co White	6.4%
Stl City/Co Black	13.6%
Stl City/Co White	6.5%
MO Black	13.2%
MO White	6.7%
US Black	13.0%
US White	6.6%



low birth weight

# teen pregnancy 10 to 17

## Definition

The teen pregnancy 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. U.S. data are averaged for the time period 1999 through 2000.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for 1999 through 2001 is about 1.8 times the averaged Missouri or the U.S. rate. In 2002, there were 363 babies born to teens less than 18 years of age in the City of Saint Louis. The ZIP Codes with rates of most concern are 63113, 63115 and 63107. The ZIP Codes with the most favorable rates are 63109 and 63139.

Zip Code (ZCTA)	Percent of Live Births to Women Less Than 18	Map Quartile
63102*	18.2%	4*
63113	13.1%	4
63115	11.2%	4
63107	11.1%	4
63118	10.9%	4
63112	10.5%	4
63106	9.2%	3
63110	8.7%	3
63120	8.7%	3
63147	8.7%	3
63104	6.7%	2
63108	5.9%	2
63103	5.6%	2*
63111	5.6%	2
63116	5.1%	2
63101*	3.4%	1*
63139	1.6%	1
63109	1.3%	1

## Black/White Disparity

The averaged teen pregnancy rate in 10 to 17 year old African Americans in Saint Louis City is 3.9 times the averaged rate for white teens in Saint Louis City.

**Disparity Ratio: 3.9**

## Focus Group Comments/Concerns

"Teen pregnancy rate is almost three times the rate as the rest of the state." "Lack of sex education in the schools." "More education with males about their responsibilities."

## Potential Public Health Interventions

Programs that provide appropriate, accurate sexual and reproductive health education and abstinence programs

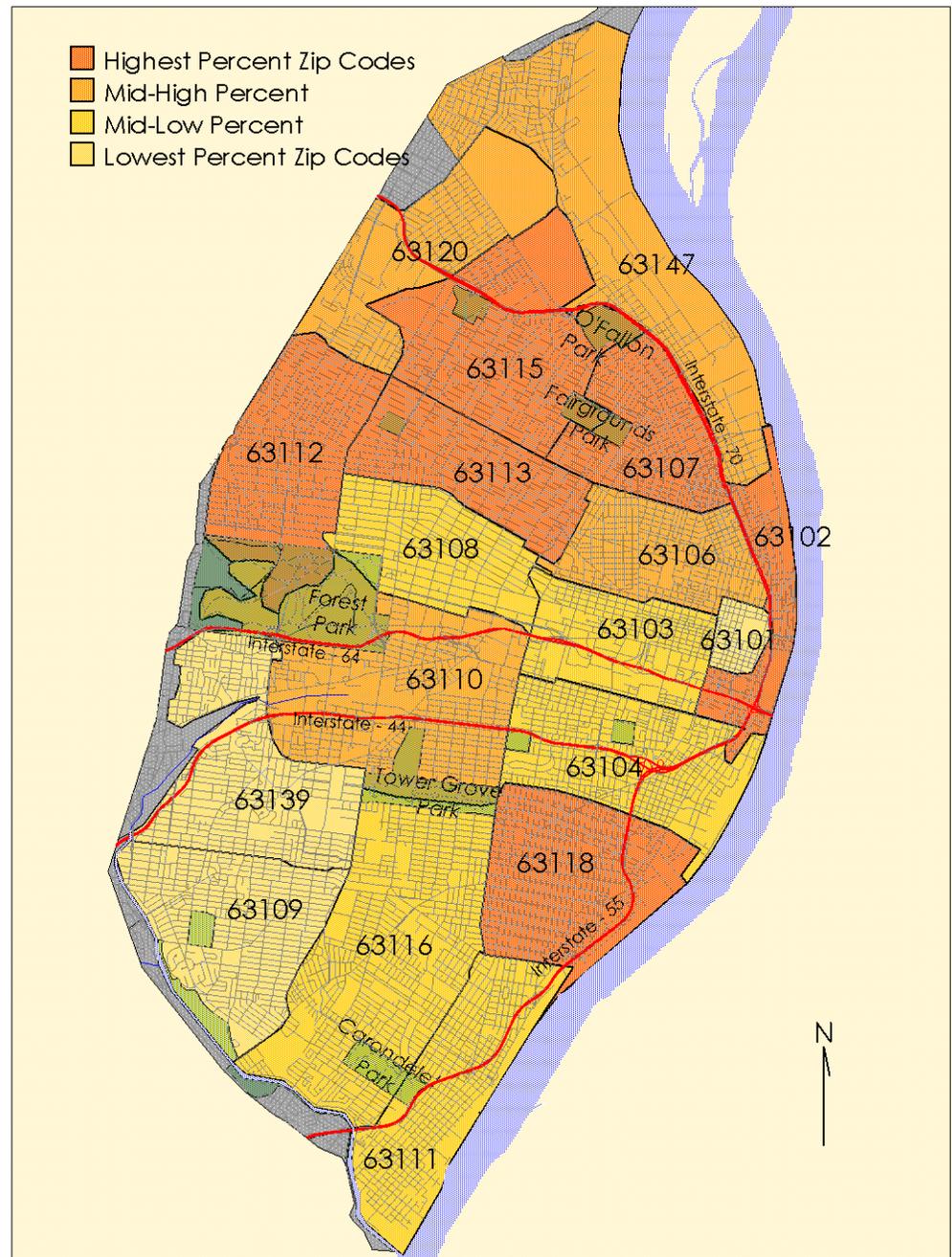
Studying the epidemiology of teen pregnancy to determine interventions specific to the Saint Louis teen population

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Teen Pregnancies Ages 10-17 % of live births 99-01 average

Stl City	7.5%
Stl County	2.9%
Stl City/Co	4.3%
MO	4.3%
US	4.1%
<b>Stl City Black</b>	<b>10.5%</b>
Stl City White	2.7%
Stl Co Black	7.2%
Stl Co White	1.4%
Stl City/Co Black	8.9%
Stl City/Co White	1.7%
MO Black	8.9%
MO White	3.4%
US Black	7.8%
US White	3.5%



teen pregnancy 10 to 17

# teen pregnancy 10 to 14

## Definition

This teen pregnancy 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. U.S. data are averaged for the time period 1999 through 2000.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for 1999 through 2001 is 3.4 times the averaged Missouri rate. In 2002, there were 32 babies born to mothers between 10 and 14 years of age in the City of Saint Louis. The ZIP Codes with rates of most concern are 63113 and 63110. The ZIP Codes with the most favorable rates are 63109 and 63111.

Zip Code (ZCTA)	Percent of Live Births to Mothers <15 Yrs Old	Map Quartile
63102*	9.1%	4*
63113	1.6%	4
63110	1.3%	4
63103	1.1%	3*
63115	1.1%	3
63108	0.8%	3
63118	0.8%	3
63112	0.7%	2
63107	0.6%	2
63104	0.4%	2
63120	0.4%	2
63147	0.4%	2
63106	0.3%	1
63116	0.2%	1
63139	0.2%	1
63111	0.1%	1
63101*	0.0%	1*
63109	0.0%	1

## Black/white Disparity

The Saint Louis City African-American average rate for the years 1999 through 2001 is 9.7 times the averaged white rate in Saint Louis in the same time period.

**Disparity Ratio: 9.7**

## Focus Group Comments/Concerns

"It was remarkable to hear teens in the group express their views on teenage pregnancy. Some are as appalled as the adults are about the fact that children are having children."

## Potential Public Health Interventions

Programs that provide appropriate, accurate sexual and reproductive health education and abstinence programs in the schools

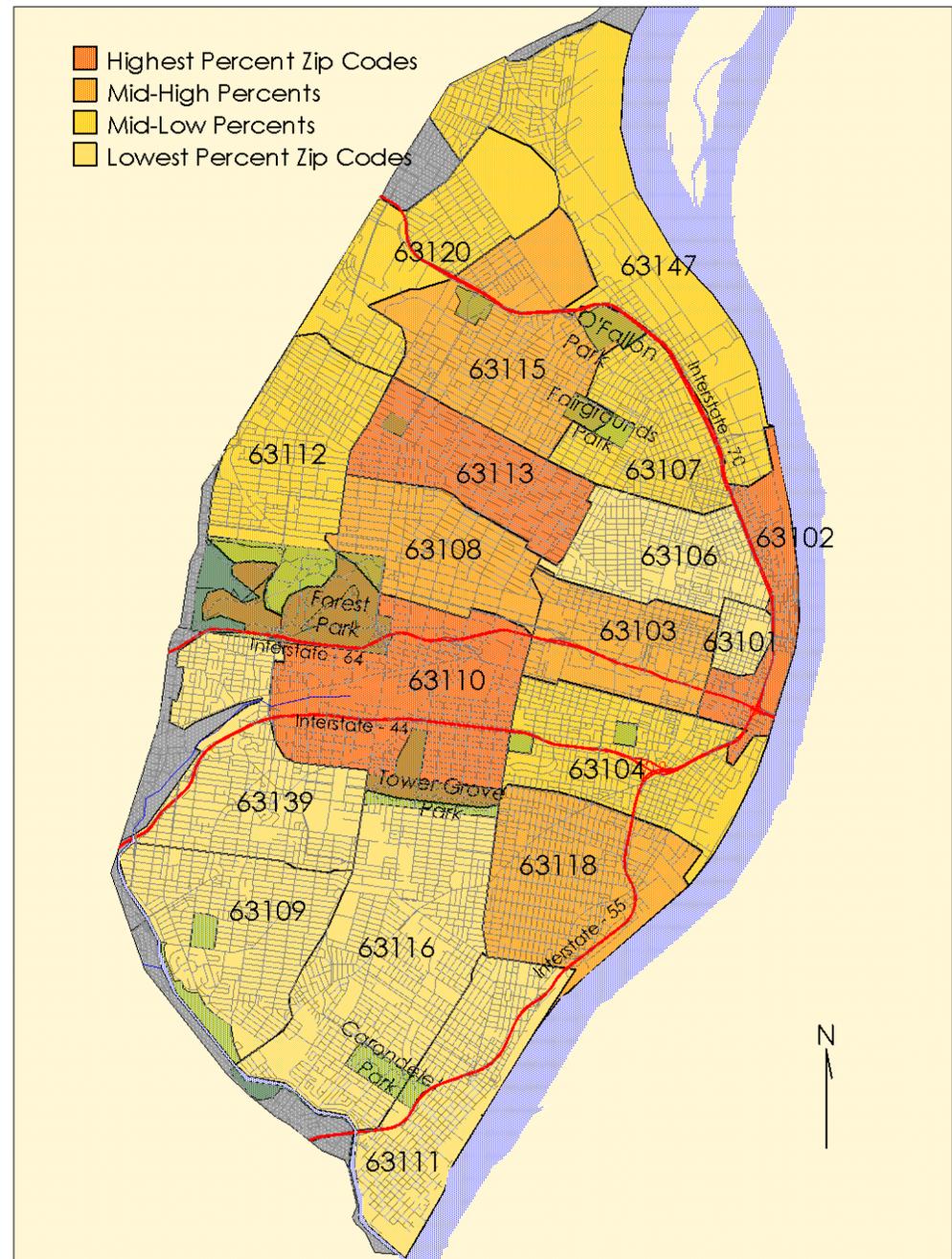
Studying the epidemiology of teen pregnancy to determine interventions specific to the Saint Louis City teen population

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Teen Pregnancies Ages 10-14 % of live births 99-01 average

Stl City	0.58
Stl County	0.13
Stl City/Co	0.26
MO	0.17
US	0.21
<b>Stl City Black</b>	<b>0.87</b>
Stl City White	0.09
Stl Co Black	0.39
Stl Co White	0.03
Stl City/Co Black	0.63
Stl City/Co White	0.04
MO Black	0.62
MO White	0.10
US Black	0.61
US White	0.14



teen pregnancy 10 to 14

# infant mortality

## 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. U.S. data are averaged for the time period 1999 through 2000.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for 1999 through 2001 is 1.7 times the averaged Missouri rate and 1.8 times the U.S. rate. In 2002, there were 71 infant deaths in the City of Saint Louis out of 5,145 births. The ZIP Codes with rates of most concern are 63107, 63120 and 63112. The ZIP Codes with the most favorable rates are 63139 and 63109.

Zip Code (ZCTA)	Infant Mortality Rates per 1,000 Live Births	Map Quartile
63102*	90.9	4*
63107	22.5	4
63120	19.1	4*
63112	18.6	4*
63101*	17.2	3*
63115	17.1	3
63113	16.1	3*
63147	15.9	3*
63110	15.8	3*
63108	15.2	3*
63106	13.8	3*
63118	12.3	3
63103	11.2	2*
63111	9.8	2*
63116	9.5	2
63104	8.8	2*
63109	4.2	1*
63139	1.1	1*

## Black/white Disparity

The Saint Louis City African-American average rate for the years 1999 through 2001 is 3.1 times the Saint Louis averaged white rate. The Saint Louis City African-American average rate for the years 1999 through 2001 is about the same as the averaged Missouri rate but 1.2 times the U.S. African-American rate.

**Disparity Ratio: 3.1**

## Focus Group Comments/Concerns

“Look at infant mortality rates – we need prenatal care not just NICU beds.”

## Potential Public Health Interventions

Programs to identify women at risk and educate them to healthy behaviors during and after pregnancy including nutrition and smoking cessation

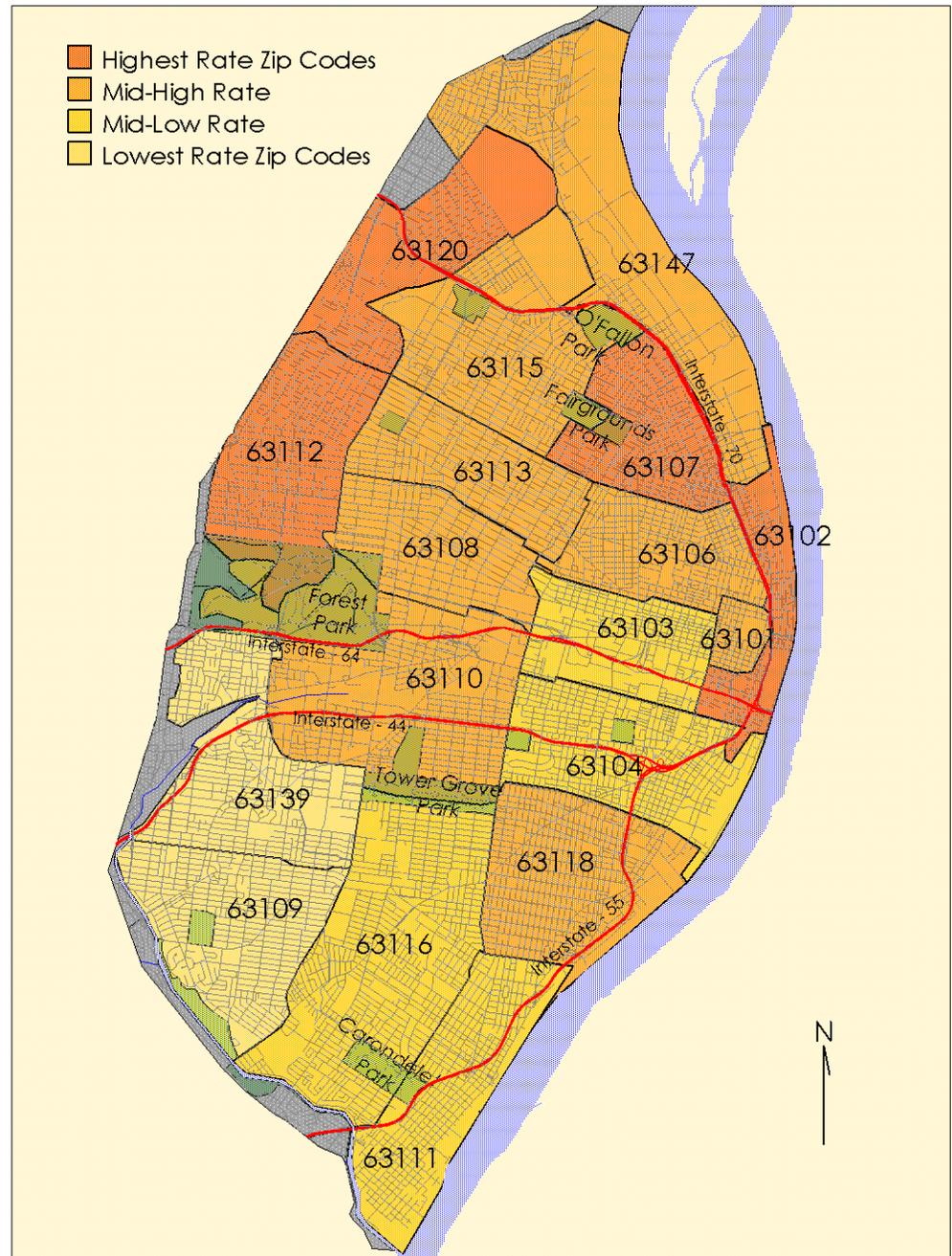
Assistance in accessing prenatal care

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data.

## Infant Mortality / 1000 live births 99-01 average

Stl City	12.8
Stl County	7.2
Stl City/Co	8.8
MO	7.4
US	7.0
<b>Stl City Black</b>	<b>17.3</b>
Stl City White	5.6
Stl Co Black	15.6
Stl Co White	4.0
Stl City/Co Black	16.5
Stl City/Co White	4.3
MO Black	16.8
MO White	5.8
US Black	14.4
US White	5.8



infant mortality

# out-of-wedlock births

## 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. U.S. comparative data are for 2001.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for 1999 through 2001 is 1.9 times the averaged Missouri and U.S. rates. In 2002 there were 3,370 babies born out-of-wedlock in the City of Saint Louis. The ZIP Codes with rates of most concern are 63106, 63120 and 63113. The ZIP Codes with the most favorable rates are 63109 and 63139.

ZIP Code	Out-of-Wedlock Births	Map Quartile
63106	91.5%	4
63120	89.5%	4
63113	89.0%	4
63107	87.3%	4
63115	85.2%	4
63112	80.5%	4
63147	78.9%	4
63101*	76.9%	4*
63118	75.0%	4
63104	74.1%	4
63110	71.7%	3
63102*	66.7%	3*
63111	66.1%	3
63103	63.6%	3
63108	59.2%	3
63116	47.2%	2
63139	26.2%	1
63109	18.6%	1

## Black/white Disparity

The Saint Louis City African-American average rate for the years 1999 through 2001 is 2.6 times the Saint Louis averaged white rate. The Saint Louis City African-American average rate for the years 1999 through 2001 is 1.12 times the averaged African-American rate for Missouri.

**Disparity Ratio: 2.6**

## Focus Group Comments/Concerns

“I think that our kids don’t have role models...The family unit, the structure, is all in itself, is kind of broken down.” “Marital status vs. single parent families vs. income - multiple problems.”

## Potential Public Health Interventions

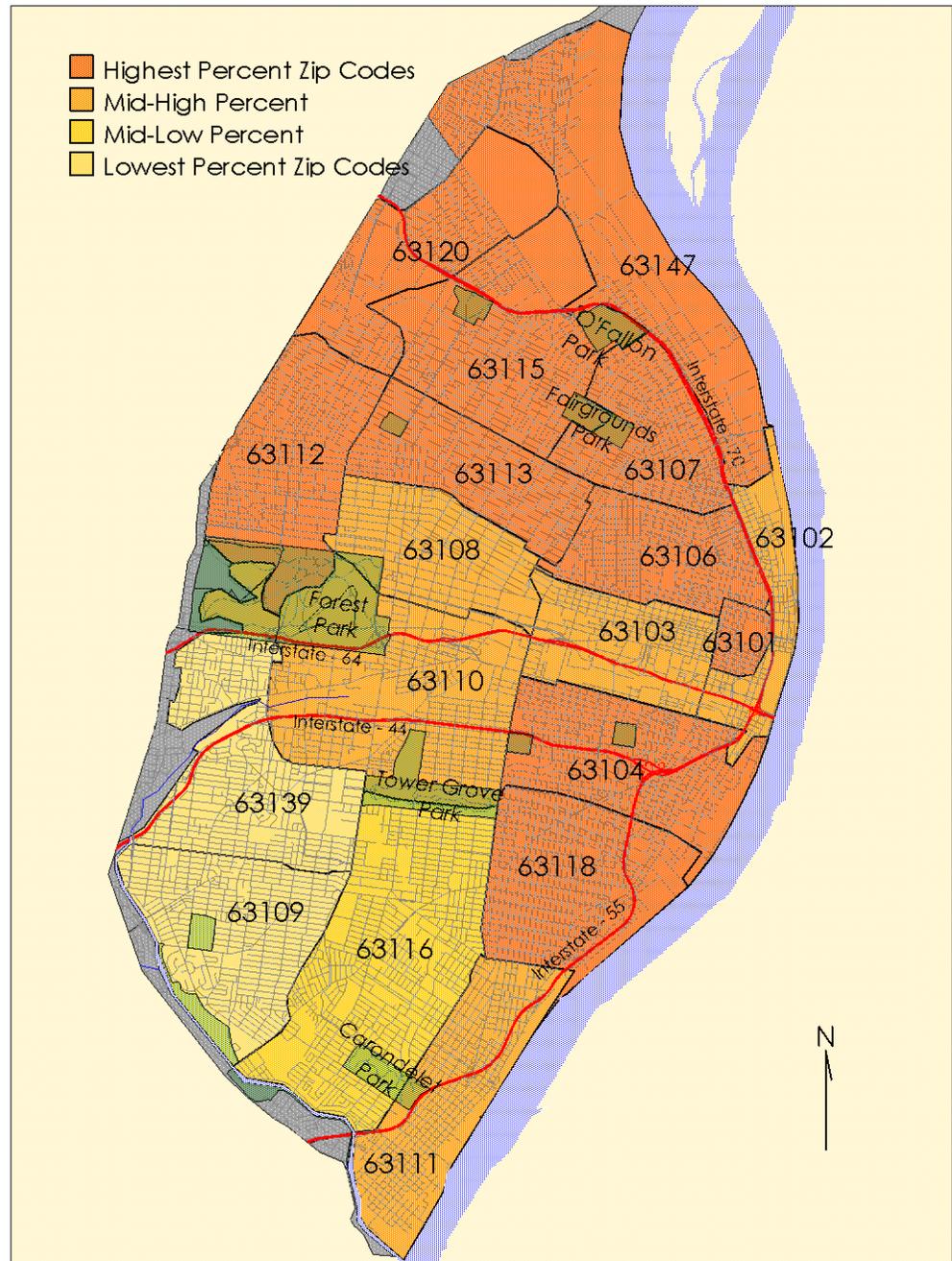
Epidemiological studies to determine populations at risk in order to develop appropriated programs and collaboration efforts

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Out of Wedlock Births  
% of live births 99-01 average

Stl City	66.1
Stl County	30.3
Stl City/Co	41.0
MO	34.5
US	34.0
<b>Stl City Black</b>	<b>85.9</b>
Stl City White	32.6
Stl Co Black	69.5
Stl Co White	16.7
Stl City/Co Black	77.7
Stl City/Co White	19.5
MO Black	76.8
MO White	27.1
US Black	68.2
US White	28.5



out-of-wedlock births

# teen abortions 10 to 17

## Definition

The teen abortion ratio in this analysis is the number of abortions to teens 10 through 17 years of age per 1000 total live births to teens 10 through 17 years of age. Saint Louis City and Missouri data are averaged for the time period 1999 and 2000.

## Public Health Implications

The problem of teen abortions relates back 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.

## Saint Louis Rates and Comparative Info

The Missouri average rate for the time period 1999 through 2001 is just 5% higher than the Saint Louis City averaged rate for the same time period. In 2001, there were 90 abortions in the 10 to 17 year old age group in the City of Saint Louis. The ZIP Code with the rate of most concern is 63139. The ZIP Codes with the lowest rates are 63110 and 63116.

ZIP Code	Teen Abortions Ages 10- 17	Map Quartile
63139	571.4	4*
63106	346.9	3
63120	325.0	2*
63113	308.8	2
63108	291.7	2*
63147	289.5	2
63115	273.7	2
63109	230.8	2*
63111	189.2	1*
63107	188.4	1
63118	139.7	1
63104	139.5	1
63112	139.2	1
63116	138.9	1*
63110	114.8	1*
63101*	0.0	1*
63102*	0.0	1*
63103	0.0	1*

## Black/white Disparity

The Saint Louis City average rate for the years 1999 through 2001 in the African-American population is 1.09 times the Saint Louis City averaged rate for the white population. The Missouri African-American average rate for the years 1999 through 2001 is 1.17 times the Saint Louis City averaged African-American rates. In the same time period, the Missouri white population averaged rate is 1.09 times the Saint Louis City white population averaged rate.

**Disparity Ratio: 1.09**

## Focus Group Comments/Concerns

"...the issue of sex and teenage pregnancy is related to the general lack of opportunities for the teenagers outside their school activities as well as failed parental care."

## Potential Public Health Interventions

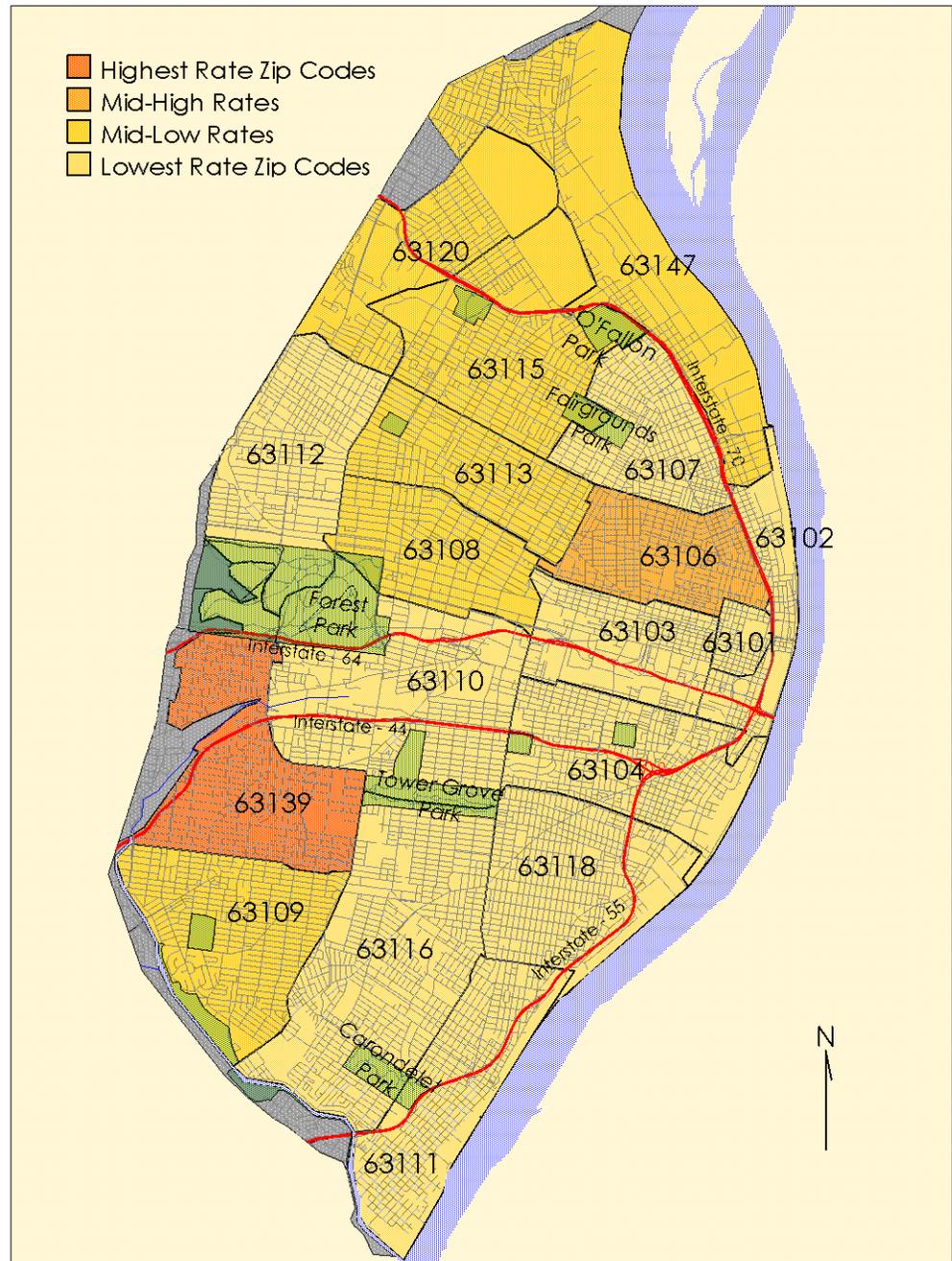
Epidemiological studies to determine populations at risk in order to develop programs and policies and collaboration with appropriate agencies.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Teen Abortions Ages 10-17  
ratio/1000 live births 10-17 99-01 average

Stl City	188.5
Stl County	N/A
Stl City/Co	N/A
MO	197.0
US	N/A
Stl City Black	185.4
Stl City White	170.1
Stl Co Black	N/A
Stl Co White	N/A
Stl City/Co Black	N/A
Stl City/Co White	N/A
MO Black	217.6
MO White	185.2
US Black	N/A
US White	N/A



teen abortions 10 to 17

# birth - medicaid

## Definition

Birth mother Medicaid participation is mothers who were Medicaid program participants during pregnancy. The rate is presented as the number of birth mothers that are Medicaid participants as a percent of total live births. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001.

## 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 and WIC participation can be used to determine possible effects of these interventions on the adequacy of preventive care and pregnancy outcomes.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for the time period 1999 through 2001 is 1.44 times the averaged Missouri rate. In 2002 in the City of Saint Louis, there were 3,200 birth mothers that were Medicaid participants out of 5,145 births. The ZIP Codes with the rates of most concern are 63106, 63107 and 63120. The ZIP Codes with the most favorable rates are 63109 and 63139.

Zip Code (ZCTA)	Percent of Live Births to Medicaid Insured	Map Quartile
63106	80.0%	4
63107	77.6%	4
63120	77.1%	4
63113	75.9%	4
63118	73.0%	4
63115	72.7%	4
63112	68.3%	4
63147	68.1%	4
63111	67.4%	4
63102*	63.6%	3*
63104	61.4%	3
63110	60.3%	3
63103	59.6%	3*
63101*	56.9%	3*
63108	47.8%	2
63116	46.1%	2
63139	23.1%	1
63109	15.7%	1

## Black/white Disparity

The Saint Louis City African-American average rate for the years 1999 through 2001 is 2.3 times the Saint Louis City white averaged rate. The Saint Louis City African-American average rate for the years 1999 through 2001 is 1.1 times the averaged Missouri African-American rate.

**Disparity Ratio: 2.3**

## Focus Group Comments/Concerns

“Almost half the kids in the city are on public assistance and reform will have serious impacts on this population – particularly in the city where there are no jobs.” “Medicaid and uninsured population and poverty that accompanies that.”

## Potential Public Health Interventions

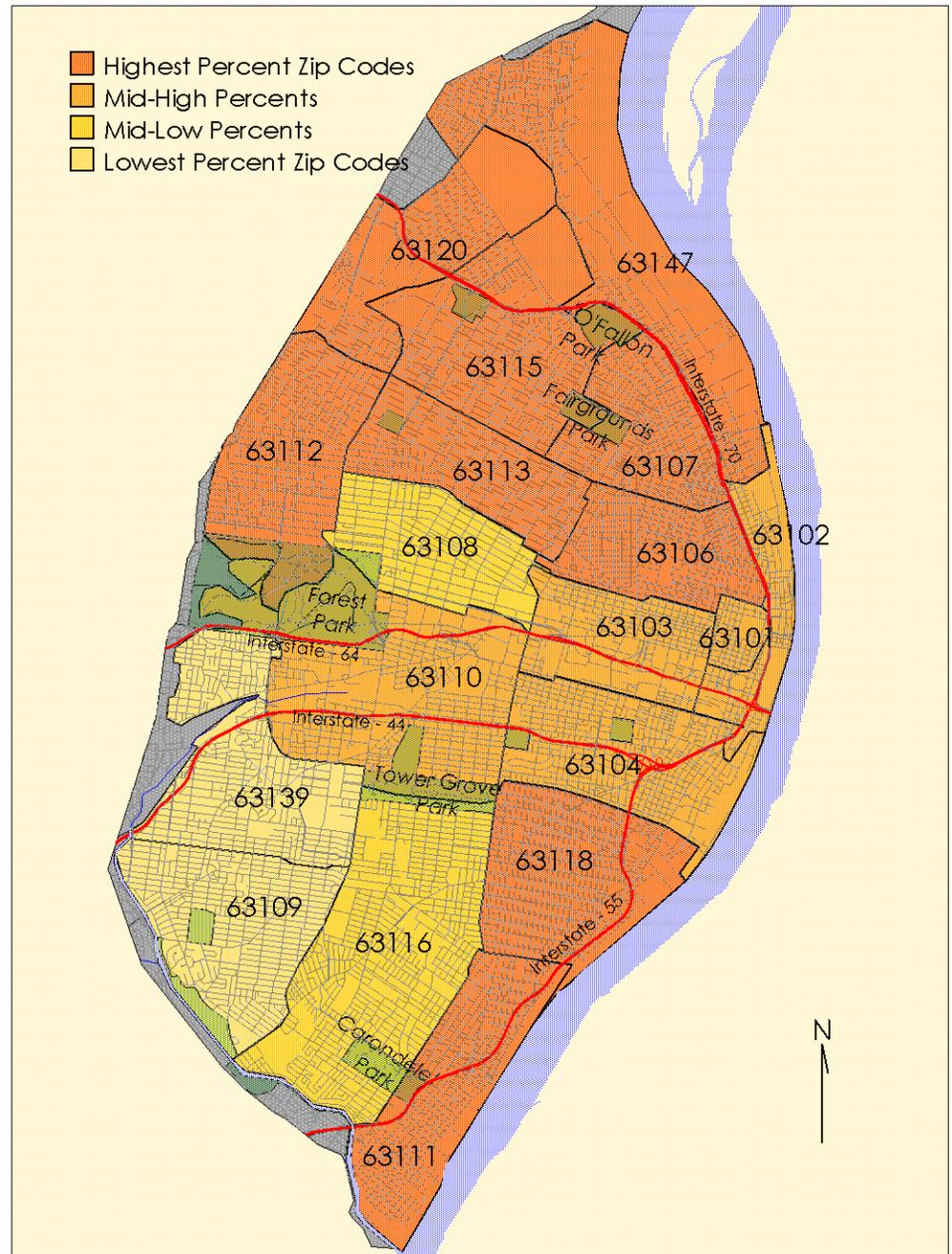
Assist in MC+ enrollment.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Medicaid Births  
% of live births 99-01 average

Stl City	59.3
Stl County	23.8
Stl City/Co	34.4
MO	41.1
US	N/A
<b>Stl City Black</b>	<b>74.5</b>
<b>Stl City White</b>	<b>33.0</b>
Stl Co Black	54.9
Stl Co White	12.7
Stl City/Co Black	64.8
Stl City/Co White	16.3
MO Black	66.8
MO White	36.5
US Black	N/A
US White	N/A



birth - medicaid

# birth - wic

## Definition

The WIC participant rate is the number of mothers who participated in the WIC program during pregnancy expressed as a percent of total live births. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001.

## Public Health Implications

WIC participation, along with the food stamp program 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for 1999 through 2001 is 1.4 times the averaged Missouri rate. In 2002, 2,915 births were to mothers participating in the WIC program out of a total of 5,145 births in the City of Saint Louis. This represents 57% of all births in 2002. The ZIP Codes with the rates of most concern are 63107, 63106 and 63120. The ZIP Codes with the most favorable rates are 63109 and 63139.

Zip Code (ZCTA)	Percent of Live Births to WIC Clients	Map Quartile
63107	73.2%	4
63106	72.9%	4
63120	72.2%	4
63113	71.4%	4
63118	69.7%	4
63115	69.4%	4
63111	66.7%	4
63112	63.9%	4
63147	63.2%	4
63104	58.7%	3
63101*	58.6%	3*
63110	57.4%	3
63103	52.8%	3*
63116	48.6%	3
63108	43.1%	2
63102*	36.4%	2*
63139	22.7%	1
63109	16.9%	1

## Black/white Disparity

The Saint Louis City African-American average rate for the years 1999 through 2001 is 2.1 times the Saint Louis City averaged white rate. The Saint Louis City African-American average rate for the years 1999 through 2001 is just 7% higher than the Missouri African-American averaged rate

**Disparity Ratio: 2.1**

## Focus Group Comments/Concerns

“We need to have health education going on in the community where people are – in grocery stores and barber shops.” “Nutrition – no grocery stores in the poor neighborhoods and this impacts nutrition and entire life.”

## Potential Public Health Interventions

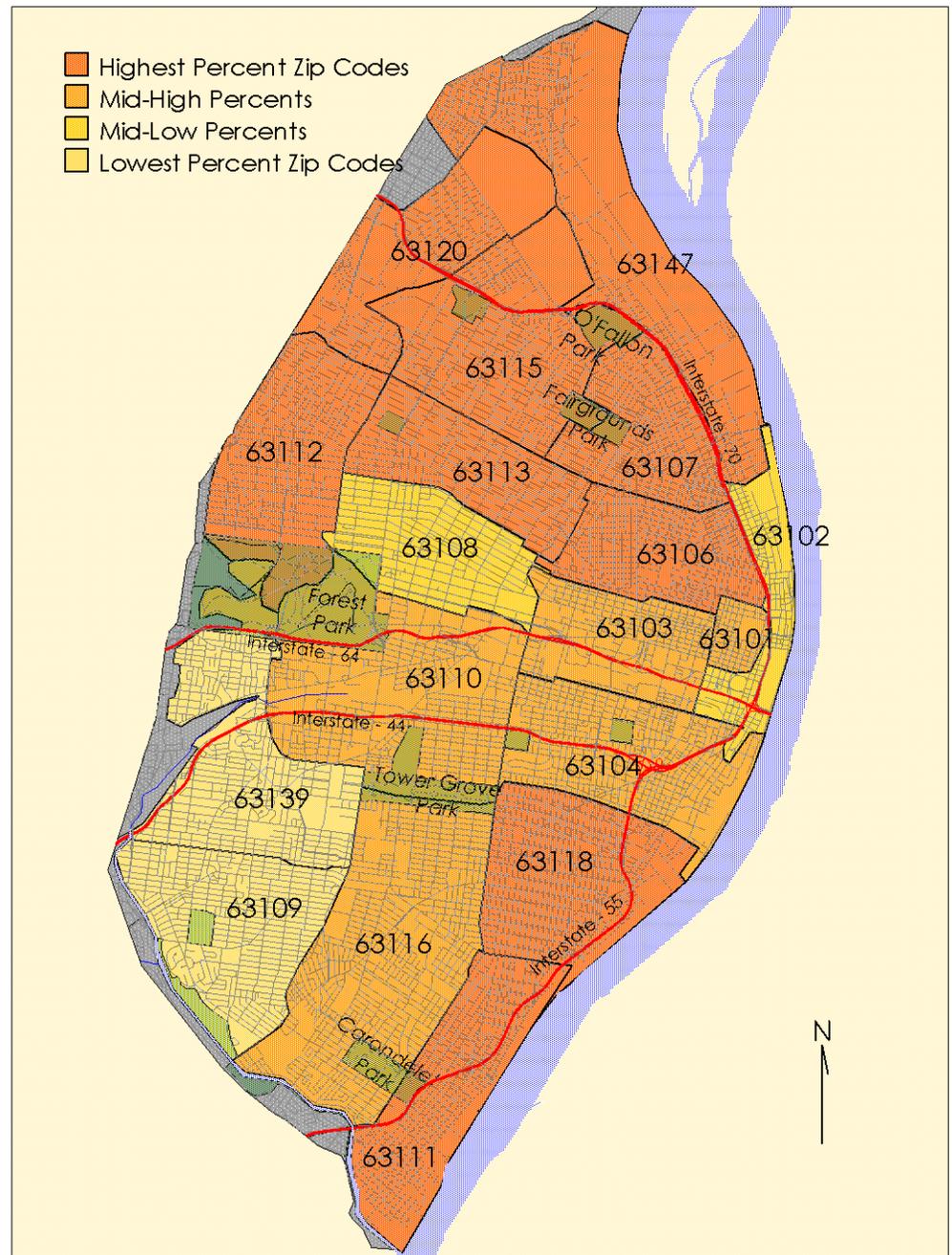
Nutritional education programs

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Birth Mothers WIC  
 % of live births 99-01 average

Stl City	57.2
Stl County	23.0
Stl City/Co	33.2
MO	40.2
US	N/A
<b>Stl City Black</b>	<b>70.4</b>
<b>Stl City White</b>	<b>34.2</b>
Stl Co Black	54.3
Stl Co White	11.8
Stl City/Co Black	62.4
Stl City/Co White	15.7
MO Black	65.7
MO White	35.7
US Black	N/A
US White	N/A



birth - wic

# birth – food stamps

## Definition

Birth mother food stamp 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for 1999 through 2001 is 2.2 times the averaged Missouri rate. In 2002, 2,018 births were to mothers participating in the Food Stamp Program in the City of Saint Louis out of 5,145 births. This represents 39% of all births in 2002. The ZIP Codes with the rates of most concern are 63106, 63120 and 63107. The ZIP Codes with the most favorable rates are 63109 and 63139.

Percent of Live Births to Food Stamp Recipients		
Zip Code (ZCTA)	Stamp Recipients	Map Quartile
63106	58.8%	4
63120	56.5%	4
63107	51.2%	4
63113	49.3%	4
63115	48.4%	4
63112	47.0%	4
63147	45.8%	4
63101*	44.8%	3*
63118	43.3%	3
63104	43.0%	3
63110	39.4%	3
63111	37.9%	3
63102*	36.4%	3*
63103	34.8%	3*
63108	32.1%	2
63116	22.2%	2
63139	9.4%	1
63109	6.5%	1

## Black/white Disparity

The Saint Louis City African-American average rate for the years 1999 through 2001 is 3.6 times the Saint Louis averaged white rate. The Saint Louis City African-American average rate for the years 1999 through 2001 is 1.2 times the Missouri averaged African-American rate.

**Disparity Ratio: 3.6**

## Focus Group Comments/Concerns

“To me it would be kind of futile to send a kid over to a twelve o'clock recreation center and he ain't had nothing to eat. He can do all the basketball and baseball and activities and fun games and stuff and all information, but if he is hungry, he's not going to retain anything.”  
 “Nutrition – maybe getting better in cafeterias in schools but they are not getting the information back home.” “Nutrition – no grocery stores in the poor neighborhoods and this impacts nutrition and entire life.”

## Potential Public Health Interventions

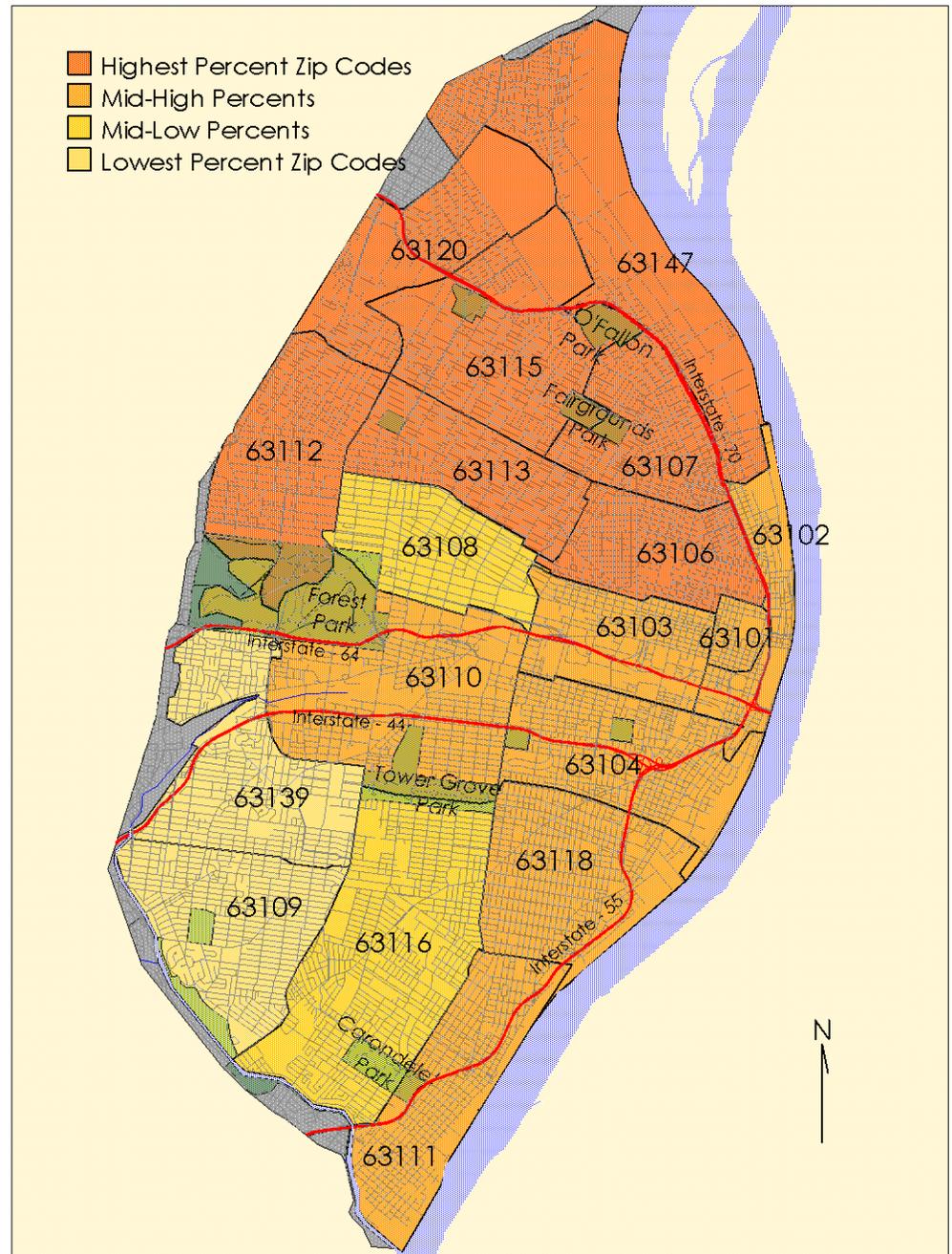
Nutritional education programs.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Birth Mothers Food Stamps  
 % of live births 99-01 average

Stl City	37.1
Stl County	11.4
Stl City/Co	19.0
MO	16.7
US	N/A
<b>Stl City Black</b>	<b>50.7</b>
Stl City White	14.1
Stl Co Black	33.1
Stl Co White	3.6
Stl City/Co Black	41.9
Stl City/Co White	5.5
MO Black	42.3
MO White	12.3
US Black	N/A
US White	N/A



birth - food stamps

# 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. U.S. data are averaged for the time period 1999 through 2000.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City averaged rate for the time period 1999 through 2001 is 1.3 times the averaged U.S. rate. However, it is actually slightly lower than the averaged Missouri rate. In 2002, 829 birth mothers reported that they smoked during the pregnancy out of 5,145 births in Saint Louis City. The ZIP Code with the rate of most concern is 63111. The ZIP Codes with the most favorable rates are 63109 and 63108.

Zip Code (ZCTA)	Percent of Live Births to Mothers who Smoked	Map Quartile
63111	25.1%	4
63113	18.8%	3
63107	18.7%	3
63120	18.5%	3
63118	18.0%	3
63116	16.9%	3
63106	16.1%	2
63112	14.9%	2
63147	14.3%	2
63110	13.8%	2
63139	13.4%	2
63115	13.1%	2
63104	12.2%	1
63103	11.2%	1*
63108	10.2%	1
63102*	9.1%	1*
63109	9.1%	1
63101*	8.6%	1*

## Black/white Disparity

The Saint Louis City average white rate for the time period 1999 through 2001 is 1.2 times the Saint Louis averaged African-American rate in the same time period. The Saint Louis City averaged white rate is even greater than the U.S. averaged white rate, by a factor of 1.4

**Disparity Ratio: .83**

## Focus Group Comments/Concerns

“Education of consumers about health.” “In the Black community I see liquor and cigarette advertisements. These are subliminal messages about what an appropriate lifestyle is.”

## Potential Public Health Interventions

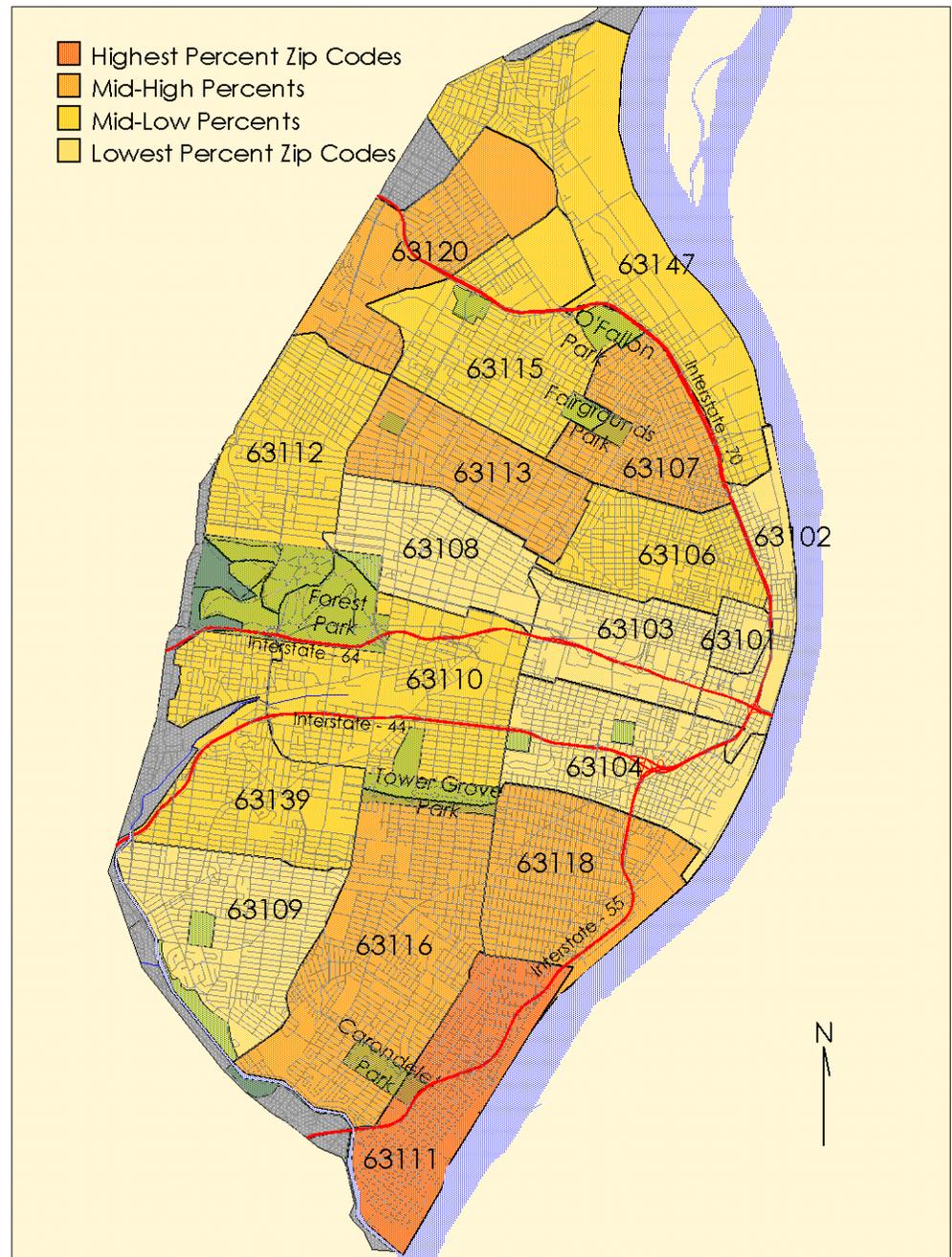
Surveillance, epidemiological studies and health education programs

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Birth Mothers Smoking % of live births 99-01 average

Stl City	15.8
Stl County	9.2
Stl City/Co	11.1
MO	18.3
US	12.1
<b>Stl City Black</b>	<b>15.0</b>
<b>Stl City White</b>	<b>18.1</b>
Stl Co Black	8.6
Stl Co White	9.8
Stl City/Co Black	11.8
Stl City/Co White	11.3
MO Black	12.9
MO White	19.5
US Black	9.1
US White	13.1



birth – smoking

# birth - alcohol

## 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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001.

## 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for 1999 through 2001 is 1.25 times the averaged Missouri rate. In 2002, just 39 birth mothers reported they drank alcohol during the pregnancy in the City of Saint Louis. This represents a small .76% of the total births in 2002, down from 1.6% in 1998. The ZIP Codes with the rates of most concern are 63108 and 63104. The ZIP Code with the most favorable rate is 63147. Since 1993 (3.9%) the rates have improved significantly.

Zip Code (ZCTA)	Percent of Live Births to Mothers Drank	Map Quartile
63108	2.3%	4
63104	1.8%	4
63107	1.4%	3
63113	1.3%	3
63115	1.3%	3
63118	1.3%	3
63103	1.1%	2*
63106	1.1%	2
63139	1.1%	2
63110	0.9%	2
63109	0.8%	2
63112	0.8%	2
63116	0.8%	2
63111	0.7%	2
63120	0.6%	2
63147	0.2%	1
63101*	0.0%	1*
63102*	0.0%	1*

## Black/white Disparity

The Saint Louis City African-American average rate for the years 1999 through 2001 is only .75 times the Saint Louis averaged white rate in the same time period. Between 1993 and 2001 the rate for the Saint Louis City African-American population improved significantly, from 4.7% in 1993 to an average of .9% for the time period 1999 through 2001.

**Disparity Ratio: .75**

## Focus Group Comments/Concerns

“Prenatal care and education is a priority.” “In the black community I see liquor and cigarette advertisements. These are subliminal messages about what an appropriate lifestyle is.”

## Potential Public Health Interventions

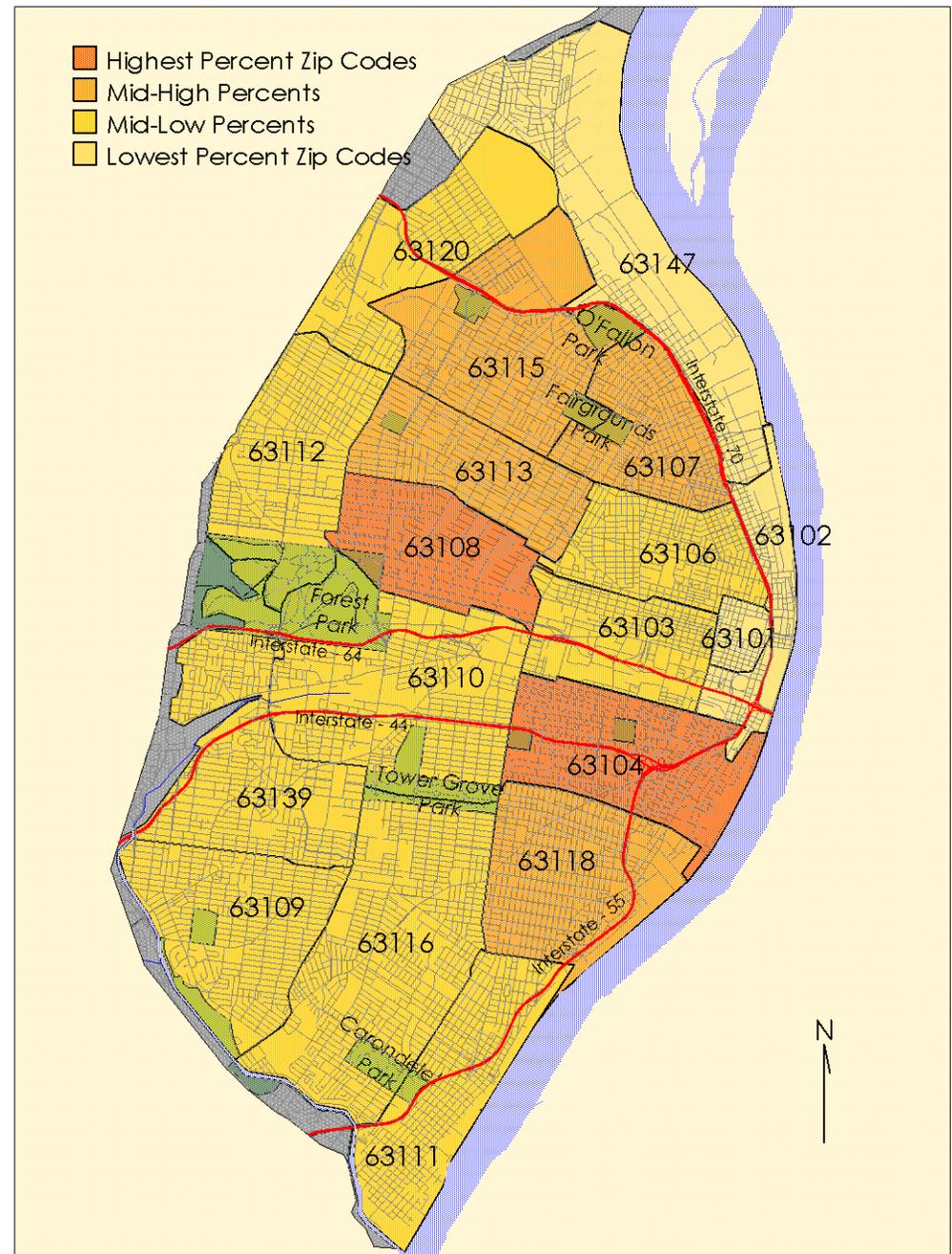
Educational programs and media advocacy regarding drinking alcohol during pregnancy

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Drank Alcohol During Pregnancy % of live births 99-01 average

Stl City	1.0
Stl County	1.0
Stl City/Co	1.0
MO	0.8
US	N/A
Stl City Black	0.9
Stl City White	1.2
Stl Co Black	0.7
Stl Co White	1.2
Stl City/Co Black	0.8
Stl City/Co White	1.2
MO Black	1.0
MO White	0.7
US Black	N/A
US White	N/A



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. Saint Louis City and Missouri data are averaged for the time period 1999 through 2001. U.S. data are averaged for the time period 1999 through 2000.

## Public Health Implications

Education is correlated with fertility and birth outcome 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.

## Saint Louis Rates and Comparative Info

The Saint Louis City averaged rate for 1999 through 2001 is 1.7 times the averaged Missouri rate and 1.5 times the averaged U.S. rate in the same time period. In 2002, 1,587 birth mothers had less than 12 years of education which represented about 31% of all births. The ZIP Codes with the rates of most concern are 63118, 63107 and 63113. The ZIP Codes with the most favorable rates are 63109 and 63139.

Zip Code (ZCTA)	Percent of Live Births to Mothers without Hi-School Degree	Map Quartile
63118	45.7%	4
63107	44.5%	4
63113	41.0%	4
63106	40.1%	4
63111	39.3%	4
63115	36.5%	4
63120	36.1%	3
63112	34.3%	3
63104	32.7%	3
63147	31.0%	3
63110	28.6%	3
63116	28.3%	3
63102*	27.3%	3*
63108	23.3%	2
63103	22.5%	2*
63101*	17.2%	1*
63139	11.8%	1
63109	8.2%	1

## Black/white Disparity

The Saint Louis City African-American averaged rate for the years 1999 through 2001 is 1.75 times the Saint Louis averaged white rate. The Saint Louis City African-American average rate for the years 1999 through 2001 is 1.5 times the U.S. averaged African-American rate.

**Disparity Ratio: 1.75**

## Focus Group Comments/Concerns

“Literacy rates – high drop-out rates.” “High drop-out rate results in teen pregnancy, illiteracy, etc.”

## Potential Public Health Interventions

Health education programs

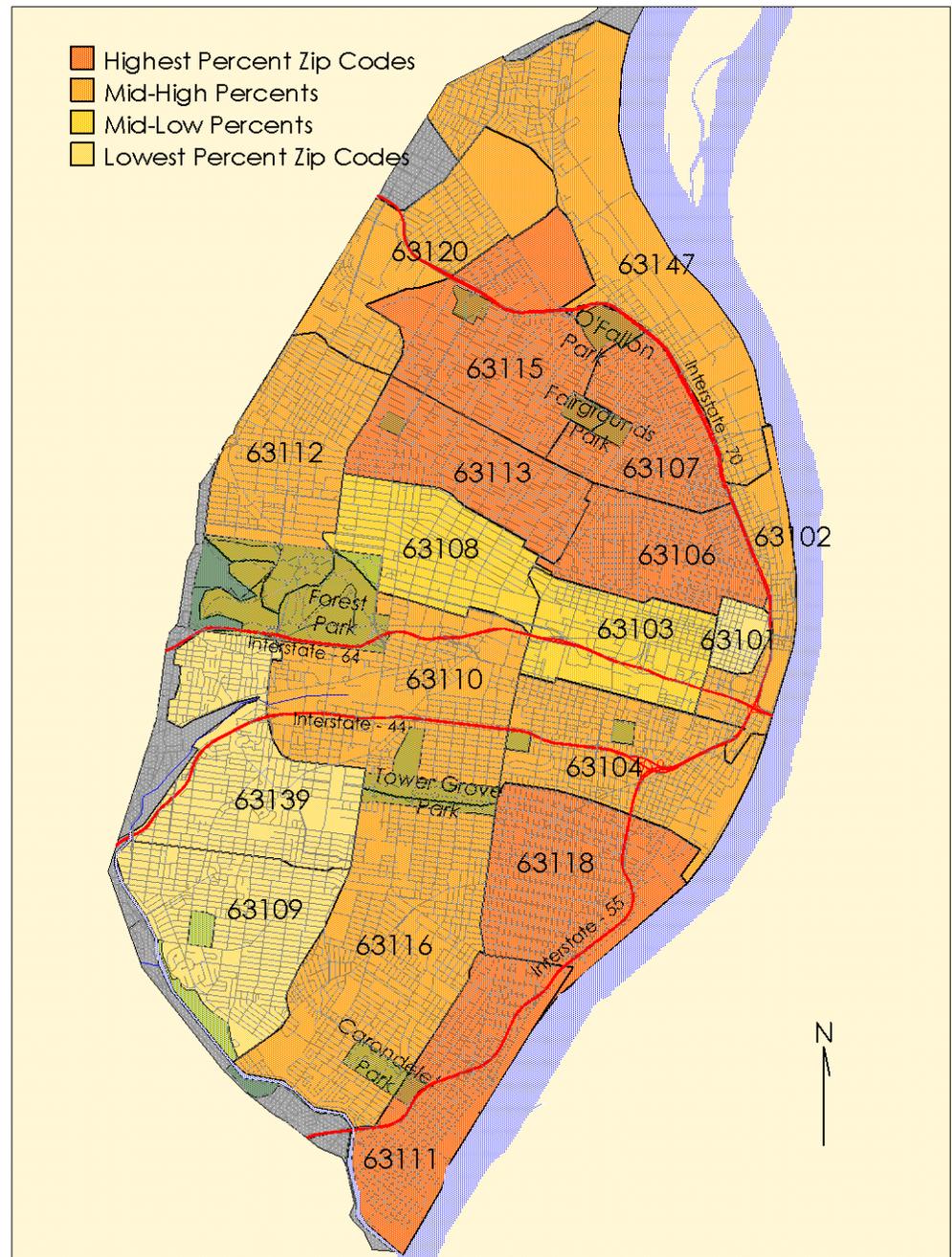
Collaborative efforts with appropriate agencies

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

Birth Mother Education  
 % < 12 Years Education 99-01 average

Stl City	32.0
Stl County	7.0
Stl City/Co	14.5
MO	19.2
US	21.4
<b>Stl City Black</b>	<b>38.0</b>
<b>Stl City White</b>	<b>21.7</b>
Stl Co Black	11.1
Stl Co White	5.7
Stl City/Co Black	24.6
Stl City/Co White	8.5
MO Black	28.7
MO White	17.4
US Black	25.0
US White	21.2



birth - education



# EPIDEMICS



# hiv infection

## Definition

Human immunodeficiency virus (HIV) - infected individuals are individuals greater than 18 months of age who have a diagnosis of HIV infection documented by either a laboratory test or a physician. The rates are presented as the number of cases per year per 100,000 population and are averaged over the 1999 through 2001 time period.

## Public Health Implications

New advancements in the treatment of HIV disease, namely combination therapy, appear to increase the quality of and prolong life for people with HIV infection. Over time, persons with HIV infection who subsequently develop AIDS are reported as an AIDS case.

## Saint Louis Rates and Comparative Info

The number of reported cases was highest in Saint Louis City in 1995. The averaged rate in Saint Louis City during the 1999 through 2001 time period is 4.8 times that in Missouri, and 3.8 times that seen in the United States. In 2002, there were 63 new cases of HIV infection reported in the City of Saint Louis. The ZIP Codes with the rates of most concern of HIV cases are 63103 and 63104. The ZIP Code with the most favorable rate is 63109.

Zip Code (ZCTA)	HIV Cases per 100K Population	Map Quartile
63101*	164.6	4*
63103	108.6	4
63104	76.3	4
63102*	76.2	4*
63108	55.6	3
63112	52.1	3
63107	42.9	3
63113	37.7	2
63118	36.1	2
63110	35.4	2
63106	34.1	2
63120	29.1	2
63115	27.8	2
63111	20.2	1
63147	20.1	1*
63116	16.8	1
63139	15.2	1
63109	8.0	1*

## Black/white Disparity

The Saint Louis City African-American population averaged rate for the years 1999 through 2001 is 1.7 times the Saint Louis averaged white rate. The HIV infection rate in the City of Saint Louis now continues to be higher in the African-American Community.

**Disparity Ratio: 1.7**

## Focus Group Comments/Concerns

“HIV/AIDS.” “We are now a Level I HIV city – that’s a crisis.” “Increase in HIV/AIDS rates especially in African-American and Latino communities.” “HIV in African-American women.”

## Potential Public Health Interventions

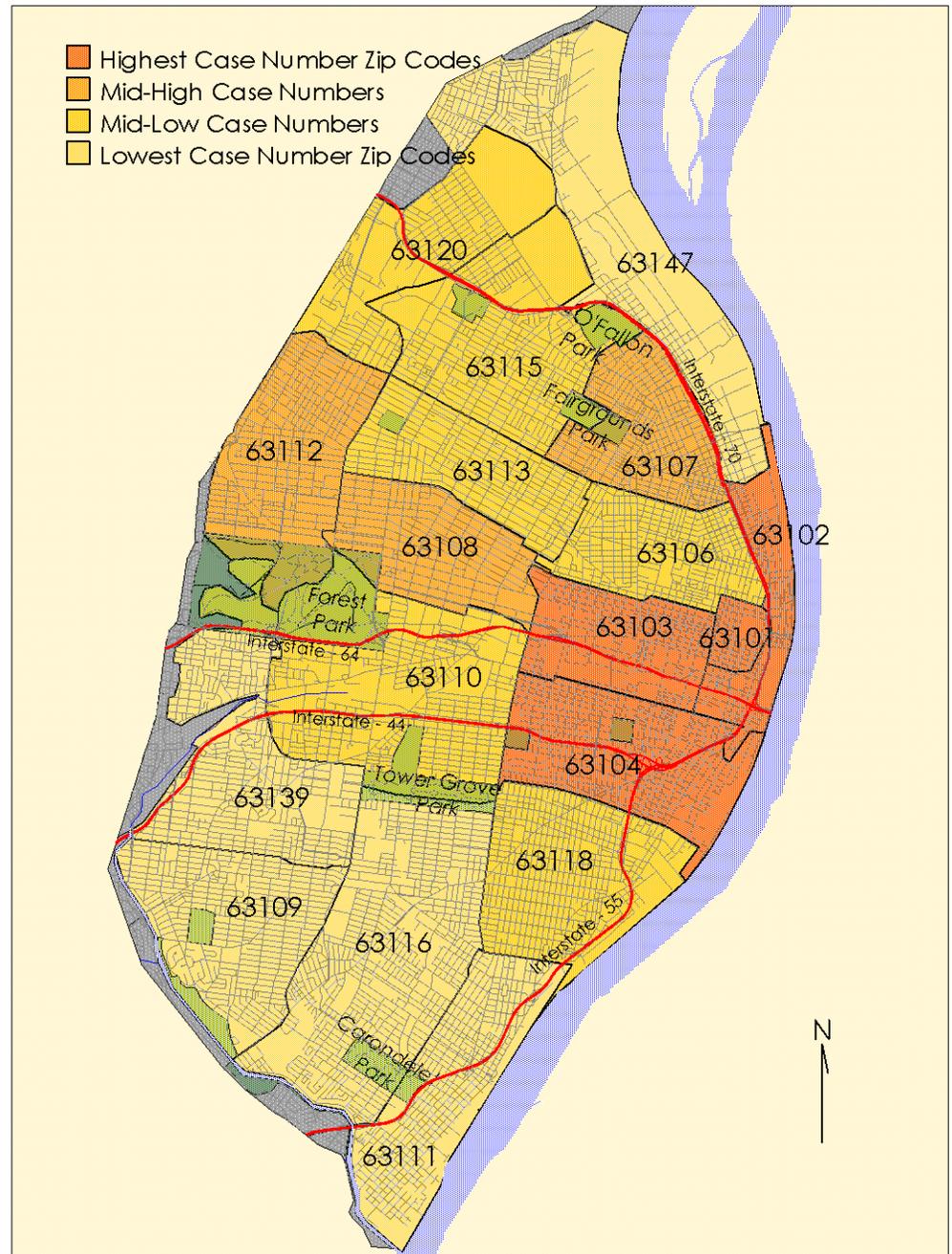
Prevention of HIV infection remains the best and most cost-effective tool for controlling the epidemic. The CDC has developed HIV prevention programs which are comprehensive, culturally competent, and scientifically sound for use in communities and high-risk populations.

## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

HIV Infection Rates\*\*  
/100,000 population 99-01 average

Stl City	34.8
Stl County	6.3
Stl City/Co	13.6
MO	7.2
US	9.1
<b>Stl City Black</b>	<b>43.3</b>
<b>Stl City White</b>	<b>25.4</b>
Stl Co Black	21.5
Stl Co White	2.6
Stl City/Co Black	32.0
Stl City/Co White	6.3
MO Black	30.9
MO White	3.9
US Black	39.4
US White	3.9



\*\*persons reported with HIV infection  
who have not developed AIDS

hiv infection

# aids cases

## Definition

The surveillance case definition for acquired immunodeficiency syndrome (AIDS), as defined by the Centers for Disease Control, is based on the case's (1) clinical condition, (2) human immunodeficiency virus (HIV) antibody test results, and (3) laboratory measures of the effect of the virus on the immune system (CD4+ test results). The rates are presented as the number of cases per 100,000 population and are averaged over the 1999 through 2001 time period.

## Public Health Implications

AIDS cases classified as "men who have sex with men" continue to account for the largest proportion of reported cases. Among women, heterosexual contact and injecting drug use account for the majority of reported cases. Persons of African-American or Hispanic race/ethnicity have higher rates than whites; women continue to represent an increasing proportion of AIDS cases.

## Saint Louis Rates and Comparative Info

AIDS cases were highest in Saint Louis City in 1996, and have declined since then. U.S. rates have been declining consistently since 1994. The averaged 1999-2001 rate for AIDS cases in Saint Louis City is 2.7 times that seen in the United States, and 5.3 times that seen in Missouri averaged over the same time period. The ZIP Codes with the rates of most concern are 63104 and 63103. The ZIP Code with the most favorable rate is 63109.

Zip Code (ZCTA)	AIDS Cases per 100K Population	Map Quartile
63101*	123.5	4*
63104	81.8	4
63103	74.7	4
63118	53.6	3
63115	51.6	3
63102*	50.8	3*
63110	49.9	3
63112	49.1	3
63106	43.4	2
63108	42.9	2
63113	33.5	2
63120	31.5	2
63107	28.6	1
63147	27.6	1
63116	24.5	1
63139	19.4	1
63111	18.6	1
63109	12.6	1

## Black/white Disparity

The Saint Louis City African-American averaged rate for the years 1999 through 2001 is 1.9 times the Saint Louis averaged white rate. The AIDS case rate in the City of Saint Louis now continues to be higher in the African-American Community.

**Disparity Ratio: 1.9**

## Focus Group Comments/Concerns

"Extended care for young people, i.e., with AIDS." "Blacks with AIDS." "...concern about HIV and AIDS epidemic." "Still worried about AIDS with a sexually active teen population."

## Potential Public Health Interventions

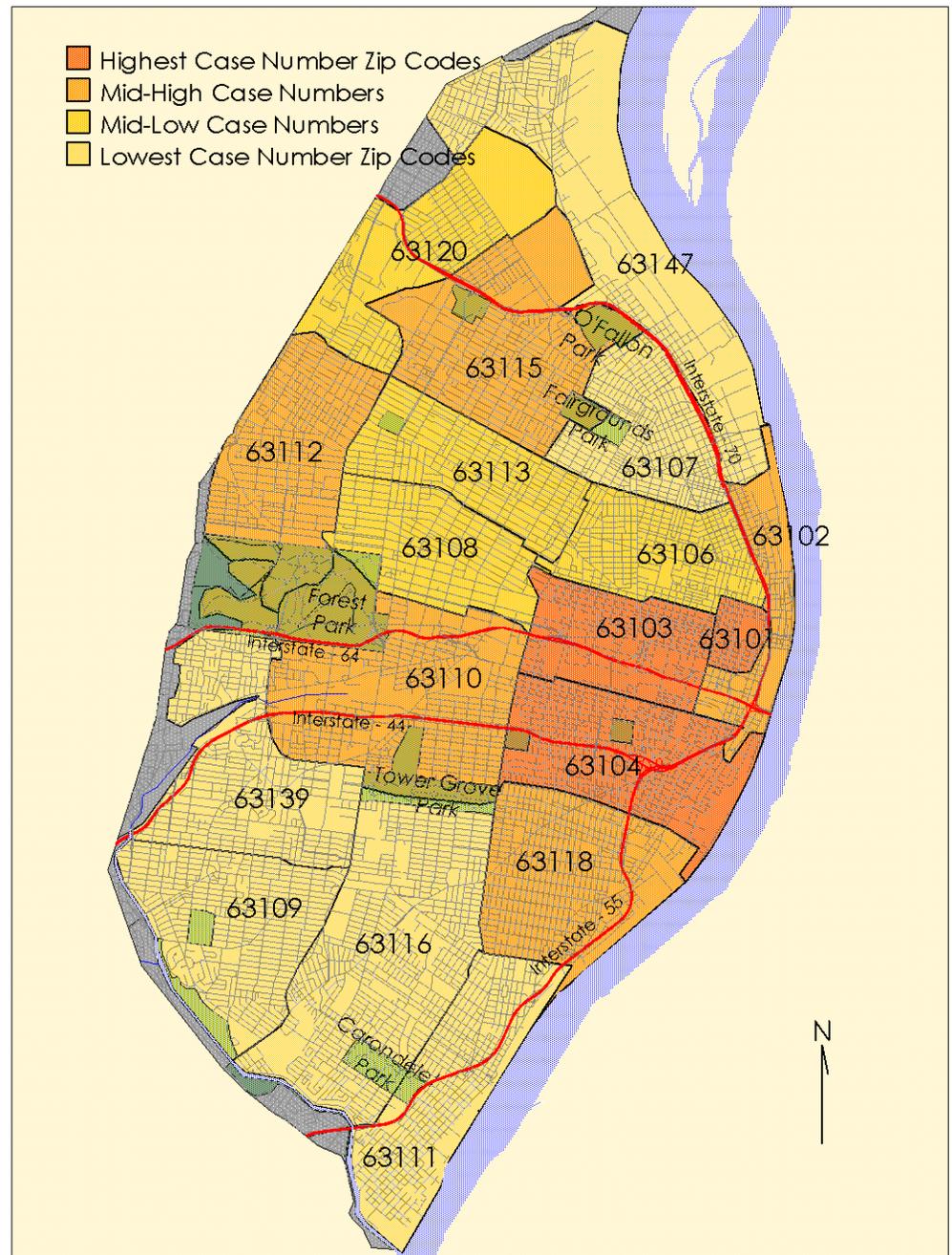
AIDS prevention activities include education programs in schools, disease monitoring, and behavioral and epidemiologic studies designed to identify the most effective interventions to combat HIV. Secondary prevention for infected individuals through case management services is another intervention. Prevention case management encourages infected individuals to disclose their status to potential partners and to always practice protected sex or to choose other expressions of sexuality that do not potentially expose partners to the virus.

## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

AIDS Cases  
/ 100,000 population 99-01 average

Stl City	39.5
Stl County	6.4
Stl City/Co	14.8
MO	7.4
US	14.6
<b>Stl City Black</b>	<b>52.5</b>
Stl City White	28.0
Stl Co Black	21.1
Stl Co White	2.9
Stl City/Co Black	36.2
Stl City/Co White	7.0
MO Black	32.9
MO White	4.0
US Black	59.0
US White	5.7



aids cases

# aids mortality

## Definition

AIDS stands for “acquired immunodeficiency syndrome”. HIV (human immunodeficiency virus) is the virus that causes AIDS. An HIV-infected person receives a diagnosis of AIDS after developing one of the CDC-defined AIDS indicator illnesses. An HIV-positive person who has not had any serious illnesses also can receive an AIDS diagnosis on the basis of certain blood tests (CD4+ counts). Age-adjusted rates are presented per 100,000 population and are averaged over the 1999 through 2001 time period.

## Public Health Implications

New advancements in the treatment of HIV disease, namely combination therapy, appear to increase the quality of and prolong life for people with HIV infection. AIDS remains the leading cause of death among African-American men ages 25 through 44, and the third leading cause of death among African-American women in the same age group.

## Saint Louis Rates and Comparative Info

In Saint Louis City in the time period 1999 through 2001, the AIDS averaged mortality rate is 2.4 times the U.S. rate and 4.5 times the rate in Missouri. In 2002, there were 40 deaths due to AIDS in the City of Saint Louis. The ZIP Code with the rate of most concern is 63108. The ZIP Codes with the most favorable rates are 63116, 63109 and 63139.

Zip Code (ZCTA)	AIDS Mortality Rates per 100K	
	Population (Age-adjusted)	Map Quartile
63101*	31.9	4*
63108	31.3	4
63103	26.2	4*
63104	21.9	3*
63106	20.8	3*
63118	17.5	3*
63107	16.9	3*
63110	16.4	3*
63113	12.6	2*
63115	10.9	2*
63112	10.4	2*
63147	10.4	2*
63120	9.5	2*
63111	8.0	2*
63139	6.4	1*
63109	5.1	1*
63116	4.5	1*
63102*	0.0	1*

## Black/white Disparity

The Saint Louis City AIDS death rate averaged over the 1999 through 2001 time period in the African-American population is 2.14 times the white population.

**Disparity Ratio: 2.14**

## Focus Group Comments/Concerns

“HIV/AIDS patients are not accessing care because they don’t want people to find out they are infected.”

## Potential Public Health Interventions

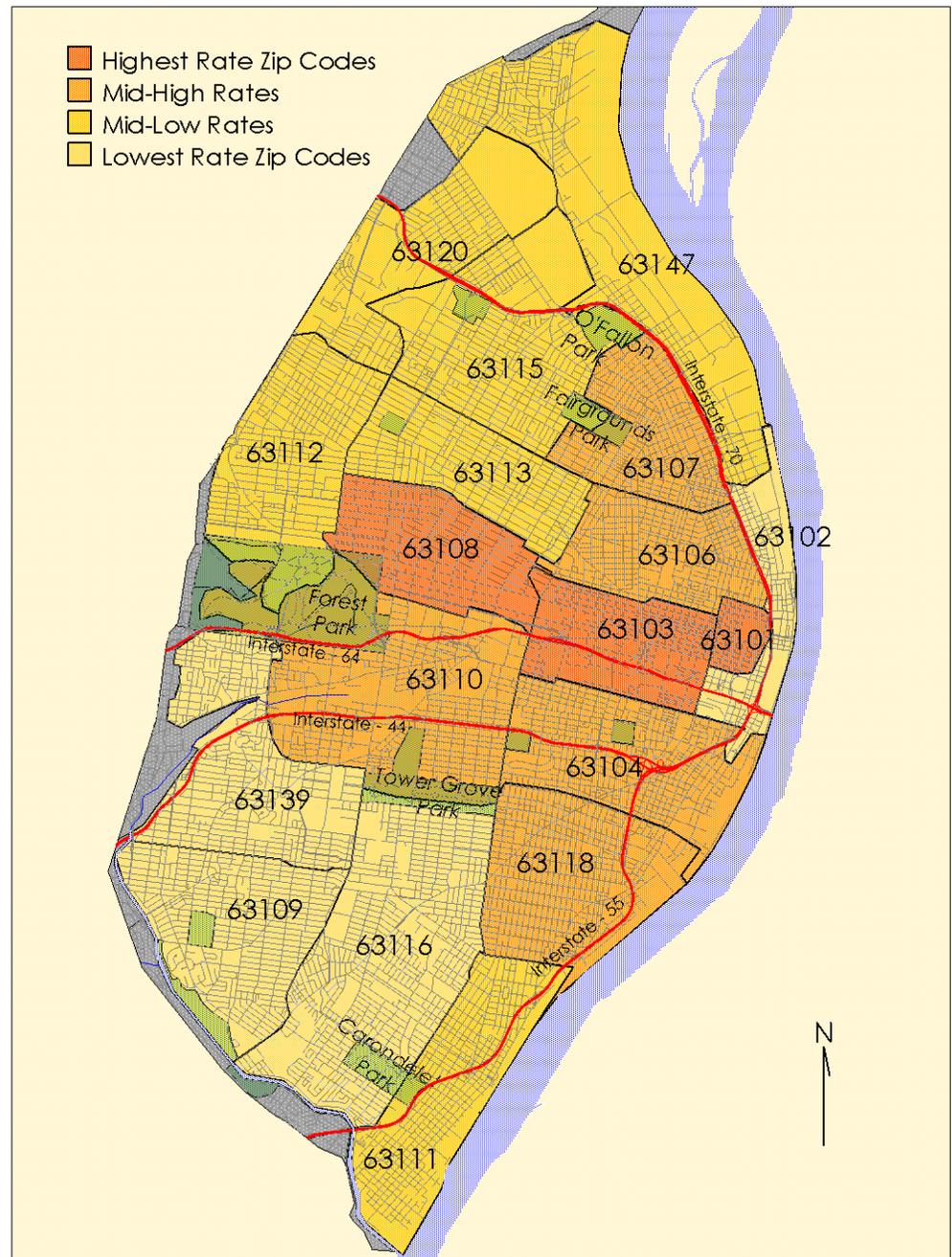
Prevention of HIV infection remains the best and most cost-effective tool for saving lives. The Centers for Disease Control funds HIV prevention programs for high-risk populations that are comprehensive, culturally competent, and scientifically sound.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## AIDS Mortality Rates / 100,000 99-01 average

Stl City	12.5
Stl County	2.4
Stl City/Co	4.9
MO	2.8
US	5.2
<b>Stl City Black</b>	<b>18.0</b>
<b>Stl City White</b>	<b>8.4</b>
Stl Co Black	8.4
Stl Co White	1.2
Stl City/Co Black	12.7
Stl City/Co White	2.5
MO Black	12.0
MO White	1.8
US Black	24.3
US White	3.1



aids mortality

# syphilis

## Definition

Syphilis is a systemic, sexually transmitted disease caused by the bacterium *Treponema pallidum*. Infections may be detected by signs or symptoms of the infection, or by serologic testing during the latent stage of the disease. Rates described here are for primary and secondary syphilis. The rates are presented as cases per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

Although the U.S. syphilis rate declined in the 1999 through 2001 time period to its lowest level in many years, syphilis remains an important problem in certain geographic areas and populations, particularly among African Americans. The Healthy People 2010 national objective for syphilis is .02 cases per 100,000 persons.

## Saint Louis Rates and Comparative Info

Syphilis rates in Saint Louis City have decreased dramatically since 1995; from 100.6 per 100,000 to 3.7 in 2002. Saint Louis experienced a syphilis epidemic starting in 1992. Comparing average rates from 1999 through 2001, the Saint Louis City rate is 8.2 times that seen in Missouri, and 3.4 times the U.S. rate. However, Saint Louis City has dropped from the number one city in the U.S. in the the early to mid-nineties to 29<sup>th</sup> in 2002. In 2002, there were 13 cases of primary and secondary syphilis in the City of Saint Louis. The ZIP Codes with the rates of most concern are 63118, 63112 and 63113. The ZIP Codes with the most favorable rates are 63139 and 63103.

Zip Code (ZCTA)	Syphilis Rank per 100K Population	Map Quartile
63118	46.0	4*
63112	44.7	4*
63113	44.0	4*
63120	43.6	4*
63110	38.6	4*
63106	37.2	4*
63108	33.4	3*
63107	24.5	3*
63115	23.8	3*
63104	10.9	1*
63111	9.3	1*
63116	8.4	1*
63147	7.5	1*
63109	3.4	1*
63101*	0.0	1*
63102*	0.0	1*
63103	0.0	1*
63139	0.0	1*

## Black/white Disparity

For syphilis, as for other STD's, differential reporting of cases from public and private sectors may magnify the differences in reported rates by race and ethnicity.

**Disparity Ratio: 12.3**

## Focus Group Comments/Concerns

"High rates of STD's." "STD's" "STD's"

## Potential Public Health Interventions

Adolescents and young adults, especially minorities, are disproportionately affected by STD's. Prevention of STD's is based on changing the sexual behaviors that place persons at risk for infection. The most effective way to prevent sexual transmission of syphilis and other STD's is to avoid sexual intercourse with an infected partner. For individuals diagnosed with syphilis, Disease Intervention Specialists (DIS) aggressively interview patients for their contacts and then locate them for examination and preventative treatment. Extensive risk reduction counseling to avoid future infection is also provided. Saint Louis City is currently participating in The CDC's National Syphilis Elimination Project.

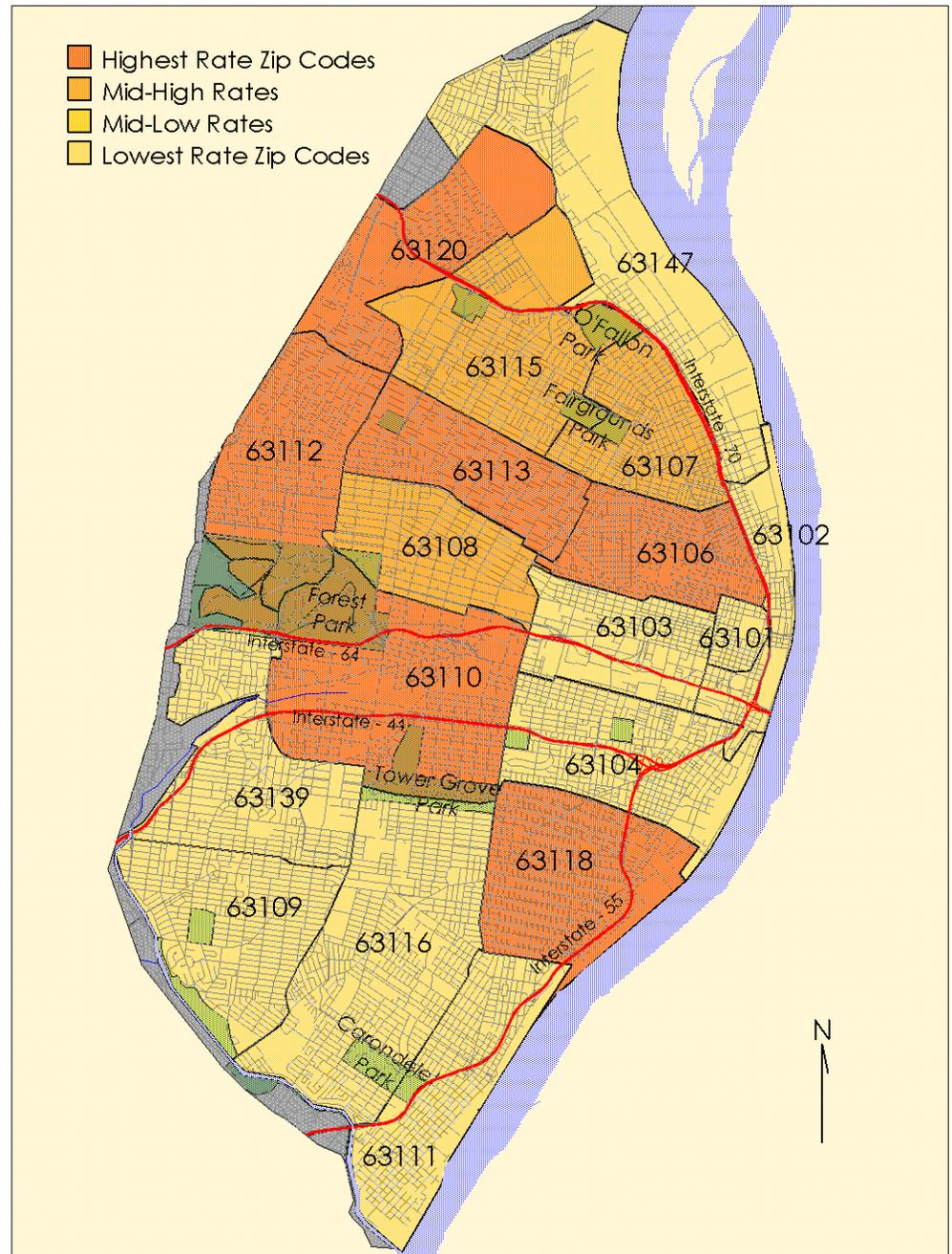
## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

Syphilis\*\*  
/ 100,000 99-01 average

Stl City	7.4
Stl County	1.0
Stl City/Co	2.6
MO	0.9
US	2.2
<b>Stl City Black</b>	<b>13.5</b>
Stl City White	1.1
Stl Co Black	3.3
Stl Co White	0.2
Stl City/Co Black	8.2
Stl City/Co White	0.4
MO Black	5.8
MO White	0.2
US Black	13.5
US White	0.5

\*\* primary and secondary syphilis



syphilis

# gonorrhoea

## Definition

*Neisseria gonorrhoeae* is a sexually transmitted bacterial disease that differs in males and females in course, severity, and ease of recognition. It is second only to chlamydial infection in the number reported to the Centers for Disease Control. The rates are presented as the number of cases per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

The rate of gonorrhea in the U.S. has continued to decline since 1975. Untreated gonorrhea can cause serious and permanent health problems in both men and women. In women, gonorrhea is a common cause of pelvic inflammatory disease (PID). About one million women each year in the U.S. develop PID. In men, gonorrhea can cause epididymitis, a painful condition of the testicles that can lead to infertility if left untreated. People with gonorrhea can more easily contract HIV. The Healthy People 2010 national objective for gonorrhea is 19 cases per 100,000 persons.

## Saint Louis Rates and Comparative Info

Rates of gonorrhea in Saint Louis City declined significantly since the early 1990s from rates of over 1,200 per 100,000 to 786 per 100,000 in 2002. The average rate of gonorrhea in Saint Louis City during the time period from 1999-2001 was 5.5 times the Missouri rate; the averaged Saint Louis City rate was 6.7 times the U.S. rate in the same time period. In 2002, 2,736 cases of Gonorrhea were reported in the City of Saint Louis. The ZIP Codes with the rates of most concern are 63106, 63107 and 63113. The ZIP Codes with the most favorable rates are 63109 and 63139.

Zip Code (ZCTA)	Gonorrhea Cases per 100K Population	Map Quartile
63106	1,674.1	4
63101*	1,657.9	4
63107	1,591.8	4
63113	1,590.0	4
63120	1,585.3	4
63115	1,355.1	4
63112	1,280.2	4
63118	1,131.6	3
63147	1,048.8	3
63110	982.0	3
63104	974.4	3
63103	789.3	2
63102*	559.4	2
63108	489.9	2
63111	426.3	1
63116	301.3	1
63139	98.5	1
63109	52.4	1

## Black/white Disparity

Specific rates by race for Saint Louis City are presented in this report but caution must be used when looking at the data because, annually, up to 30 percent of the cases do not specify race. There may also be underreporting in the white community. When looking at the averaged rates by ZIP Code, the rates of most concern were reported in ZIP Codes that are predominately African American. The disparity ratio is 20.1. The rate in the Saint Louis City African-American population is 1.6 times that of the U.S. African-American population.

**Disparity Ratio: 20.1**

## Focus Group Comments/Concerns

“One of the major issues impacting health in Saint Louis is communicable diseases among city residents, primarily the lower income groups.”  
 “Ignorance of adolescents about unprotected sex.”

## Potential Public Health Interventions

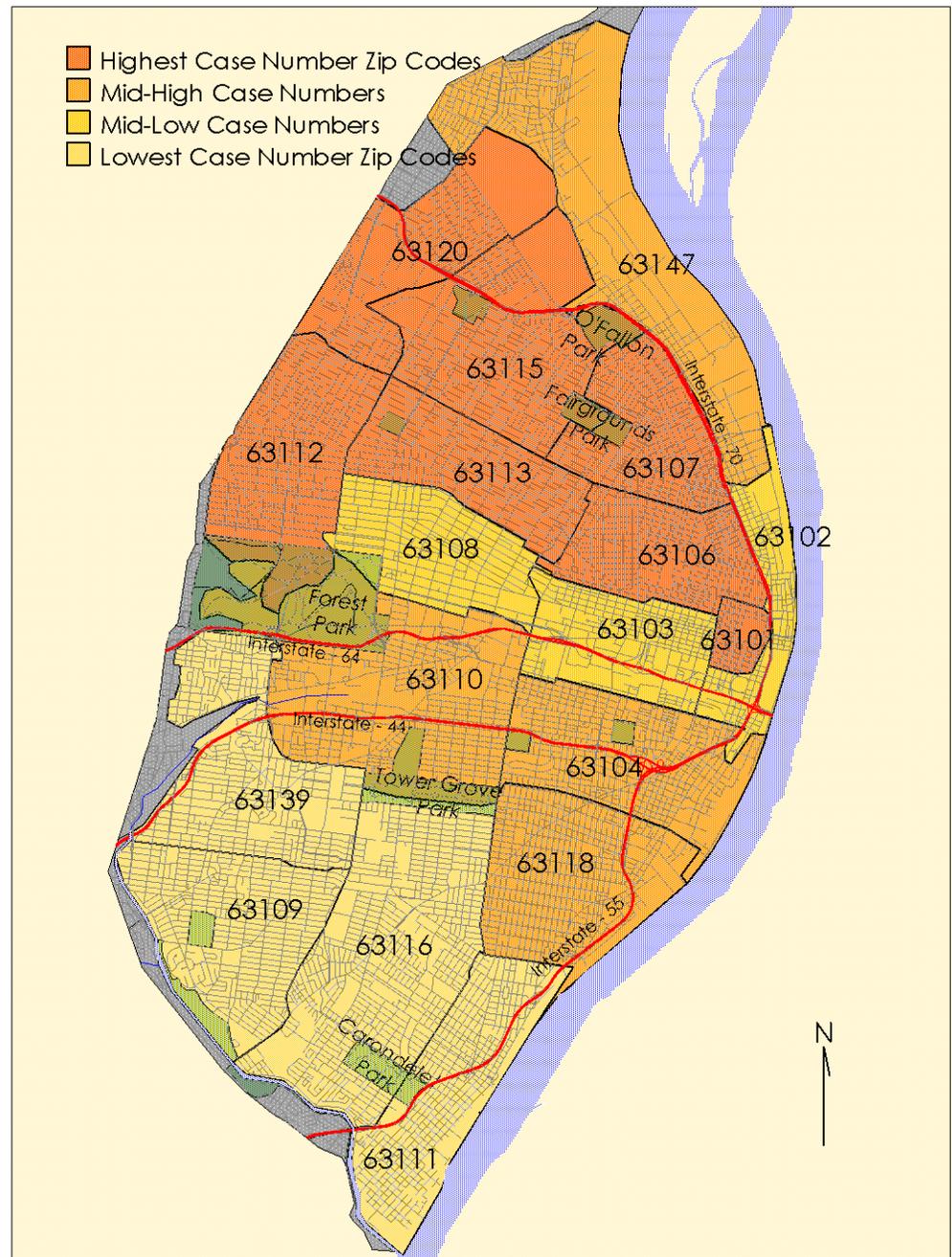
Most infections among men produce symptoms that cause them to seek curative treatment. But, because gonococcal infections among women are often asymptomatic, an important component of gonorrhea control in the United States continues to be the screening of women at high risk for STDs. The highest rates of gonorrhea and chlamydia in women are in 15- to 19-year-olds. For individuals diagnosed with gonorrhea, Disease Intervention Specialists (DIS) aggressively interview the patients for their contacts and then locate these individuals for examination and preventative treatment. Extensive risk reduction counseling to avoid future infection is also provided.

## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

## Gonorrhea / 100,000 99-01 average

Stl City	854.0
Stl County	174.5
Stl City/Co	347.9
MO	156.5
US	127.7
<b>Stl City Black</b>	<b>1,303.2</b>
<b>Stl City White</b>	<b>64.7</b>
Stl Co Black	694.7
Stl Co White	13.4
Stl City/Co Black	1,038.7
Stl City/Co White	78.2
MO Black	N/A
MO White	N/A
US Black	812.1
US White	28.1



# g o n o r r h e a

# chlamydia

## Definition

Chlamydia trachomatous is the chief agent of this sexually transmitted disease. Clinical manifestations of this genital infection are similar to gonorrhea; in males primarily as a urethritis and in females by mucopurulent cervicitis. Almost all of the cases reported are in females. Males are not routinely tested. Funding is available to test the female population. The rates described here are cases per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

Infections are frequently asymptomatic in both females and males; chlamydia infections have been found in 1-10% of sexually active men. In females, infection during pregnancy may result in conjunctival or pneumonic infections of the child. In Saint Louis City most of the cases are female because mostly females are tested. Since clinical manifestations are similar to gonorrhea, it is recommended that both organisms be treated if one is suspected.

## Saint Louis Rates and Comparative Info

Comparing the average rate from 1999-2001, the Saint Louis City chlamydia infection rate is 3.5 times that seen in Missouri, and 3.4 times that seen in the U.S. In 2002, 3,202 cases of Chlamydia were reported in the City of Saint Louis. The ZIP Codes with the rates of most concern are 63106, 63113 and 63107. The ZIP Codes with the most favorable rates are 63109 and 63139.

Zip Code (ZCTA)	Chlamydia Rank per 100K Population	Map Quartile
63101*	2,222.2	4
63106	1,668.8	4
63113	1,451.9	4
63107	1,424.2	4
63120	1,257.8	3
63115	1,203.0	3
63118	1,157.1	3
63147	1,122.8	3
63112	1,076.2	3
63104	1,041.3	3
63110	960.4	3
63102*	724.1	2*
63103	580.4	2
63111	512.6	2
63108	477.0	2
63116	397.7	1
63139	130.8	1
63109	89.4	1

## Black/white Disparity

Specific rates by race for Saint Louis City are presented in this report but caution must be used when looking at the data because, annually, up to 30 percent of the cases do not specify race. There may also be underreporting in the white community. When looking at the averaged rates by ZIP Code, the rates of most concern were reported in ZIP Codes that are predominately African American. The disparity ratio is 13.3. The rate in the Saint Louis City African-American population is just 1.1 times that of the U.S. African-American population.

Disparity Ratio: 13.3

## Focus Group Comments/Concerns

"Higher than average rates of STD's." "High level of STD's."

## Potential Public Health Interventions

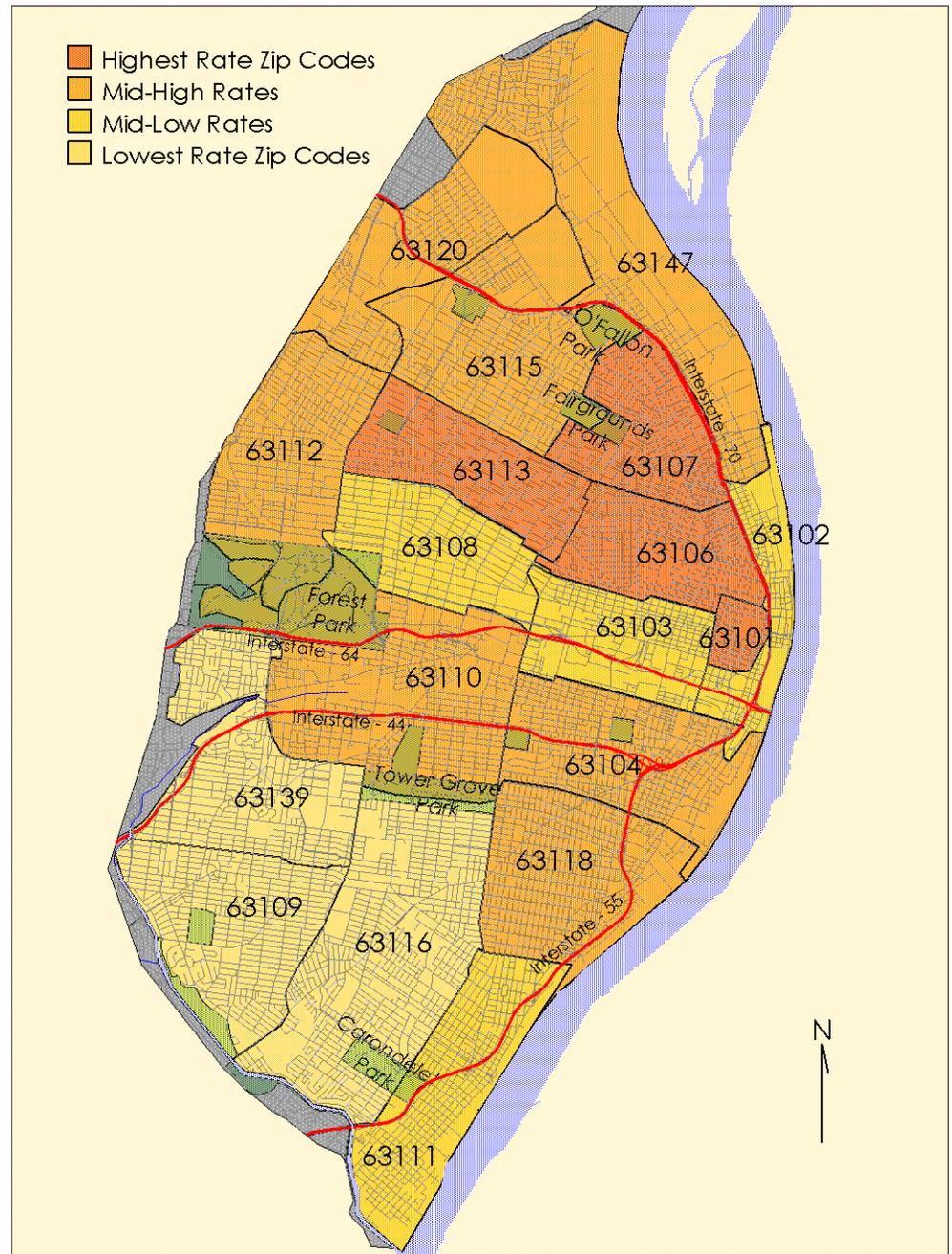
As with other sexually transmitted diseases, health and sex education are important strategies for prevention and control. When used consistently and correctly, condoms are effective in preventing many STD's, including chlamydia. Due to the asymptomatic nature of the disease, increased screening is recommended. Screening for chlamydia should occur at the same time when screening for gonorrhea.

## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

## Chlamydia /100,000 99-01 average

Stl City	861.3
Stl County	250.3
Stl City/Co	406.2
MO	242.8
US	254.0
<b>Stl City Black</b>	<b>1,173.2</b>
Stl City White	87.9
Stl Co Black	725.6
Stl Co White	38.2
Stl City/Co Black	940.5
Stl City/Co White	46.3
MO Black	936.8
MO White	84.8
US Black	1,045.1
US White	109.3



chlamydia

# tb cases

## Definition

TB, or tuberculosis, is a disease caused by bacteria called *Mycobacterium tuberculosis*. The bacteria can attack any part of the body, but usually attacks the lungs. The rates are presented as the number of cases per 100,000 and are also averaged over the the 1999-2001 time period.

## Public Health Implications

TB is spread through the airborne droplets from sputum of individuals with infectious TB disease. TB disease was once the leading cause of death in the United States. As a result of drug therapy developed in the 1940's, TB slowly began to disappear in the United States. However, TB came back. But since the increase in cases, starting in 1989, there has been increased funding and attention to the problem. In 2002 there were 15,075 cases of TB in the United States. In 2002, the U.S. rate at 5.2 per 100,000 was the lowest rate in 50 years.

## Saint Louis Rates and Comparative Info

During the 1999-2001 time period, the average rate of TB in Saint Louis City was 3.6 times the Missouri rate, and 2 times the U.S. rate. In 2002 in Saint Louis City, there were 27 cases of TB. The ZIP Codes with the rates of most concern are 63103 and 63110. The ZIP Codes with the most favorable rates are 63139 , 63106 and 63109.

Zip Code (ZCTA)	TB Cases per 100K Population	Map Quartile
63101*	123.5	4*
63103	33.9	4*
63110	27.3	4
63102*	25.4	3*
63104	20.0	3
63115	18.5	3
63147	17.6	2*
63107	16.3	2*
63118	13.1	2
63108	12.7	2*
63113	10.5	2*
63116	9.1	1
63112	8.9	1*
63120	7.3	1*
63111	4.7	1*
63109	3.4	1*
63106	3.1	1*
63139	2.8	1*

## Black/white Disparity

The 1999-2001 average rate in the Saint Louis City African-American population is 3.36 times that in the Saint Louis City white population for the same time period.

**Disparity Ratio: 3.4**

## Focus Group Comments/Concerns

"Infectious diseases, TB, hepatitis A, B and C".

## Potential Public Health Interventions

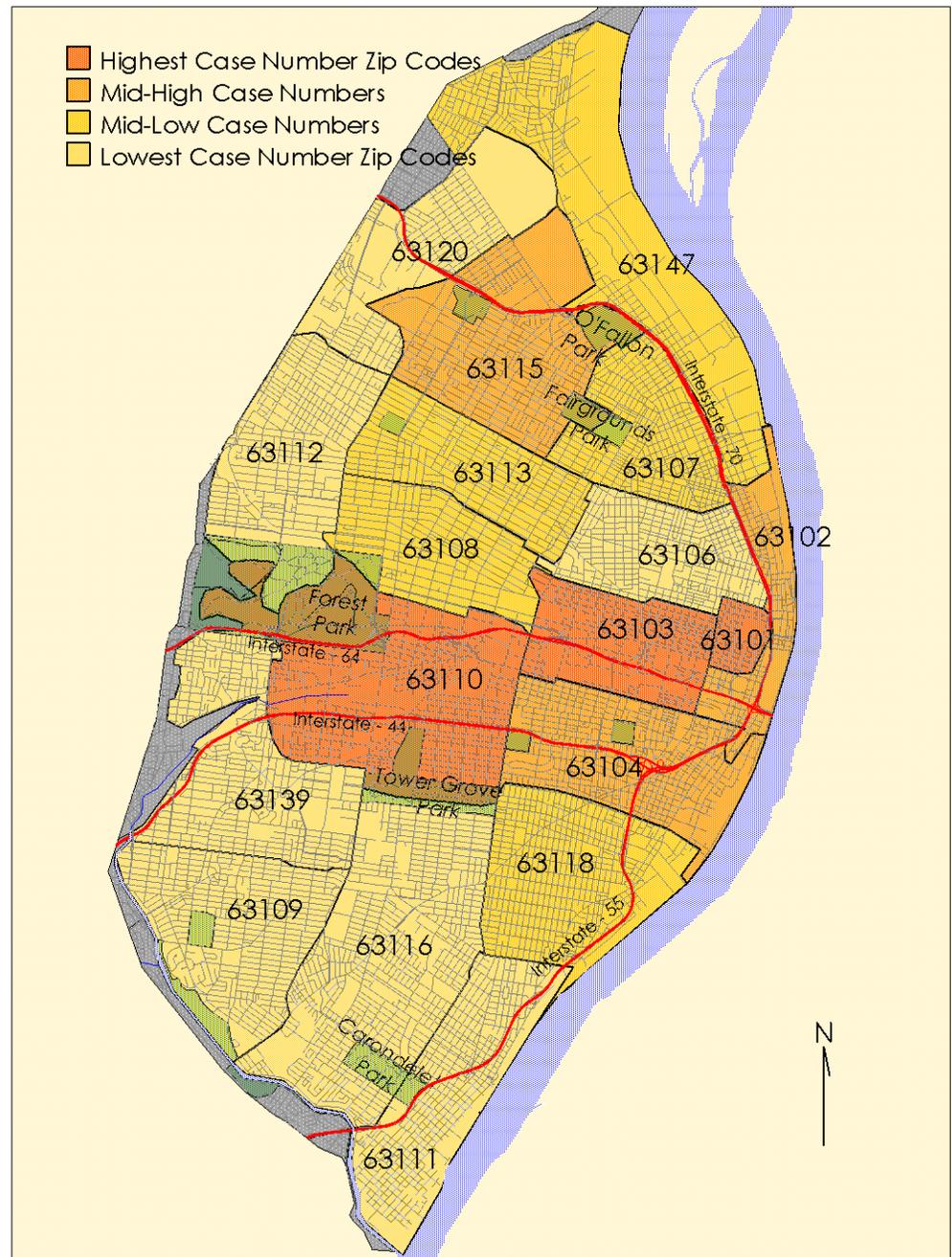
A TB skin test is the most effective way to diagnose a TB infection. People who are infected with TB do not have any symptoms and cannot spread TB, but may develop TB disease at some time in the future. For individuals with weak immune systems, such as babies, young children, and people infected with HIV, the bacteria can become active and cause TB disease. Between 1997 and 2000, 9 cases of Multi-drug resistant TB have been reported in the City of Saint Louis. The CDC considers 9 cases to be a high number and thus resources are being committed to engage in partner and contact elicitation.

## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

## TB Cases / 100,000 90-01 average

Stl City	12.1
Stl County	3.0
Stl City/Co	5.3
MO	3.4
US	5.9
<b>Stl City Black</b>	<b>17.2</b>
Stl City White	5.2
Stl Co Black	7.3
Stl Co White	1.1
Stl City/Co Black	12.1
Stl City/Co White	1.7
MO Black	12.4
MO White	1.7
US Black	15.2
US White	1.9



t b c a s e s

# hepatitis a

## Definition

Hepatitis A is a liver disease caused by Hepatitis A virus (HAV), which appears to induce lifelong protection against subsequent infection. The severity of clinical disease associated with HAV infection increases with age. Close personal contact and contaminated food and water can serve as vehicles of HAV transmission. Transmission of HAV generally occurs as a result of ingestion by a susceptible person of virus shed in the feces of an infected person. This transmission is called “fecal-oral”. Complications of hepatitis A include fulminant hepatitis in which the case fatality rate can be >50%, cholestatic hepatitis and relapsing hepatitis. The rates are presented as the number of cases per 100,000 population and are averaged over 1999-2001 time period.

## Public Health Implications

During the past several decades, the incidence of hepatitis A in the United States has been cyclic, with nationwide epidemics occurring every 10 to 15 years; the latest epidemic occurred in 1989. A peak was also observed in 1995. Although it is smaller than 1989, between epidemics, hepatitis A continues to occur at relatively high levels. Children play an important role in the transmission of HAV in the United States; children who are infected before age 5 have unrecognized asymptomatic infection. In 2002 there were an estimated 73,000 new infections in the U.S. and just 2 cases in Saint Louis City.

Zip Code	Hepatitis A	Map Quartile
63102*	25.4	4
63104	17.5	4
63103	14.5	4
63118	14.3	4
63107	8.2	2
63108	8.0	2
63111	7.7	2
63106	6.3	2
63116	5.0	2
63112	4.4	2
63139	4.1	1
63110	3.3	1
63120	2.5	1
63113	2.1	1
63109	1.1	1
63101*	0.0	1
63115	0.0	1
63147	0.0	1

## Saint Louis Rates and Comparative Info

In Saint Louis City, rates of Hepatitis A decreased dramatically in the period from 1994 to 1999-2001 time period, from 53.1 per 100,000 in 1994 to 6.1 per 100,000 in the 1999 through 2001 time period. When comparing average rates over the 1999-2001 time period, Saint Louis City experienced a rate of hepatitis A 3.2 times that seen in Missouri, and 1.56 times that seen in the U.S. ZIP Codes with the rates of most concern are 63104, 63103 and 63118. The ZIP Codes with the most favorable rates are 63147 and 63115.

## Black/white Disparity

Specific rates by race for Saint Louis City are not presented in this report due to the percentage of cases that do not identify race.

## Focus Group Comments/Concerns

“Infectious diseases, TB, hepatitis A, B and C.”

## Potential Public Health Interventions

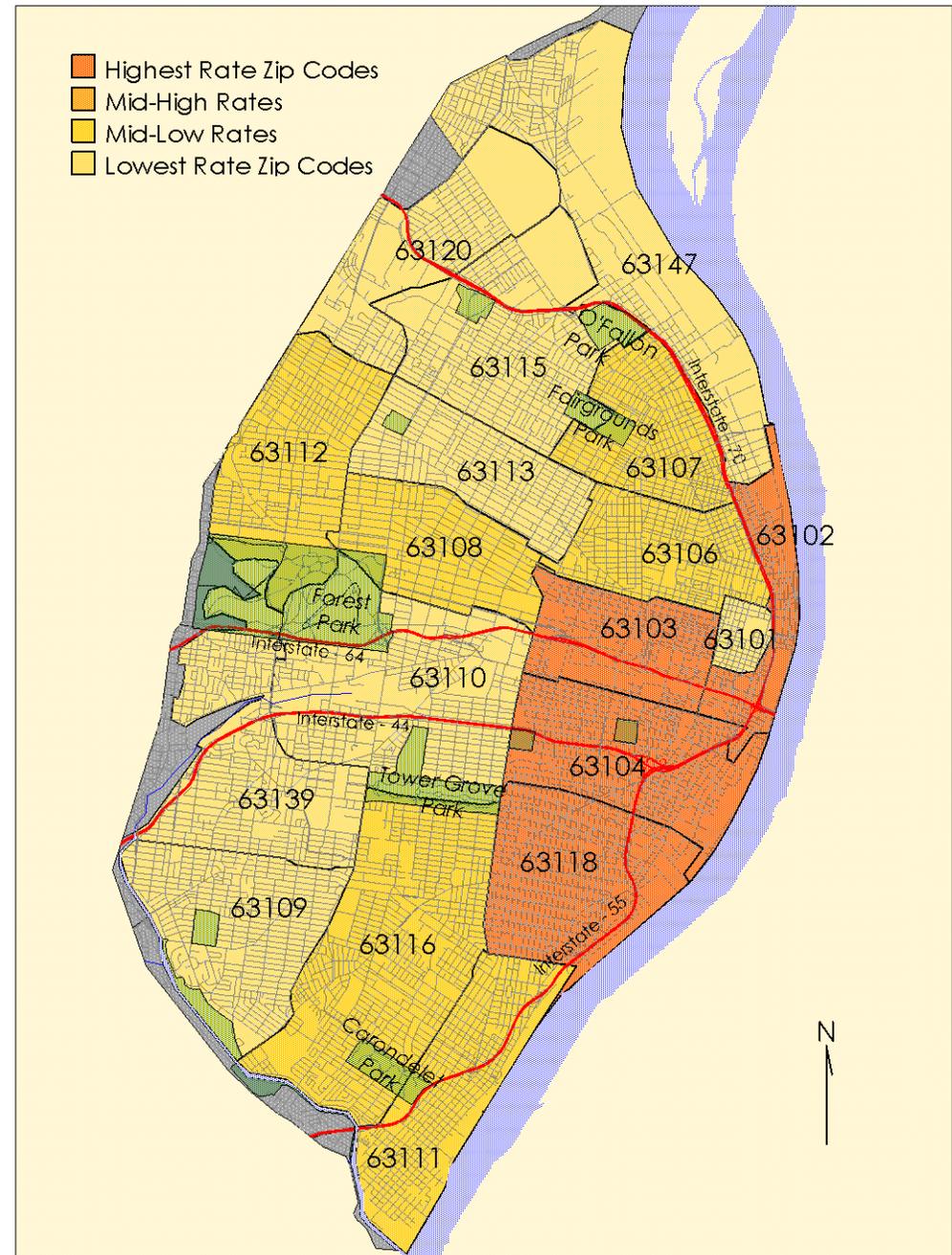
Good personal hygiene and proper sanitation can help prevent hepatitis A. Vaccines are also available for long-term prevention of hepatitis A virus infection in persons 2 years of age and older. Immune globulin is available for short-term prevention in all ages. Hepatitis vaccine is the best protection.

## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

## Hepatitis A / 100,000 99-01 average

Stl City	6.1
Stl County	3.0
Stl City/Co	N/A
MO	1.9
US	3.9
Stl City Black	N/A
Stl City White	N/A
Stl Co Black	N/A
Stl Co White	N/A
Stl City/Co Black	N/A
Stl City/Co White	N/A
MO Black	2.9
MO White	2.7
US Black	2.3
US White	1.9



hepatitis a

# hepatitis b

## Definition

Hepatitis B is a serious disease caused by a virus that attacks the liver. The virus, which is called hepatitis B virus (HBV), can cause lifelong infection, cirrhosis (scarring) of the liver, liver cancer, liver failure and death. HBV is transmitted by percutaneous or permucosal exposure to infectious blood or body fluids from persons who have either acute or chronic HBV infection. Blood exposure and sex contact are relatively efficient modes of transmission. The rates are presented as the number of cases per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

In the United States, hepatitis B is largely a disease of young adults; the rate of reported cases is highest for persons 20 - 49 years of age. High risk groups include: injection drug users, sexually active heterosexuals, men who have sex with men, health care workers and hemodialysis patients. The number of new infections per year has declined from an average of 260,000 in the 1980s to about 78,000 in 2001. The greatest decline has happened among children and adolescents due to routine hepatitis B vaccination.

## Saint Louis Rates and Comparative Info

Averaged rates in the time period 1999-2001, indicate that the rate in Saint Louis City is 1.8 times the Missouri rate, and 1.5 times the U.S. rate. The ZIP Codes of most concern are 63110, 63103 and 63111. The ZIP Codes with no cases are 63147, 63113 and 63106.

Zip Code	Hepatitis B	Map Quartile
63110	9.9	4
63103	7.2	3
63111	6.2	3
63107	6.1	3
63118	5.5	3
63104	5.2	3
63120	5.0	3
63108	4.8	2
63112	4.4	2
63109	3.4	2
63116	2.1	1
63139	1.4	1
63115	1.3	1
63101*	0.0	1
63102*	0.0	1
63106	0.0	1
63113	0.0	1
63147	0.0	1

## Black/white Disparity

Specific rates by race for Saint Louis City are not presented in this report due to the percentage of cases that do not identify race.

## Focus Group Comments/Concerns

"Infectious diseases, TB, hepatitis A, B and C."

## Potential Public Health Interventions

The current hepatitis B vaccination strategy in the United States has an overall goal of eliminating HBV transmission. Because most of the serious consequences related to HBV occur among persons with chronic HBV infection, the primary objectives of this strategy are to prevent chronic HBV infection and its consequences, cirrhosis and liver cancer. Hepatitis B vaccine is the best protection, particularly those in the high risk groups.

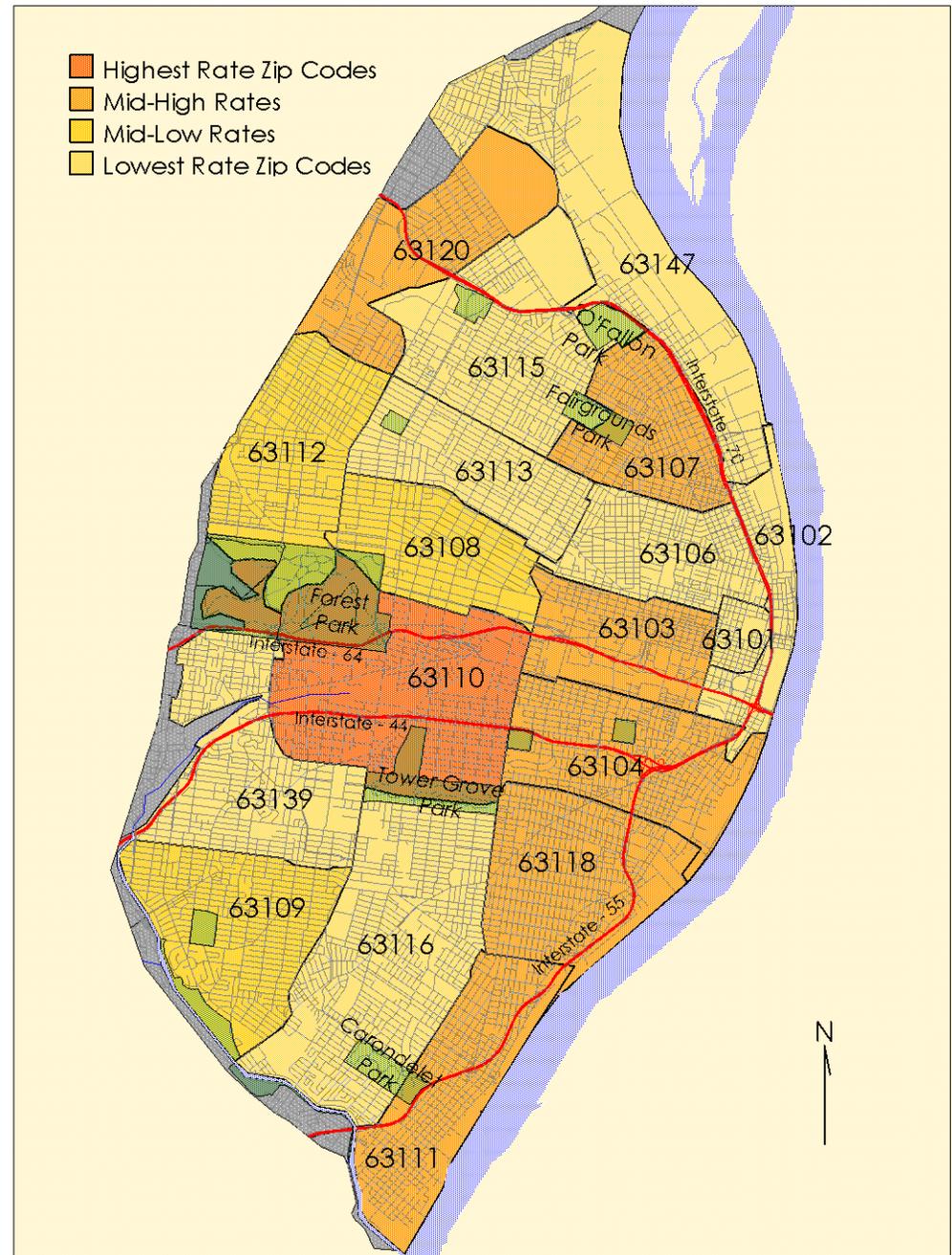
## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

# Hepatitis B

/ 100,000 99-01 average

Stl City	4.3
Stl County	2.2
Stl City/Co	N/A
MO	2.4
US	2.8
Stl City Black	N/A
Stl City White	N/A
Stl Co Black	N/A
Stl Co White	N/A
Stl City/Co Black	N/A
Stl City/Co White	N/A
MO Black	2.1
MO White	1.2
US Black	4.2
US White	1.5



hepatitis b



# ENVIRONMENTAL



# lead poisoning

## Definition

Lead poisoning results from the ingestion of lead. It primarily affects children between the ages of 6 months and 5 years. The major source of lead is from chipping lead-based paint and paint dust in housing. Lead poisoning, in this document, is defined as those children less than six years of age that have a blood lead level of 10 µg/dl (micrograms per deciliter) or higher. The rates presented are the percent of lead poisoned children that have been screened and are referred to as “screening prevalence rates” (SPR). The rates do not represent all children under six years of age.

## Public Health Implications

Childhood lead poisoning is considered to be entirely preventable but remains a major environmental health problem in the United States. Lead poisoning can adversely affect intelligence, behavior and development. Minority and poor children are disproportionately affected.

## Saint Louis Rates and Comparative Info

The rate for Missouri in 2000 was 9.9 and 2.2 for the United States. In 2000, in the City of Saint Louis there were close to 1,683 children under the age of 6 reported as having elevated blood lead levels. The number of children lead poisoned has steadily decreased in Saint Louis City since 2000.

Zip Code (ZCTA)	2000 Lead Poisoning Prevalence Rates	Map Quartile
63107	47.6	4
63118	45.6	4
63113	41.9	4
63120	39.6	4
63110	38.4	4
63115	37.8	3
63102*	37.5	3
63112	36.0	3
63104	34.7	3
63147	32.6	3
63101*	31.6	3
63108	30.7	3
63106	28.9	2
63111	27.9	2
63116	27.4	2
63103	26.2	2
63139	17.7	1
63109	10.8	1

## Black/white Disparity

In Saint Louis City in 2000 the screening prevalence rate for African-American children was 38.7 whereas the rate in white children was 27.3. The two ZIP Codes with the highest screening prevalence rates are in the predominately African-American areas of the city. They are ZIP Codes 63107 and 63113. However 63118, which is predominately white is also a ZIP Code with rates of great concern.

**Disparity ratio: 1.4**

## Focus Group Comments/Concerns

“There is a general lack of appreciation for or understanding of the problem of childhood lead poisoning and its impact on families (particularly among African-American families).” “Most of these old houses are located in ZIP Code areas that show the highest rates of childhood lead poisoning.” “In the accounts of the various participants, there are generations of lead-poisoned children in many families.”

## Potential Public Health Interventions

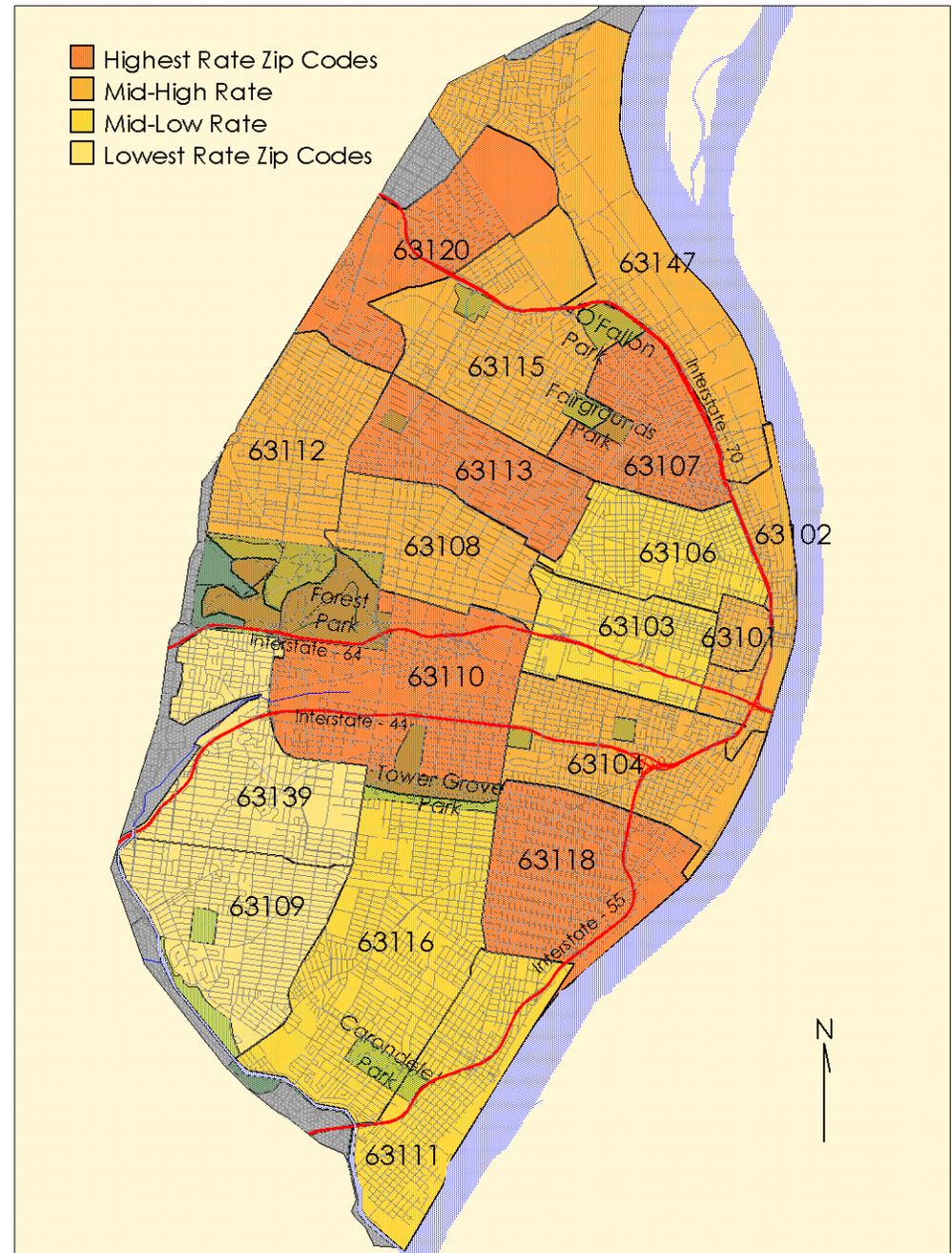
Screening programs, education programs, epidemiological assessments to determine high risk areas, prevention programs, remediation efforts and policy development

## Data Source

City of Saint Louis Department of Health, Childhood Lead Poisoning Program

## Childhood Lead Poisoning Screened Prevalence Rates - 2000

Stl City	31.1
Stl County	6.3
Stl City/Co	18.0
MO	9.9
US	2.2
<b>Stl City Black</b>	<b>38.7</b>
<b>Stl City White</b>	<b>27.3</b>
Stl Co Black	n/a
Stl Co White	n/a
Stl City/Co Black	n/a
Stl City/Co White	n/a
MO Black	n/a
MO White	n/a
US Black	n/a
US White	n/a



lead poisoning

# asthma

## Definition

Asthma is a long-term, often progressive disease in which the airways in the lungs become temporarily blocked through inflammation causing episodes of breathing difficulty. Asthma triggers include dust, tobacco smoke, cockroaches and some chemicals. A long-term multifaceted approach is required to prevent and manage asthma. Asthma currently cannot be cured, only controlled. The rates are presented as the number of asthma hospitalizations averaged for the time period 2000-2002 per 1,000 population.

## Public Health Implications

Asthma is one of the most common and costly diseases in the United States. More than 7.5% of the population has asthma and the numbers are growing. The number of asthma sufferers has more than doubled from 6.7 million in 1980 to almost 31 million in 2002. An estimated 8.9 million are children. Asthma is disproportionately affecting poor, inner-city dwellers.

## Saint Louis Rates and Comparative Info

Comparable national and State rates are not available for this report. The ZIP Code with the rate of most concern is 63106. The ZIP Codes with the most favorable rates are 63109 and 63139.

ZIP Code	Asthma Admissions	Map Quartile
63106	8.3	4
63101*	7.8	4
63120	5.7	3
63113	4.9	3
63107	4.9	3
63115	4.6	3
63112	4.2	2
63118	4.0	2
63103	3.7	2
63147	3.4	2
63110	3.4	2
63104	2.8	2
63108	2.2	1
63111	2.0	1
63116	1.6	1
63102*	1.0	1*
63139	0.9	1
63109	0.6	1

## Black/white Disparity

Race information is not provided, however the ZIP Codes with the rates of most concern are predominately African American and the ZIP Codes with the most favorable rates are predominately white.

## Focus Group Comments/Concerns

"Asthma." "Asthma." "Asthma – dust, pets, old buildings."

## Potential Public Health Interventions

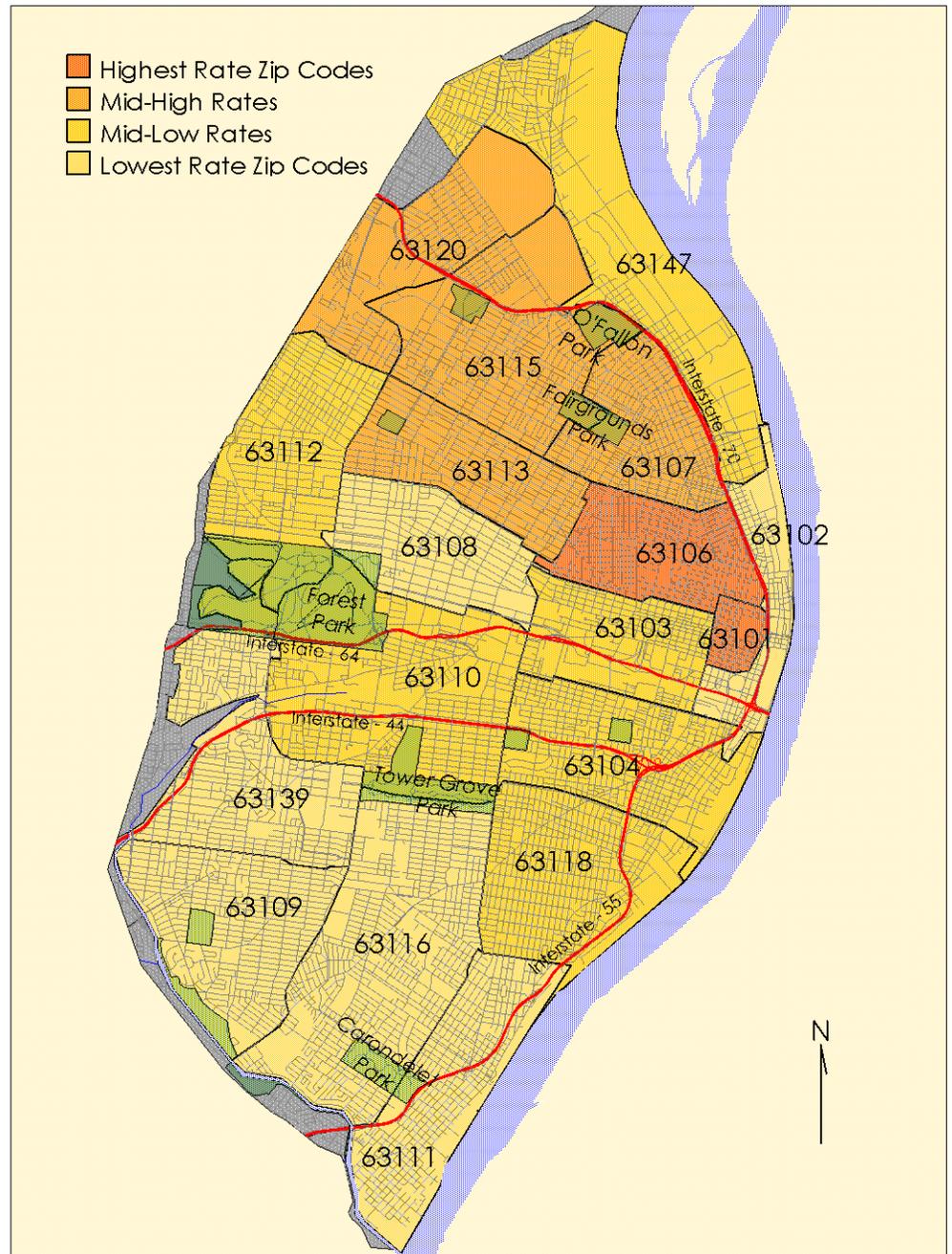
Public health programming includes assisting in access to primary care, health education and environmental sanitation interventions

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation

## Asthma Hospital Admission Rates / 1000 Population - 2000

Stl City	N/A
Stl County	N/A
Stl City/Co	N/A
MO	N/A
US	N/A
Stl City Black	N/A
Stl City White	N/A
Stl Co Black	N/A
Stl Co White	N/A
Stl City/Co Black	N/A
Stl City/Co White	N/A
MO Black	N/A
MO White	N/A
US Black	N/A
US White	N/A



asthma

# foodborne illness

## Definition

More than 250 different diseases have been described that can be caused by contaminated food or drink. A foodborne disease outbreak is defined as a group of people developing the same illnesses after ingesting the same food. Four of the most common foodborne diseases caused by bacteria: Shigella, Salmonella, Campylobacter, and Escherichia coli are used for this analysis. The rates presented are per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

The great majority of food items which cause foodborne diseases are raw or undercooked foods of animal origin such as meat, milk, eggs, cheese, fish, or shellfish. While the causes and effects of foodborne diseases are better understood today, emerging risks need to be monitored for several reasons. The food supply of the United States has changed dramatically, consumer habits are changing, and new and emerging foodborne pathogens are being identified, which can cause diseases unrecognized 50 years ago. Constant vigilance is necessary to identify new problems requiring new solutions as they emerge.

## Saint Louis Rates and Comparative Info

Compared to the average rate in Missouri from 1999-2001, Saint Louis City reported a foodborne illnesses rate of 1.4 times the Missouri rate. The ZIP Codes with the rates of most concern are 63106, 63112 and 63115. The ZIP Codes with the most favorable rates are 63111, 63116. 63109 and 63108.

Zip Code	Foodborne Illness	Map Quartile
63106	69.5	4
63112	64.7	4
63115	63.4	4
63147	60.7	4
63139	57.5	3
63118	56.3	3
63113	53.8	3
63107	53.1	3
63103	50.7	3
63101*	50.2	3
63110	46.3	2
63120	45.2	2
63104	41.9	2
63108	35.1	1
63109	31.9	1
63116	29.1	1
63111	26.3	1
63102*	25.4	1

## Black/white Disparity

The data are not generated by race. Reporting foodborne illness by ZIP Code is not entirely very meaningful since it is not known where the person may have been exposed.

## Focus Group Comments/Concerns

“Environmental and sanitation issues.”

## Potential Public Health Interventions

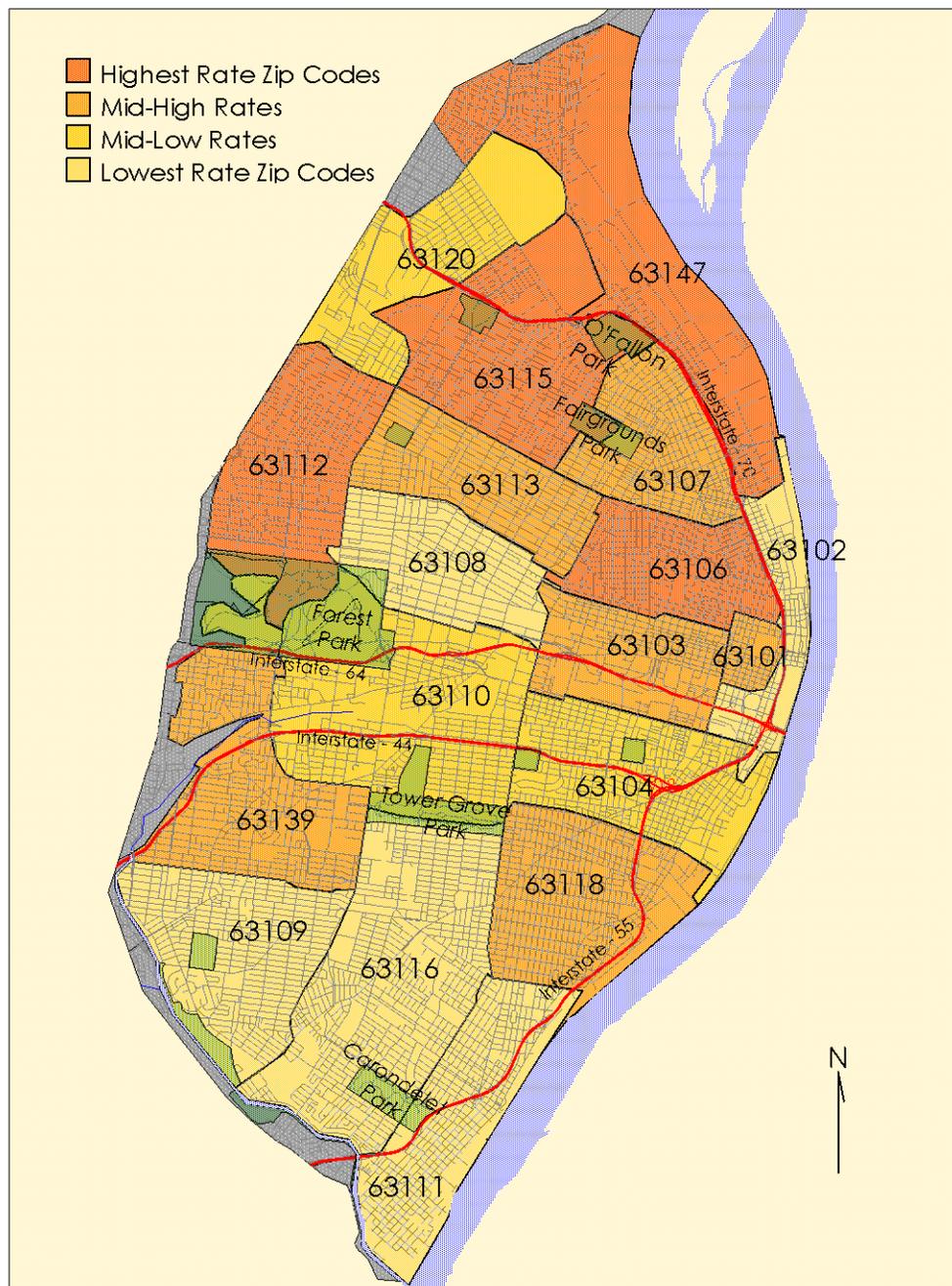
Thorough cooking kills almost all foodborne bacteria, viruses and parasites, and is the single most important step in preventing foodborne disease. Preventing spread of contamination from raw foods in the kitchen is also important. Washing one's hands, cutting board, and knife with soap and water immediately after handling raw meat, raw poultry, raw seafood or raw eggs will help keep the food handler from contaminating any other foods in the kitchen. Persons who are ill with diarrhea or vomiting should not prepare food for others. Special care is needed in the preparation of food for infants, the elderly, and persons whose immune systems are compromised by underlying illness or medical treatment of illness.

## Data Source

The City of Saint Louis Department of Health, Communicable Disease Section

## Foodborne Illness / 100,000 1999-2001 average

Stl City	46.6
Stl County	32.1
Stl City/Co	N/A
MO	32.9
US	N/A
Stl City Black	N/A
Stl City White	N/A
Stl Co Black	N/A
Stl Co White	N/A
Stl City/Co Black	N/A
Stl City/Co White	N/A
MO Black	25.7
MO White	18.0
US Black	N/A
US White	N/A



foodborne illness



# INJURY



# motor vehicle accident mortality

## Definition

Deaths from motor vehicle accidents are described as a transport accident involving a motor vehicle, and includes both motor vehicle traffic and non-traffic accidents. The death is recorded in the ZIP Code of the accident victim's residence, not where the accident occurred. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

In the U.S., traffic injuries are the leading cause of injury deaths. According to the National Highway Traffic Safety Administration (NHTSA), the percentage of traffic fatalities that were alcohol-related is approximately 40%. In the U.S., traffic injuries are also the leading cause of on-the-job fatalities.

## Saint Louis Rates and Comparative Info

In Saint Louis City, the average rate for the time period 1999 through 2001 for traffic accident deaths is 0.9 that seen in U.S., and 0.7 times the averaged rate in Missouri in the same time period. In 2002, there were 45 City of Saint Louis residents that died from motor-vehicle accidents. The three ZIP Codes with rates of most concern are 63120, 63111, and 63115. The ZIP Codes with the most favorable rates are 63104, 63110 and 63106

Motor Vehicle Accident Mortality Rates per 100K		
Zip Code (ZCTA)	Population (Age-adjusted)	Map Quartile
63101*	69.5	4*
63120	27.7	4*
63111	23.6	4*
63115	22.0	4*
63112	17.9	3*
63103	16.6	3*
63116	14.6	3
63107	13.0	2*
63118	12.6	2*
63147	12.1	2*
63109	11.6	2*
63113	11.1	2*
63139	8.2	2*
63108	6.2	1*
63106	5.7	1*
63110	5.7	1*
63104	4.5	1*
63102*	0.0	1*

## Black/white Disparity

The Saint Louis City average rate for the white population for the years 1999 through 2001 is 1.3 times the Saint Louis City averaged African-American rate in the same time period.

**Disparity Ratio: 1.3**

## Focus Group Comments/Concerns

"Lack of respect for authority – traffic lights."  
"Commuting – road rage."

## Potential Public Health Interventions

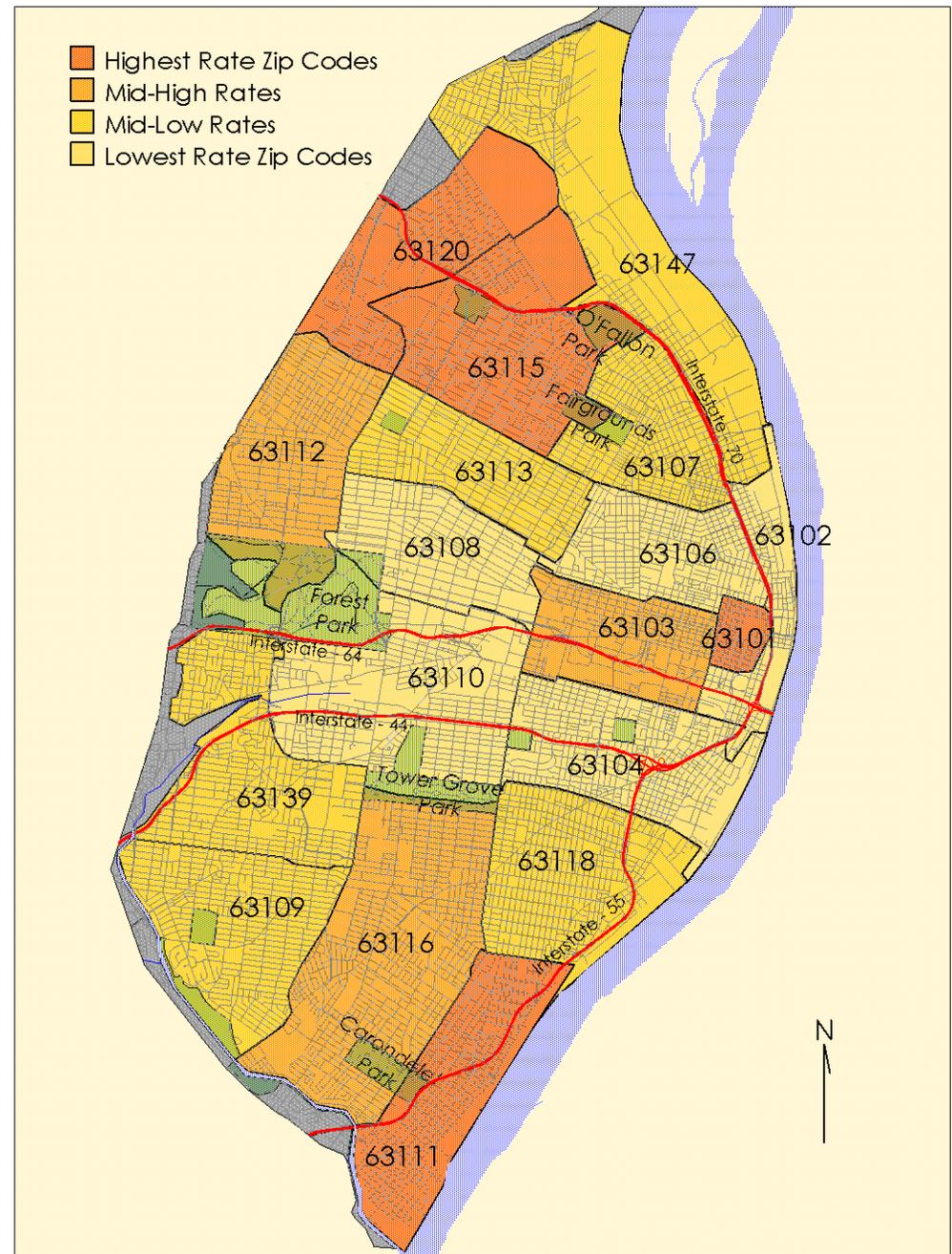
The quickest, easiest, and most effective way to prevent traffic injuries and fatalities is to make certain that every vehicle occupant is properly buckled up on every trip. Research has found that lap/shoulder belts, when used properly, reduce the risk of fatal injury to front seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent. For light truck occupants, seat belts reduce the risk of fatal injury by 60 percent and moderate-to-critical injury by 65 percent.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Motor Vehicle Accident Mortality Rates / 100,000 99-01 average

Stl City	13.3
Stl County	10.5
Stl City/Co	11.2
MO	19.5
US	15.2
<b>Stl City Black</b>	<b>15.5</b>
<b>Stl City White</b>	<b>11.9</b>
Stl Co Black	13.3
Stl Co White	10.0
Stl City/Co Black	14.5
Stl City/Co White	10.3
MO Black	15.8
MO White	20.6
US Black	16.5
US White	16.8



motor vehicle accident mortality

# non-motor vehicle accident mortality

## Definition

Deaths from “non-motor vehicle accidents” and adverse events include railway accidents, water and air transport accidents, poisonings, falls, and fires. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

In the U.S., the leading causes of death from unintentional injuries are motor vehicle crashes, fires, burns, falls, drownings, and poisonings. Unintentional injuries are the leading cause of death in the United States for people aged 1-44. After motor vehicle crashes, drowning is the second leading cause of death due to unintentional injuries among children and young adults, aged 1-24. Among people over age 65, falls account for about 7,400 deaths a year. Alcohol is involved in many injuries, including about 40% of deaths in residential fires.

## Saint Louis Rates and Comparative Info

In Saint Louis City, the rate of accidental death not due to motor vehicle accidents for the 1999-2001 time period, is 2.1 times that seen in the U.S., and 1.7 times the rate in Missouri. In 2002 there were 133 deaths to Saint Louis City residents due to non motor-vehicle accidents. The ZIP Codes of most concern are 63118, 63112 and 63111. The ZIP Codes with the most favorable rates are 63147 and 63109.

Non-motor Vehicle Accident Mortality Rates per 100K		
Zip Code (ZCTA)	Population (Age-adjusted)	Map Quartile
63101*	62.8	4*
63118	55.9	4
63112	50.0	4
63111	47.9	4
63113	45.0	3
63103	43.9	3*
63106	42.2	3*
63116	40.2	3
63104	37.1	2*
63108	35.8	2
63115	35.8	2
63120	33.4	2*
63107	31.8	2*
63110	29.8	1*
63139	27.7	1
63102*	25.4	1*
63109	24.3	1
63147	23.2	1*

## Black/white Disparity

In Saint Louis City, the average rate for the 1999 through 2001 time period for accidental death not due to motor vehicle accidents is only 6% higher in the African-American community than in the white community. When comparing these rates to those seen in the U.S., Saint Louis City African Americans have a 1.76-fold increase over U.S. African Americans averaged for the same time period; whites have a 1.9-fold increase over U.S. whites.

**Disparity Ratio: 1.06**

## Focus Group Comments/Concerns

“Safety in the community.”

## Potential Public Health Interventions

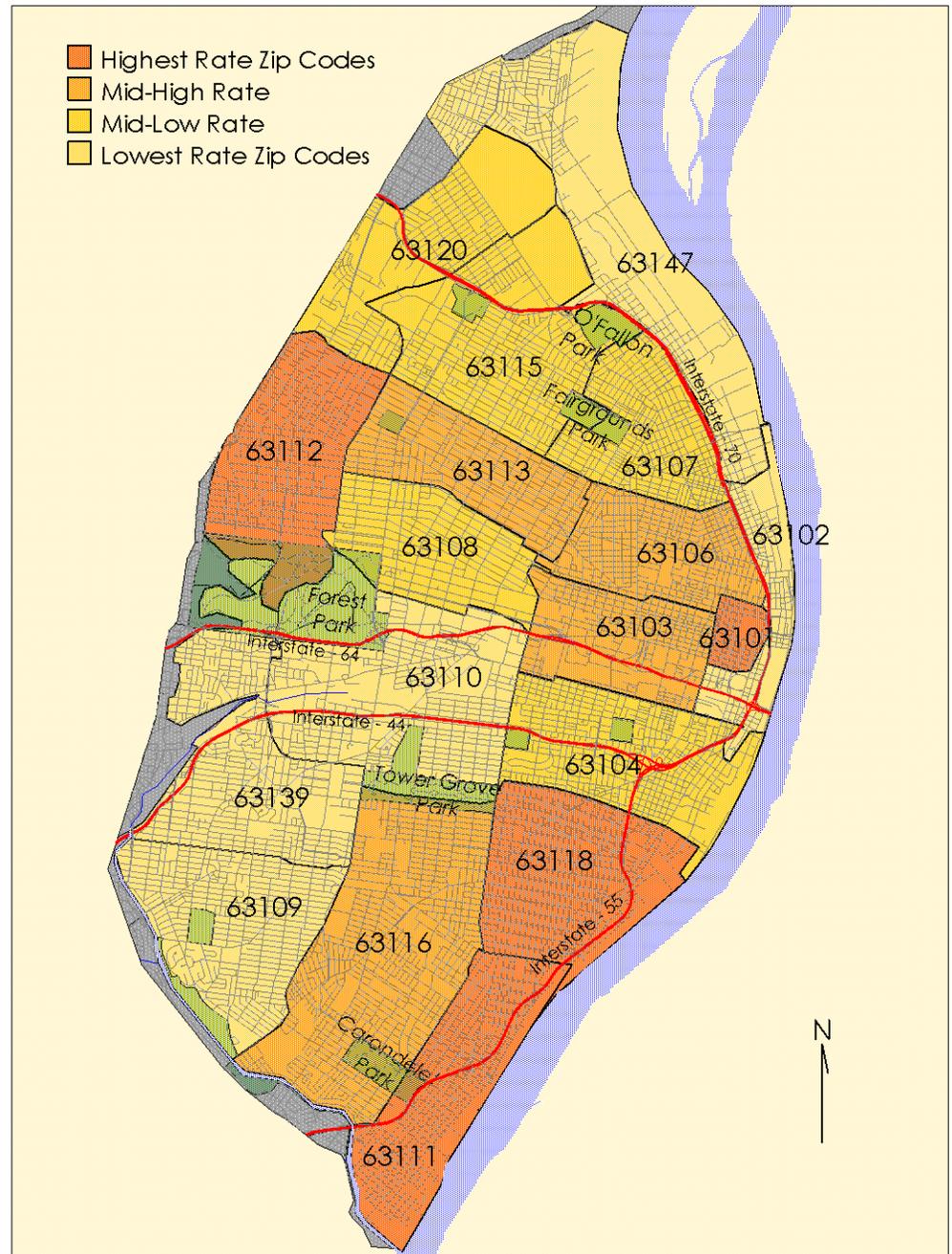
The Division of Unintentional Injury Prevention (at CDC) monitors trends in unintentional injuries in the U.S., and conducts research to better understand risk factors, and evaluates interventions to prevent these injuries. Current activities include studies on: risk factors for drowning among minorities; risk factors associated with fatal and nonfatal residential fires, including faulty heating systems, smoking, the absence of functioning smoke detectors, and the use of alcohol by occupants; studies on the risk factors for falls, such as alcohol use, medication, and bone density; the evaluation of programs to increase the use of bicycle helmets.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Non-Motor Vehicle Accident Mortality Rates / 100,000 99-01 average

Stl City	38.1
Stl County	18.1
Stl City/Co	23.0
MO	22.0
US	18.3
<b>Stl City Black</b>	<b>39.3</b>
<b>Stl City White</b>	<b>37.1</b>
Stl Co Black	18.2
Stl Co White	17.9
Stl City/Co Black	28.3
Stl City/Co White	21.1
MO Black	30.3
MO White	21.4
US Black	22.3
US White	19.3



non-motor vehicle accident mortality

# overall accident mortality

## Definition

Deaths from accidents and adverse events includes non-motor vehicle and motor vehicle accidents. Non-motor vehicle accidents include falls, fires, poisonings, railway and water and air transport accidents. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

The vast majority of all fatal and non-fatal injuries in America, including traffic injuries, are predictable and preventable. Injuries are a major public health and health care problem and are the leading cause of death for people age 1 to 44. Fatalities, however, are only a small part of the total injury picture. For each injury-related death, there are 19 hospitalizations for injury and another 300 injuries that require medical attention. Injury patterns vary by age group, gender, and cultural group.

## Saint Louis Rates and Comparative Info

The averaged overall death rate due to all accidents in Saint Louis City is 1.5 times that in the U.S. The averaged Saint Louis City rate is 1.24 times that in Missouri. In 2000 there were 178 deaths to Saint Louis residents due to all accidents. The ZIP Codes with the rates of most concern are 63111, 63118 and 63112. The ZIP Codes with the most favorable rates are 63147, 63139 and 63109.

Zip Code (ZCTA)	All Accidents Mortality Rates per 100K	
	Population (Age-adjusted)	Map Quartile
63101*	132.3	4*
63111	72.9	4
63118	69.3	4
63112	67.8	4
63120	61.1	4
63103	60.5	3*
63115	57.8	3
63113	56.1	3
63116	54.8	3
63106	50.2	3*
63107	46.5	2
63108	42.0	2
63104	41.6	2
63110	37.1	1
63109	35.9	1
63139	35.9	1
63147	35.3	1*
63102*	25.4	1*

## Black/white Disparity

In Saint Louis City, the averaged 1999-2001 African-American rate is just 11% higher than the rate in the white community in the same time period. When comparing Saint Louis City African Americans to U.S. African Americans, the averaged rate is 1.37 times in Saint Louis; for the Saint Louis City white population, the averaged rate is 1.3 times the U.S. rate.

**Disparity Ratio: 1.1**

## Focus Group Comments/Concerns

“Safety in the community.”

## Potential Public Health Interventions

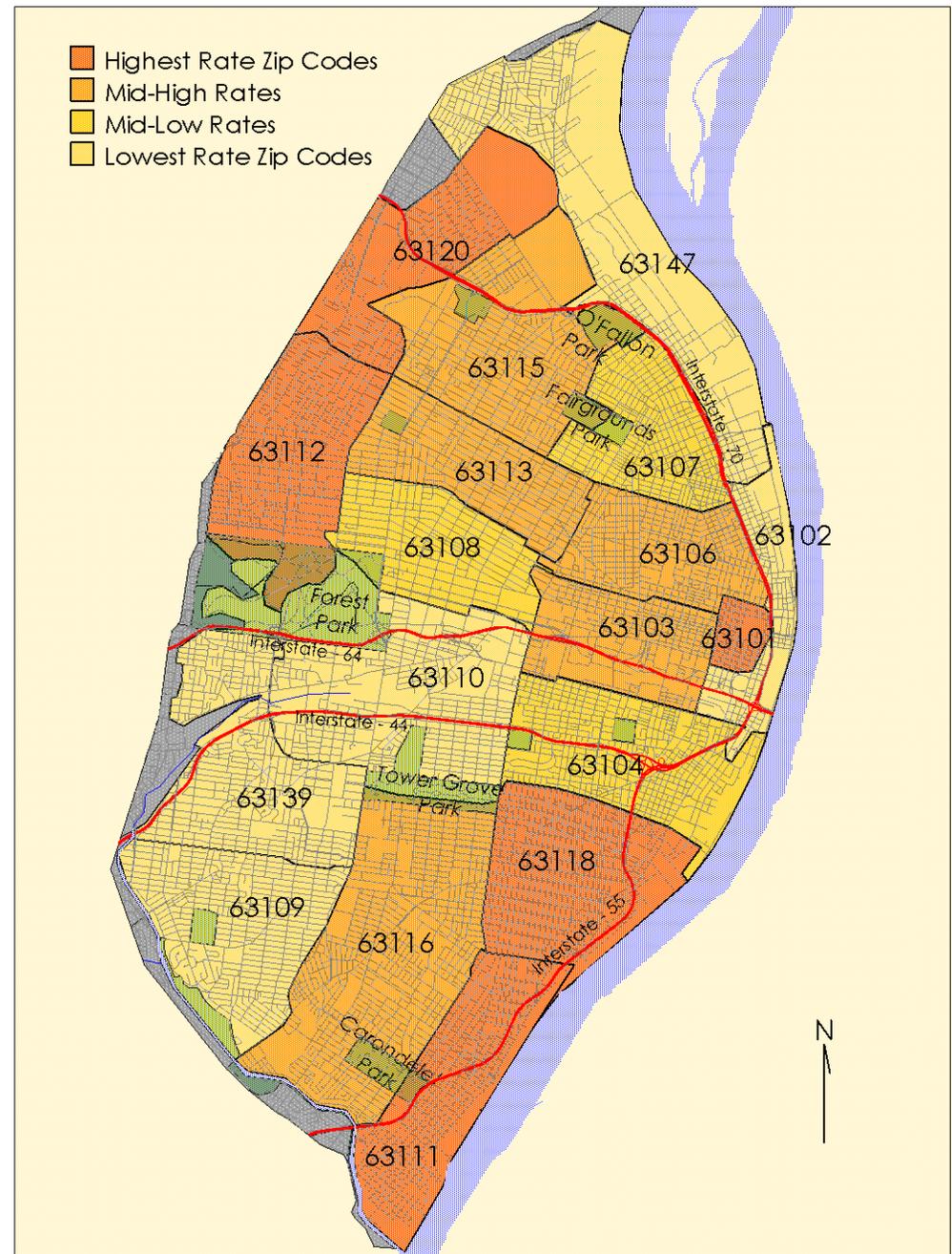
The most common causes of injuries seen in emergency departments are from traffic crashes, falls, and violence. Studies of conventional trauma care show that as many as 35% of trauma patient deaths could have been prevented if optimal urgent care had been available. Epidemiological studies and health education are potential public health activities.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Overall Accident Mortality Rates / 100,000 99-01 average

Stl City	51.4
Stl County	28.8
Stl City/Co	34.3
MO	41.4
US	34.9
<b>Stl City Black</b>	<b>54.9</b>
<b>Stl City White</b>	<b>49.1</b>
Stl Co Black	32.3
Stl Co White	27.9
Stl City/Co Black	42.5
Stl City/Co White	31.3
MO Black	46.1
MO White	42.0
US Black	40.1
US White	37.6



overall accident mortality 121



# BEHAVIOR



# homicide

## Definition

Deaths from homicides and legal intervention include injuries inflicted by another person with the intent to injure or kill, by any means, and injuries inflicted by police or other law-enforcing agents in the course of legal action. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

Nationally, more than 70% of homicides are committed with a firearm. Homicide is the fourth leading cause of death for persons 1 to 14 years of age and is in the top five leading causes of death for persons ages 1 through 44. It is also the second most frequent cause of work-related death.

## Saint Louis Rates and Comparative Info

The homicide rate in the U.S. increased sharply between 1985 and 1991, and then began to decline in 1992. In Saint Louis City, the 1999-2001 average age-adjusted homicide rate is 5.3 times that seen in the U.S., and 4.4 times that in Missouri. In 2002 there were 93 deaths due to homicide and legal intervention to residents in the City of Saint Louis. This is down from 238 in 1993. The ZIP Codes with the rates of most concern are 63107 and 63113. The ZIP Codes with the most favorable rates are 63109 and 63116.

Zip Code (ZCTA)	Homicide Rates per 100K Population (Age-adjusted)	Map Quartile
63107	89.4	4
63113	70.2	4
63115	67.5	3
63147	51.7	3
63120	51.2	3*
63106	45.6	2*
63118	42.3	2
63110	37.5	2
63112	32.2	2
63104	25.6	1*
63111	20.4	1*
63108	18.1	1*
63103	16.6	1*
63102*	13.3	1*
63139	6.7	1*
63116	5.8	1*
63109	5.5	1*
63101*	-	-

## Black/white Disparity

In Saint Louis City in the African American community, the death rate due to homicide is 8 times that seen in the white population in the 1999-2001 time period. The averaged age-adjusted homicide rate among Saint Louis City African Americans is 2.6 times that seen in the U.S. African-American population; for the Saint Louis City white population, the averaged homicide rate is 1.6 times that seen in U.S. whites in the 1999 through 2001 time period.

**Disparity Ratio: 8.0**

## Focus Group Comments/Concerns

"Violence, especially among African-American teenagers." "Violence and fear of violence."

## Potential Public Health Interventions

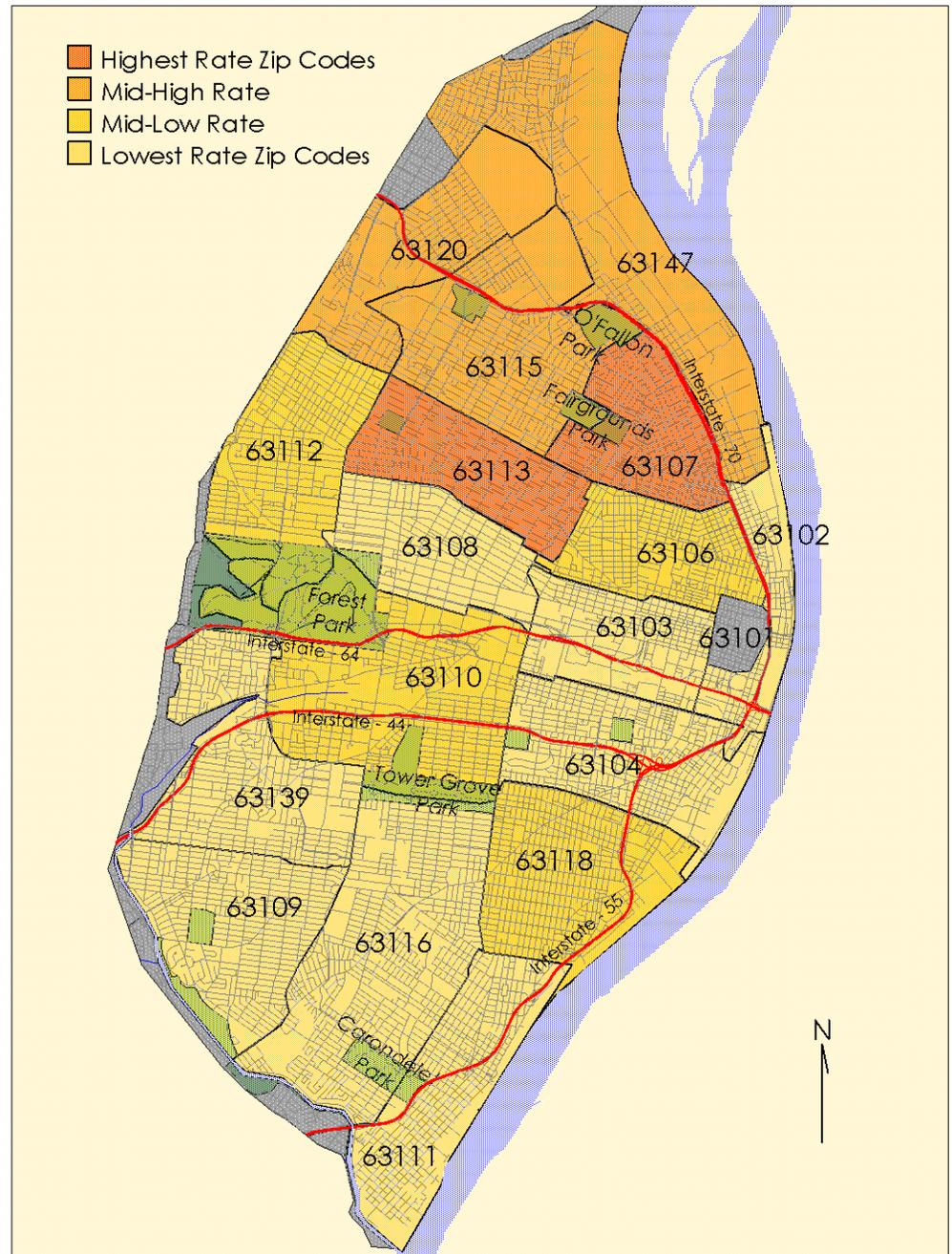
Violence is a multifaceted and complex problem of enormous social consequence. Public health activities should include evaluation of specific interventions that may reduce injuries and deaths related to interpersonal violence, particularly among adolescents and young adults.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Homicide Rates / 100,000 99-01 average

Stl City	31.5
Stl County	5.7
Stl City/Co	12.6
MO	7.2
US	5.9
<b>Stl City Black</b>	<b>56.2</b>
Stl City White	7.0
Stl Co Black	19.1
Stl Co White	2.0
Stl City/Co Black	36.5
Stl City/Co White	2.9
MO Black	35.8
MO White	3.4
US Black	21.7
US White	4.0



homicide

# suicide

## Definition

Suicide and attempted suicide are described as self-inflicted injuries specified as intentional. The determination of suicide on a death certificate requires that the death be established as both self-inflicted and intentional. Because suicide is particularly subject to inaccurate determination, the incidence of suicide may be underestimated by anywhere from 10%-50%. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

Persons suffering from mental disorders, particularly affective illnesses, are at markedly increased risk of committing suicide. Other predictors of suicide include: substance abuse, stressful life events, loss or disruption of normal social support networks, absent or inadequate social support networks, and ready accessibility of firearms - firearms are the most frequently used method of suicide. Suicide rates tend to be higher for men than women.

## Saint Louis Rates and Comparative Info

In Saint Louis City, the average suicide rate is 1.2 times that in the U.S., but the same rate seen in Missouri. In 2002 there were 38 suicides by City residents. The ZIP Codes with the rates of most concern are 63111, 63104 and 63108. The most favorable rates are in 63103, 63115 and 63113.

Zip Code (ZCTA)	Population (Age-adjusted)	Suicide Rates per 100K	Map Quartile
63102*	25.4		4*
63111	19.0		4*
63104	18.1		4*
63108	18.1		4*
63116	15.9		4
63106	15.5		4*
63139	15.4		4*
63118	13.8		3*
63120	11.6		3*
63101*	10.5		2*
63110	10.3		2*
63112	10.3		2*
63109	9.5		2*
63107	8.7		2*
63147	7.6		2*
63113	6.4		1*
63115	6.0		1*
63103	3.7		1*

## Black/white Disparity

In Saint Louis City, the average rate for the 1999-2001 time period for the white population is 2.8 times the rate of suicide seen in the African-American population. When compared to U.S. rates, the averaged rate in Saint Louis City African Americans is 1.16 times that in U.S. African Americans; and the averaged rate in the Saint Louis City white population is 1.55 times that in the U.S. white population in the 1999 through 2001 time period.

**Disparity Ratio: .36**

## Focus Group Comments/Concerns

“Low self-esteem.” “Mental health – few providers willing to see Medicaid patients.” “Mentally ill people – don’t know about services or are afraid to take advantage of the services.”

## Potential Public Health Interventions

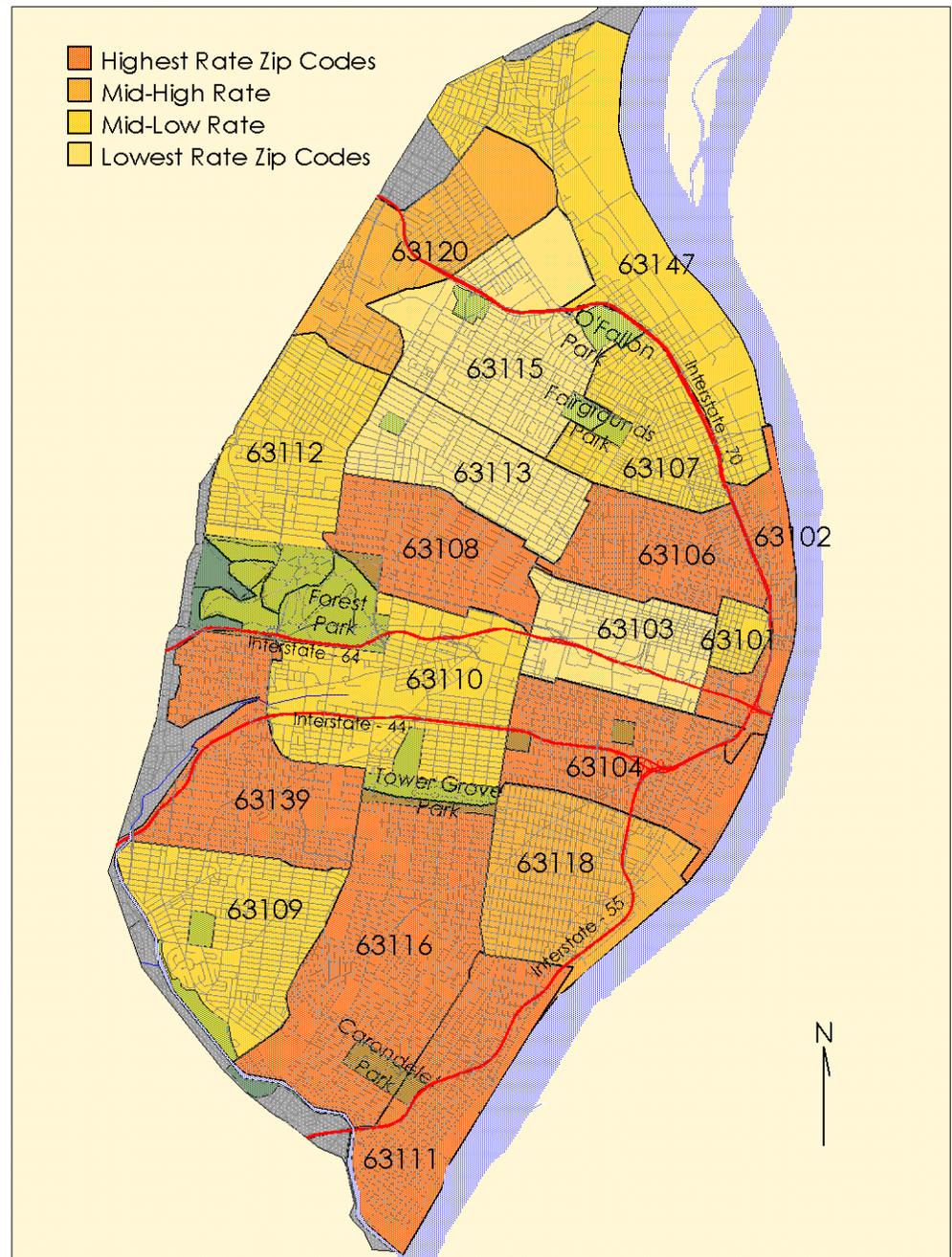
Identifying and treating persons with mental disorders remains an important mainstay of suicide prevention. Screening programs conducted in schools to identify high-risk youths are useful in identifying young persons who should receive in-person counseling and, if warranted, referral and treatment.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Suicide Rates / 100,000 99-01 average

Stl City	12.6
Stl County	10.6
Stl City/Co	11.1
MO	12.6
US	10.4
Stl City Black	6.7
<b>Stl City White</b>	<b>18.8</b>
Stl Co Black	6.4
Stl Co White	11.9
Stl City/Co Black	6.6
Stl City/Co White	13.0
MO Black	7.6
MO White	13.6
US Black	5.8
US White	12.1



suicide

# Leading causes of death

## Definition

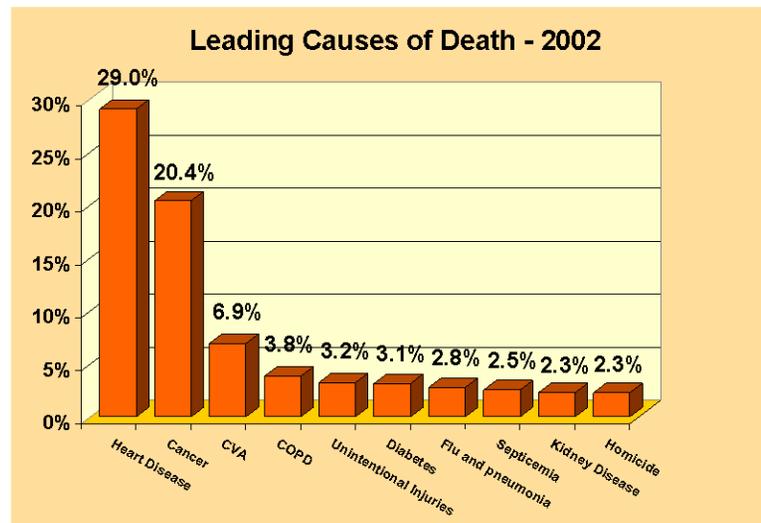
Data on the cause of death is information reported on all death certificates. The “underlying cause of death” is defined as “the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury” (World Health Organization). Underlying causes of death are determined using procedures in coding the cause of death, and are then coded using the Tenth Revision, International Classification of Diseases, 1992 (ICD-10 codes).

## Public Health Implications

The underlying cause of death is a well-accepted measure of mortality, and is useful as a means of standardizing classification of deaths. Mortality rates may be used to determine high-risk populations in a community.

## Saint Louis Rates and Comparative Info

In the U.S., the leading causes of death in 2001 were: 1) Heart disease, 2) Cancer, 3) Cerebrovascular disease (stroke), 4) Chronic obstructive pulmonary disease (COPD) now referred to as chronic lower respiratory disease, 5) Unintentional injuries, 6) Diabetes, 7) Flu and pneumonia, 8) Alzheimer’s disease, 9) Kidney disease and 10) Septicemia. The three leading causes of death in Saint Louis City in 2002 were heart disease, cancer, and cerebrovascular disease which are also the leading causes of death for Missouri and the U.S. In 2002 there were 4,104 deaths to residents of the City of Saint Louis. In the City of Saint Louis the top ten causes of death account for almost 80% of all deaths.



## Black/white Disparity

In 2002, the top three leading causes of death for both the African-American community and the white community in Saint Louis City were heart disease, cancer and cerebrovascular disease (stroke). However, where homicide was the 4<sup>th</sup> leading cause of death in the Saint Louis City African-American community in 2002, it did not appear in the top ten causes of death in the Saint Louis white population.

## Focus Group Comments/Concerns

“People don’t feel responsible in their own health care decisions- they can’t take responsibility for their own health.” “Fast pace – stress levels – schools need to teach relaxation and stress reduction.”

## Potential Public Health Interventions

It has been estimated, that in the U.S., 40% to 50% of premature mortality occurs in tobacco users. Tobacco has been attributed to heart disease, cancer, CVA, COPD, pneumonia and influenza. Epidemiological studies, surveillance and health education activities are potential public health interventions.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Leading Causes of Death - 2002

Rank	Cause	%
<b>Total Population</b>		
1	Heart Disease	29.0%
2	Cancer	20.4%
3	CVA	6.9%
4	COPD	3.8%
5	Unintentional Injuries	3.2%
6	Diabetes	3.1%
7	Flu and pneumonia	2.8%
8	Septicemia	2.5%
9	Kidney Disease	2.3%
10	Homicide	2.3%
<b>White</b>		
1	Heart Disease	32.4%
2	Cancer	19.1%
3	CVA	7.7%
4	COPD	5.0%
5	Flu and pneumonia	3.6%
6	Diabetes	3.0%
7	Unintentional Injuries	2.8%
8	Kidney Disease	1.6%
9	Septicemia	1.6%
10	Alzheimer's	1.3%
<b>Black</b>		
1	Heart Disease	25.6%
2	Cancer	21.5%
3	CVA	6.1%
4	Homicide	4.4%
5	Unintentional Injuries	3.7%
6	Septicemia	3.6%
7	Diabetes	3.3%
8	Kidney Disease	3.0%
9	COPD	2.6%
10	Flu and pneumonia	1.9%

leading causes of death

# overall mortality

## Definition

Mortality statistics are an important public health surveillance tool that fulfills both legal and social functions. U.S. mortality statistics are based on information coded by the states and provided to the National Center for Health Statistics. The age-adjusted mortality rates are presented per 100,000 population, and are averaged over the 1999-2001 time period. Rates are age-adjusted to account for differences in the age distribution of the population in each ZIP Code and thereby allowing comparisons among different areas.

## Public Health Implications

Mortality statistics are essential data in epidemiological studies for research in areas such as heart disease, cancer and injury control, for identifying high-risk populations and geographic differences in rates of selected causes of death.

## Saint Louis Rates and Comparative Info

The average age-adjusted overall death rate in Saint Louis City for the time period 1999 through 2001 is 1.36 times that seen in the U.S. in the same time period. The Saint Louis City averaged rate is also 1.26 times that experienced in Missouri. In 2002 there were 4,104 deaths to residents of the City of Saint Louis. The ZIP Codes with the rates of most concern are 63107, 63103 and 63113. The ZIP Code with the most favorable rate is 63109.

Zip Code (ZCTA)	Overall Mortality Rates per 100K Population (Age-adjusted)	Map Quartile
63107	1,470.2	4
63103	1,467.3	4
63113	1,450.2	4
63106	1,440.5	4
63111	1,377.8	4
63147	1,322.8	4
63101*	1,308.7	3
63118	1,248.0	3
63120	1,244.0	3
63115	1,224.5	3
63110	1,220.9	3
63104	1,206.5	3
63112	1,126.3	2
63108	1,100.3	2
63102*	1,091.8	2
63116	1,058.4	2
63139	1,055.3	2
63109	857.2	1

## Black/white Disparity

Both the African-American and white populations in Saint Louis City show higher mortality rates than seen in the U.S. population for the respective races. The averaged rate in the Saint Louis City African-American community is just 1.15 times that seen in the Saint Louis City white community. The averaged rate in the Saint Louis City African-American population and the Saint Louis City white population are 1.15 and 1.26 times that in the respective U.S. populations.

**Disparity Ratio: 1.15**

## Focus Group Comments/Concerns

“If you can’t see the benefits of staying well you don’t seek preventive care.” “Ignorance on basic health care.” “Lifestyle issues with the elderly.” “Stress getting care early – through many communication channels – churches, food pantry, etc.”

## Potential Public Health Interventions

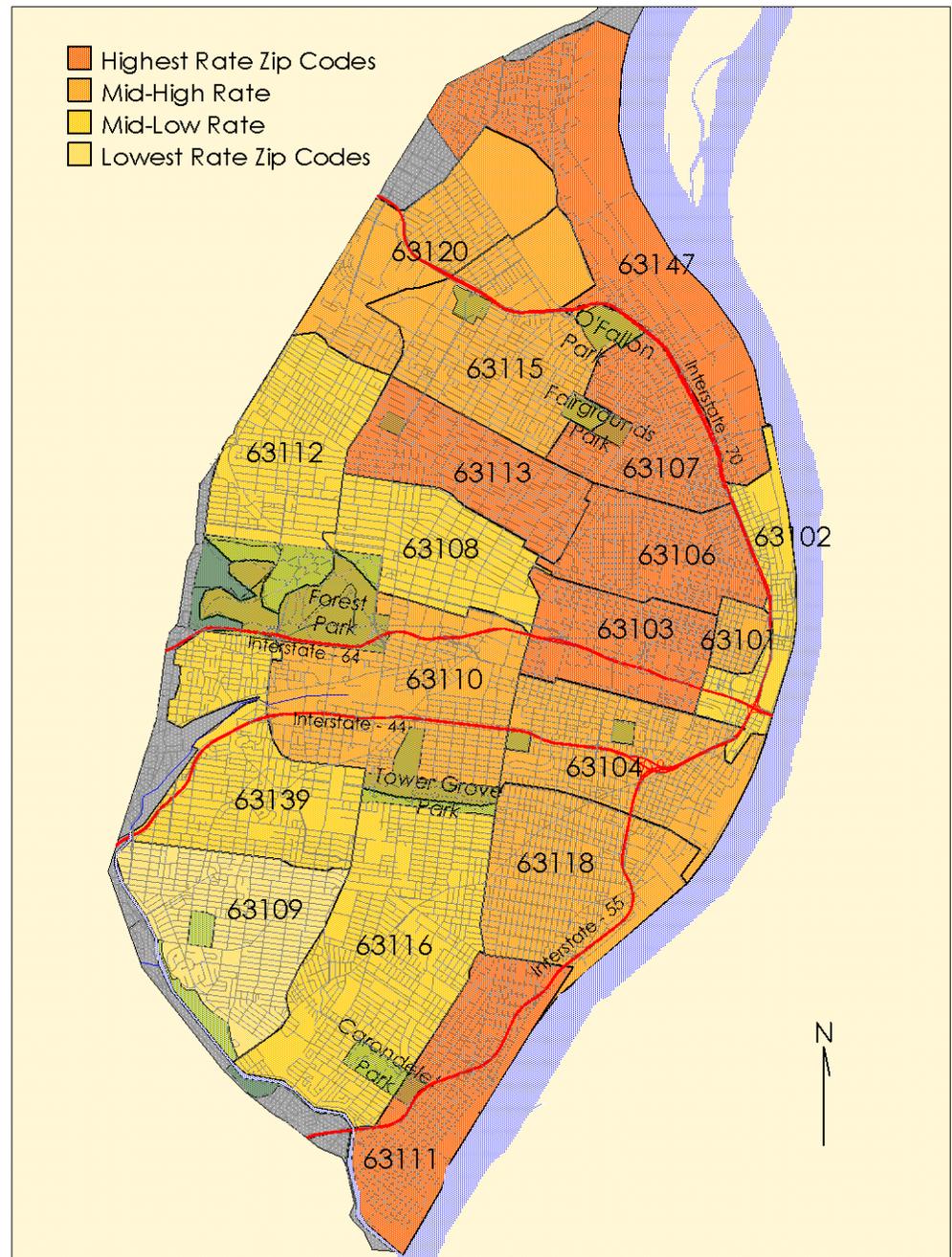
A long-term downward trend in mortality, which is reflected in the U.S. age-adjusted death rates, has continued since 1940. Public health interventions include surveillance and epidemiological studies to determine high-risk behaviors and populations.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Overall Mortality Rates / 100,000 99-01 average

Stl City	1,175.7
Stl County	862.7
Stl City/Co	937.9
MO	934.8
US	863.0
<b>Stl City Black</b>	<b>1,281.9</b>
<b>Stl City White</b>	<b>1,111.3</b>
Stl Co Black	1,073.7
Stl Co White	839.4
Stl City/Co Black	1,164.4
Stl City/Co White	882.7
MO Black	1,180.5
MO White	924.3
US Black	1,118.9
US White	879.1



overall mortality

# heart disease mortality

## Definition

Diseases of the heart are a common cause of ill health and the number one cause of death. The types of heart disease are many and varied and include rheumatic heart disease, hypertensive disease, ischemic heart disease, and diseases of pulmonary circulation. Age-adjusted rates are the number of deaths per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

The American Heart Association has identified several risk factors for coronary heart disease, which can lead to a heart attack, and death. Some of them can be changed, treated or modified, and some cannot. The more risk factors a person has, the greater the chance that he or she will develop heart disease. Risk factors include: increasing age, male sex, heredity, cigarette and tobacco smoke, high blood pressure, high blood cholesterol levels, physical inactivity, obesity and overweight and diabetes mellitus.

## Saint Louis Rates and Comparative Info

The death rate due to heart disease in Saint Louis City in the period from 1999-2001, is 1.4 times the rate seen in the U.S and 1.3 times that seen in Missouri. In 2002, there were 1,191 deaths due to heart disease to residents of the City of Saint Louis. The ZIP Codes with the rates of most concern from death due to heart disease are 63147 and 63103. The ZIP Codes with the most favorable rates are 63109, 63112 and 63115.

Zip Code (ZCTA)	Heart Disease Mortality Rates per 100K Population (Age-adjusted)	Map Quartile
63147	521.3	4
63103	505.2	4
63101*	500.4	4
63107	487.5	4
63111	456.9	3
63113	445.1	3
63106	438.4	3
63110	436.6	3
63118	424.9	3
63108	380.0	2
63104	376.2	2
63102*	372.0	2*
63116	354.4	2
63139	354.3	2
63120	344.3	1
63115	341.8	1
63112	316.4	1
63109	297.8	1

## Black/white Disparity

In the Saint Louis City African-American community, the averaged death rate due to heart disease is 1.1 times that in the Saint Louis City white population in the 1999 through 2001 time period. When compared to the U.S. population, the white population in Saint Louis City has consistently seen death rates due to heart disease, at 1.4 times the U.S. white population. The Saint Louis City averaged African-American population rate is almost 1.2 times the U.S. African-American population.

**Disparity Ratio: 1.1**

## Focus Group Comments/Concerns

“Compliance with medical regimes – health education, cost of medicines.” “Saint Louis City is a “fat” city.” “...nutrition and exercise.”

## Potential Public Health Interventions

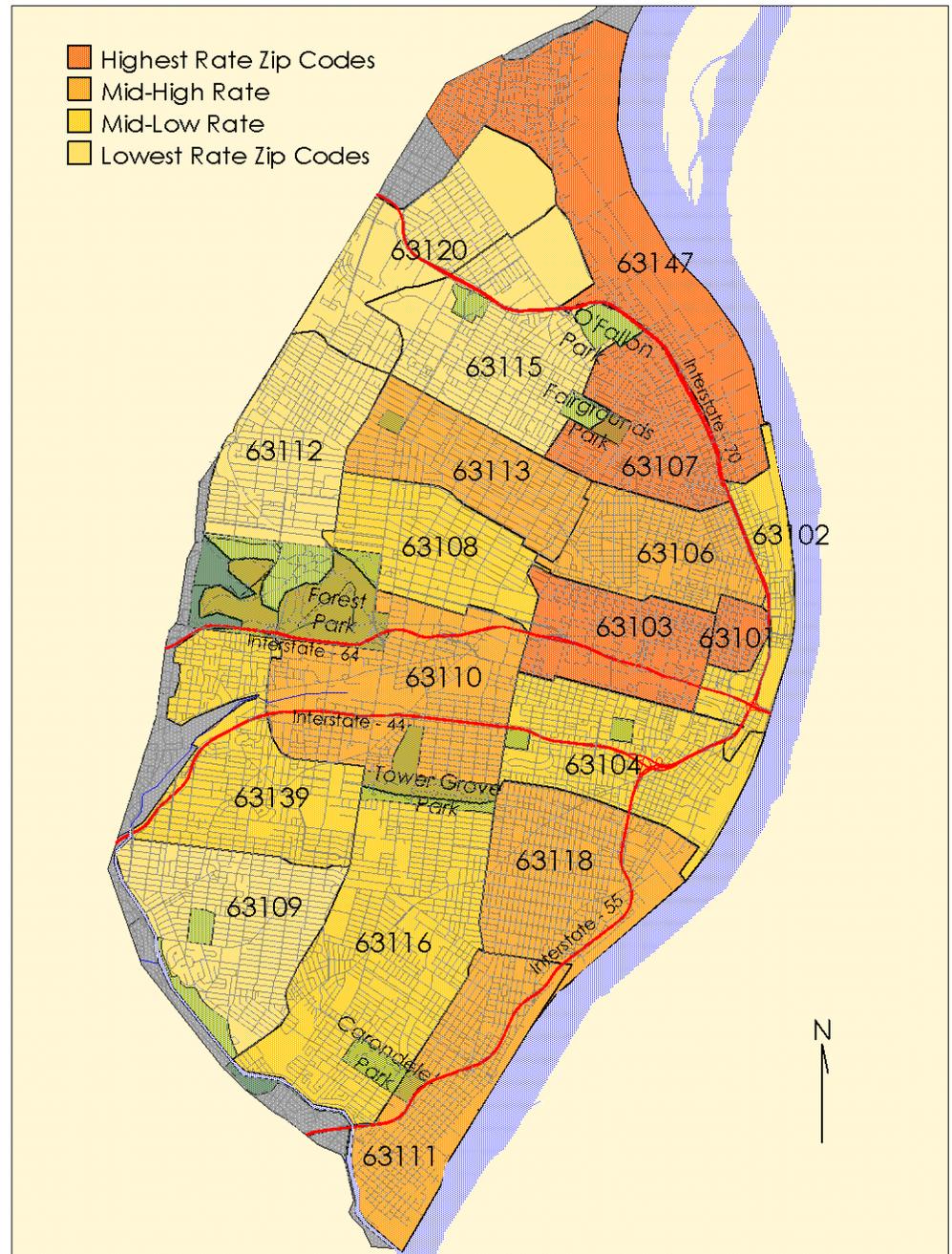
The most effective public health activities would include targeting areas with high death rates due to heart disease, and developing educational programs to encourage smoking cessation, healthier eating habits, and increased physical activity.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Heart Disease Mortality Rates / 100,000 99-01 average

Stl City	375.0
Stl County	283.7
Stl City/Co	305.3
MO	291.7
US	258.9
<b>Stl City Black</b>	<b>382.5</b>
<b>Stl City White</b>	<b>378.2</b>
Stl Co Black	341.7
Stl Co White	278.9
Stl City/Co Black	359.4
Stl City/Co White	294.8
MO Black	350.1
MO White	290.6
US Black	322.6
US White	264.3



heart disease mortality

# cancer mortality

## Definition

Cancer is a general term frequently used to indicate any of various types of malignant neoplasms, most of which invade surrounding tissues. Deaths from cancer include solid malignant neoplasms and neoplasms of the lymphatic and hematopoietic tissues. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

Different risk factors are attributed to different cancer types. Tobacco use is the single best recognized cause of cancer, and is now responsible for 30% of all cancer deaths in the U.S. Other causes of cancer include high-fat and low-fiber diets, physical inactivity, and genetics.

## Saint Louis Rates and Comparative Info

The Saint Louis City average rate for cancer for the time period 1999 through 2001 is 1.2 times that seen in the United States and 1.15 times the Missouri rate. In 2002, there were 836 deaths due to cancer in the City of Saint Louis. The ZIP Codes with the rates of most concern are 63120, 63107 and 63115. The ZIP Code with the most favorable rate is 63109.

Zip Code (ZCTA)	Cancer Mortality Rates per 100K Population (Age-adjusted)	Map Quartile
63120	327.4	4
63107	298.8	4
63115	294.7	4
63113	276.0	3
63106	263.2	3
63103	260.4	3
63111	257.8	3
63147	249.0	2
63112	246.4	2
63139	238.2	2
63118	233.9	2
63116	230.3	2
63110	222.3	1
63104	215.6	1
63108	210.6	1
63102*	205.3	1*
63101*	197.1	1*
63109	187.4	1

## Black/white Disparity

The averaged rate in the Saint Louis City African-American population is 1.2 times that in the Saint Louis City white population in the 1999 through 2001 time period. The Saint Louis City averaged African-American rate is only 7% higher than the U.S. African-American population in the same time period.

**Disparity Ratio: 1.2**

## Focus Group Comments/Concerns

“People who are poor don’t put a priority on health care. When you worry about money for food you don’t have time to worry about preventive care.”  
 “Rapid change in the number of cancers which are evolving in parts of the Midwest.”

## Potential Public Health Interventions

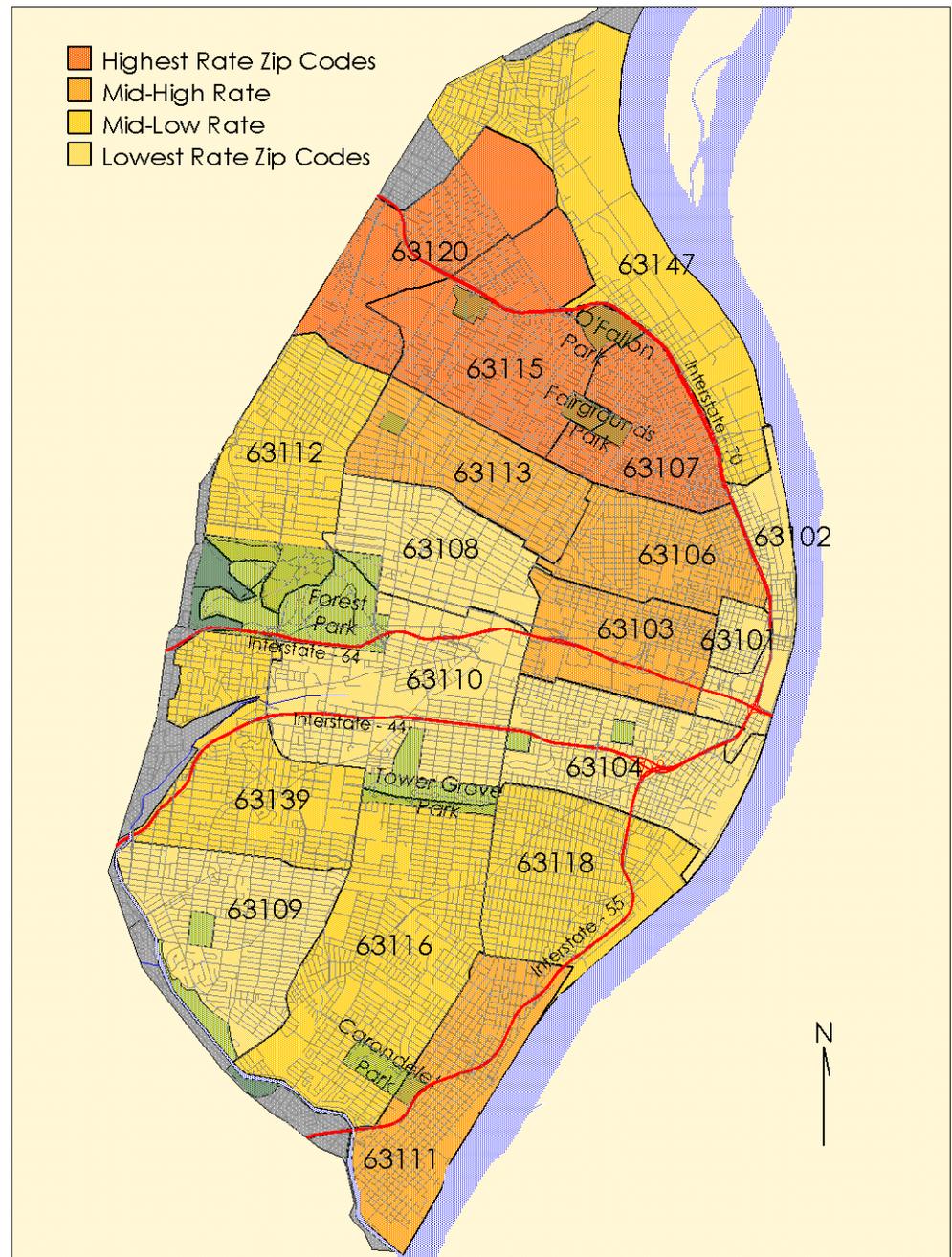
Smoking cessation is a critical component in the reduction of cancer mortality. Diet is another important area in cancer prevention; some estimate that healthier eating habits will reduce cancer rates, and decrease cancer deaths by 9%. Early detection of cancer and cancer screening programs, particularly in high-risk populations, such as in individuals with strong family history of cancer, can also decrease mortality rates.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Cancer Mortality Rates / 100,000 99-01 average

Stl City	239.1
Stl County	195.6
Stl City/Co	205.6
MO	208.0
US	198.6
<b>Stl City Black</b>	<b>267.8</b>
<b>Stl City White</b>	<b>223.4</b>
Stl Co Black	254.2
Stl Co White	189.1
Stl City/Co Black	259.1
Stl City/Co White	194.9
MO Black	264.7
MO White	206.3
US Black	250.2
US White	203.5



cancer mortality

# cva mortality

## Definition

Cerebrovascular disease is a general term for brain dysfunction caused by an abnormality of the cerebral blood supply. Deaths from cerebrovascular diseases, commonly called “stroke”, usually result from a cerebral hemorrhage, thrombosis causing infarction, or an embolism which generally originates from the heart. Age-adjusted rates are presented per 100,000 population and averaged over the 1999-2001 time period.

## Public Health Implications

Some stroke risk factors are based on heredity or natural processes that can't be changed: strokes more than double for each decade of life after age 55. Men have about a 19% greater chance of stroke than women. African Americans have a much higher risk of death due to CVA, in part due to a greater incidence of high blood pressure. Factors that can be changed include controlling high blood pressure and not smoking cigarettes.

## Saint Louis Rates and Comparative Info

The average rate for the time period 1999 through 2001 for death due to stroke in Saint Louis City is somewhat higher than that seen in the U.S. and Missouri, 1.25 and 1.15 times, respectively. In 2002, there were 284 deaths due to CVA. The ZIP Codes with the rates of most concern are 63103 and 63111. The most favorable ZIP Codes are 63108 and 63109.

Zip Code (ZCTA)	CVA Mortality Rates per 100K Population (Age-adjusted)	Map Quartile
63102*	193.3	4*
63103	120.7	4
63111	104.7	4
63107	101.4	3
63106	100.5	3
63113	92.3	3
63110	91.9	3
63120	91.8	3
63147	75.2	2
63104	75.0	2
63101*	72.8	2*
63115	72.4	2
63116	70.2	2
63118	68.3	1
63139	65.5	1
63112	65.4	1
63109	64.1	1
63108	52.1	1

## Black/white Disparity

In Saint Louis City the average death rate for the African-American community in the time period 1999 through 2001 is just 1.07 times that in the white population. Compared to African Americans in the U.S., the averaged death rate for stroke in Saint Louis City African Americans is similar. For the Saint Louis City white population, the averaged rate for strokes is 1.2 times that seen in the U.S. white population.

**Disparity Ratio: 1.07**

## Focus Group Comments/Concerns

“We need a holistic model, not a medical model.”

## Potential Public Health Interventions

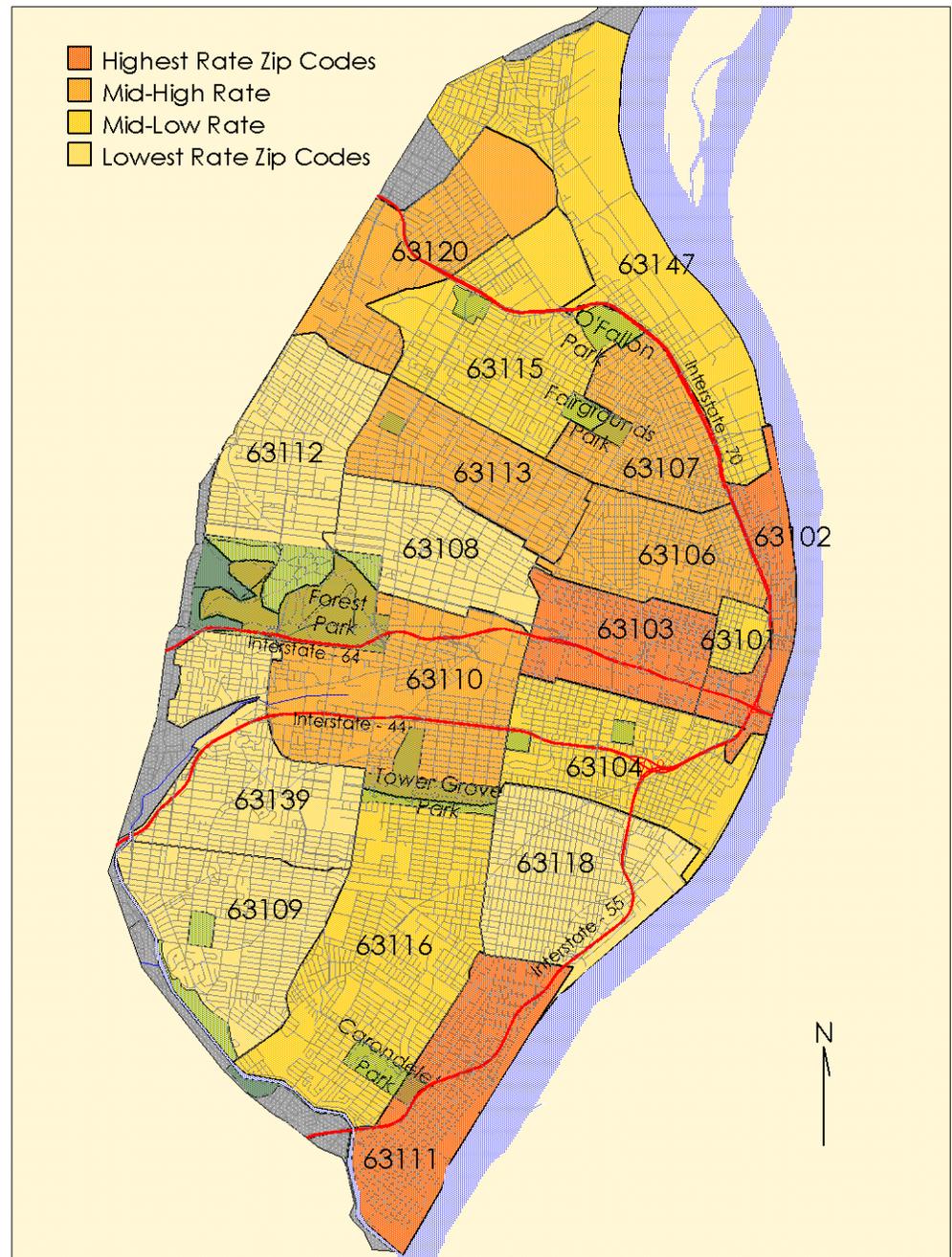
Education on lowering high blood cholesterol and lipids, controlling high blood pressure, increasing physical activity, controlling obesity and quitting smoking are factors that can be intervened upon to reduce the mortality rate due to stroke.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Cerebrovascular Disease Mortality Rates / 100,000 99-01 average

Stl City	75.4
Stl County	59.1
Stl City/Co	62.9
MO	65.4
US	60.4
<b>Stl City Black</b>	<b>78.9</b>
<b>Stl City White</b>	<b>73.7</b>
Stl Co Black	69.7
Stl Co White	58.0
Stl City/Co Black	73.4
Stl City/Co White	60.5
MO Black	77.2
MO White	65.1
US Black	79.6
US White	60.6



c v a m o r t a l i t y

# influenza and pneumonia mortality

## Definition

Influenza, commonly called "the flu," is an infection of the respiratory tract caused by the influenza virus. Compared with most other viral respiratory infections, such as the common cold, influenza infection often causes a more severe illness. Most people who get the flu recover completely in 1 to 2 weeks, but some people develop serious and potentially life-threatening medical complications, such as pneumonia. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

In an average year, influenza is associated with more than 20,000 deaths nationwide and more than 100,000 hospitalizations. Flu-related complications can occur at any age. However, the elderly and people with chronic health problems are much more likely to develop serious complications after influenza infection than younger, healthier people. In the U.S., the deaths due to influenza and pneumonia are consistently in the top 10 leading causes of death within every age group.

## Saint Louis Rates and Comparative Info

In Saint Louis City, the average rate for the time period 1999 through 2001 for death due to influenza and pneumonia is 1.36 times the rate in the U.S. In 2002 there were 114 deaths due to pneumonia and influenza to residents of the City of Saint Louis. The ZIP Codes with the rates of most concern are 63107 and 63111. The ZIP Codes with the most favorable rates are 63103 and 63147.

Flu & Pneumonia Mortality Rates per 100K		
Zip Code (ZCTA)	Population (Age-adjusted)	Map Quartile
63107	53.4	4
63111	43.1	3
63101*	41.9	3*
63113	38.3	3
63139	38.2	3
63118	37.7	3
63104	35.5	3*
63106	35.4	3*
63120	34.1	2*
63116	29.2	2
63112	29.0	2
63108	28.9	2
63109	28.9	2
63110	27.3	2*
63115	24.4	1
63147	18.4	1*
63103	17.1	1*
63102*	0.0	1*

## Black/white Disparity

In Saint Louis City the average death rate in the African-American community is .85 that in the white population for the time period 1999 through 2001. Compared to the U.S. averaged death rate for pneumonia and influenza, Saint Louis City is 1.2 times the U.S. African-American rate and 1.4 times the US white population.

**Disparity Ratio: .85**

## Focus Group Comments/Concerns

"Vaccinations"

## Potential Public Health Interventions

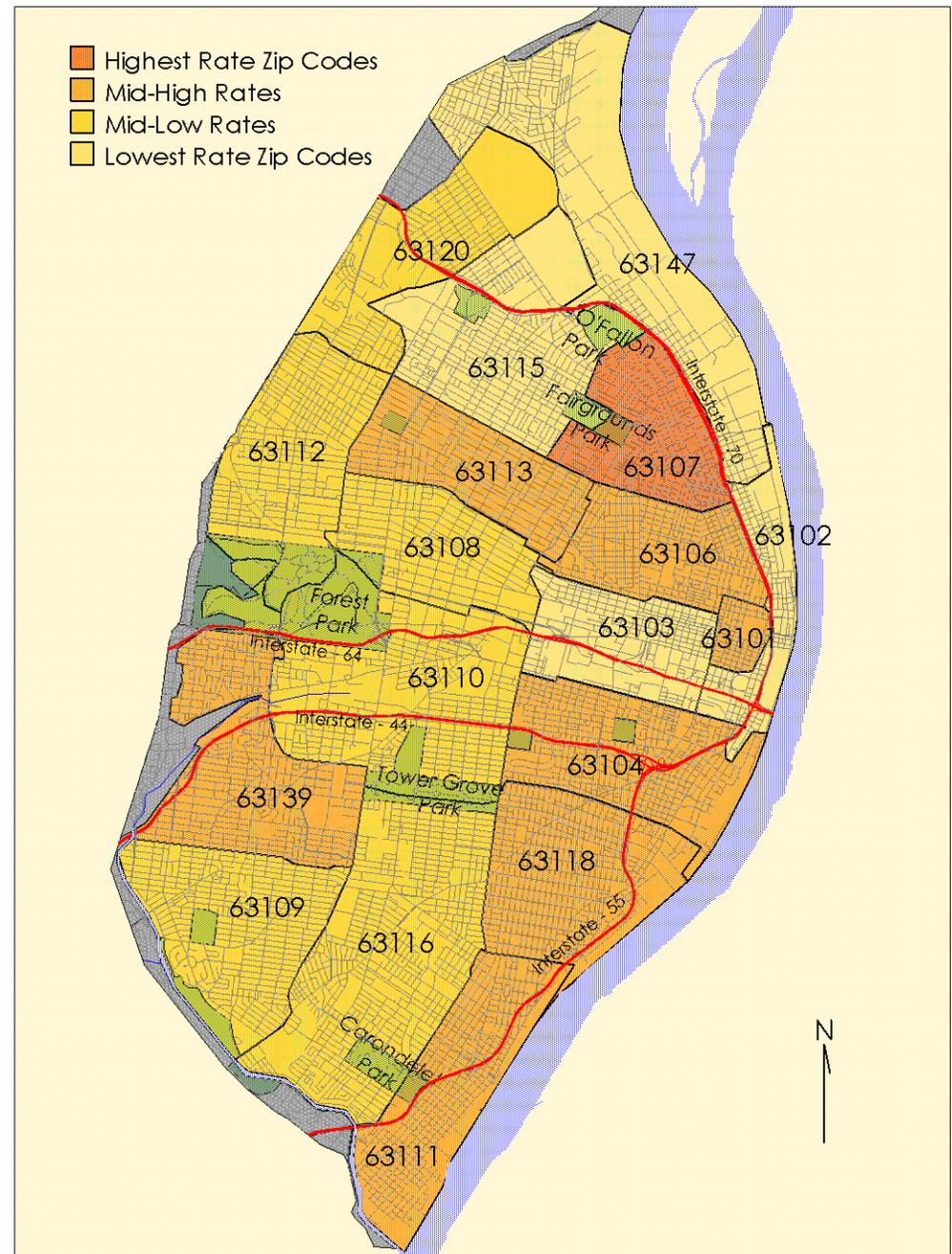
Much of the illness and death caused by influenza can be prevented by annual influenza vaccination. Influenza vaccine is specifically recommended for people who are at high risk for developing serious complications as a result of influenza infection. These high-risk groups include all people aged 50 years or older and people of any age with chronic diseases of the heart, lung or kidneys, diabetes, immunosuppression, or severe forms of anemia.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Pneumonia and Influenza Mortality Rates / 100,000 99-01 average

Stl City	31.7
Stl County	29.3
Stl City/Co	29.8
MO	26.7
US	23.3
Stl City Black	29.2
Stl City White	34.3
Stl Co Black	28.8
Stl Co White	29.6
Stl City/Co Black	28.9
Stl City/Co White	30.4
MO Black	26.3
MO White	27.1
US Black	24.6
US White	24.0



influenza and pneumonia mortality

# c o p d m o r t a l i t y

## Definition

Chronic obstructive pulmonary disease (COPD) is now referred to as chronic lower respiratory diseases and is a general term that comprises those conditions that are accompanied by chronic or recurrent reduction in expiratory airflow within the lung, due to the narrowing of the small bronchi. Deaths from chronic obstructive pulmonary diseases and allied conditions include deaths due to bronchitis, emphysema, asthma, and chronic airway obstruction. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

Both emphysema and chronic bronchitis are diseases of longtime smokers: 82 percent of those who die of COPD are smokers, and smokers are ten times more likely than non-smokers to die of COPD. Higher rates of chronic bronchitis are also found among coal miners, grain handlers, metal molders, and other workers exposed to dust and irritating fumes. Chronic bronchitis symptoms worsen when atmospheric concentrations of sulfur dioxide and other air pollutants increase.

## Saint Louis Rates and Comparative Info

Overall in Saint Louis City, the average death rate for the 1999-2001 time period for COPD or chronic lower respiratory disease is similar to that in the U.S., and about 10% lower than the averaged rate in Missouri. In 2002, there were 157 deaths to residents of the City of Saint Louis due to COPD. The ZIP Code with the rate of most concern is 63118. The ZIP Codes with the most favorable rates are 63109, 63112, 63108 and 63139.

Zip Code (ZCTA)	COPD Mortality Rates per 100K	
	Population (Age-adjusted)	Map Quartile
63103	87.3	4*
63102*	77.3	4*
63118	66.6	4
63106	56.6	3*
63111	51.7	3
63116	49.9	3
63120	48.4	3*
63115	45.7	2
63107	45.1	2
63110	44.5	2
63147	44.0	2*
63101*	41.9	2*
63104	40.0	2*
63113	40.0	2
63139	38.4	1
63108	38.0	1
63112	37.0	1
63109	29.3	1

## Black/white Disparity

The average rate for the 1999 through 2001 time period in Saint Louis City due to COPD in the white population is 1.36 times that in the African-American population. Comparing rates to the U.S. population, the averaged death rate in Saint Louis City African Americans is just 1.15 times that seen in the U.S. African-American population.

**Disparity Ratio: .73**

## Focus Group Comments/Concerns

“Need to take services to people – prevention, education and need to introduce prevention to their lives.”

## Potential Public Health Interventions

Prevention of COPD involves reducing controllable risks

Health education activities related to smoking and avoidance of exposure to secondhand smoke whenever possible

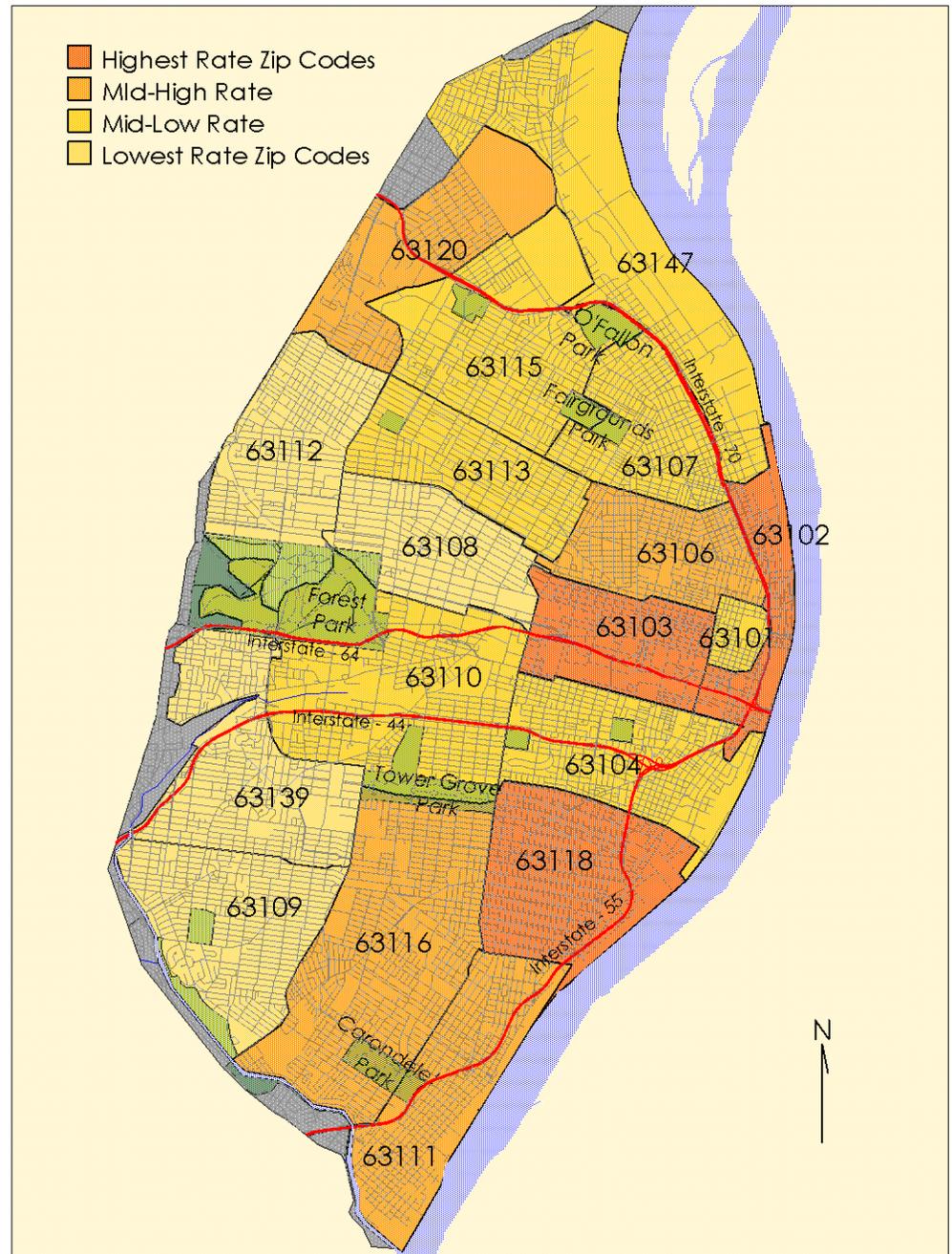
Policy development related to clean air quality both in the workplace and in the community

## Data Source

Missouri Department of Health, Center for Health Management Information & Epidemiology

## COPD Mortality Rates\*\* / 100,000 99-01 average

Stl City	43.7
Stl County	37.8
Stl City/Co	39.1
MO	49.1
US	44.4
Stl City Black	37.0
Stl City White	50.5
Stl Co Black	29.4
Stl Co White	38.8
Stl City/Co Black	33.5
Stl City/Co White	40.6
MO Black	34.1
MO White	50.9
US Black	32.1
US White	47.7



\*\*Chronic Obstructive Pulmonary Disease

# c o p d m o r t a l i t y

# diabetes mortality

## Definition

Diabetes mellitus is a metabolic disease, caused by an absolute or relative deficiency of insulin. Death from diabetes mellitus is usually due to long-term complications. Age-adjusted rates are presented per 100,000 population and are averaged over the 1999-2001 time period.

## Public Health Implications

Heart disease is the leading cause of diabetes-related deaths, with a heart disease death rate about 2 to 4 times as high as that of adults without diabetes. People with diabetes are also at a higher risk of stroke and are more likely to die of pneumonia or influenza than people who do not have diabetes. A genetic susceptibility to this disease, coupled with diet, physical inactivity, and increasing age increases the risk of diabetes.

## Saint Louis Rates and Comparative Info

In the U.S., the age-adjusted death rate for diabetes has been gradually increasing since 1994 for both men and women. In the U.S. in 2002, compared to non-Hispanic whites, diabetes death rates were 2.5 times among African-American persons, 2.4 times among American Indians or Alaska natives, and 1.7 times among persons of Hispanic origin. The average death rate for the time period 1999 through 2001 due to diabetes in Saint Louis City is 1.65 times that seen in the U.S., and 1.6 times that seen in Missouri. In 2002, there were 129 deaths to residents of the City of Saint Louis as a result of diabetes. The ZIP Codes with the rate of most concern are 63113 and 63104. The ZIP Code with, by far, the most favorable rate is 63109.

Zip Code (ZCTA)	Diabetes Mortality Rates per 100K Population (Age-adjusted)	Map Quartile
63113	77.7	4
63104	67.0	4
63103	64.7	4*
63101*	62.4	3*
63106	57.9	3*
63147	49.1	3*
63112	48.6	3
63108	47.4	2
63111	47.3	2
63120	40.9	2*
63115	40.2	2
63107	38.5	2*
63139	37.6	2
63118	35.4	2
63116	31.1	1
63110	29.7	1*
63109	18.9	1
63102*	-	1*

## Black/white Disparity

In the time period between 1999 and 2001, the average death rate in the Saint Louis City African-American community is 1.7 times that seen in the white population. Comparing African Americans, the average death rate in Saint Louis City is just 8% higher than the rates in the U.S. and Missouri; for the white population, the average rate in Saint Louis City is 1.3 times that seen in the U.S. white population.

**Disparity Ratio: 1.7**

## Focus Group Comments/Concerns

“Late care for chronic diseases – lack of money for prescriptions.”

## Potential Public Health Interventions

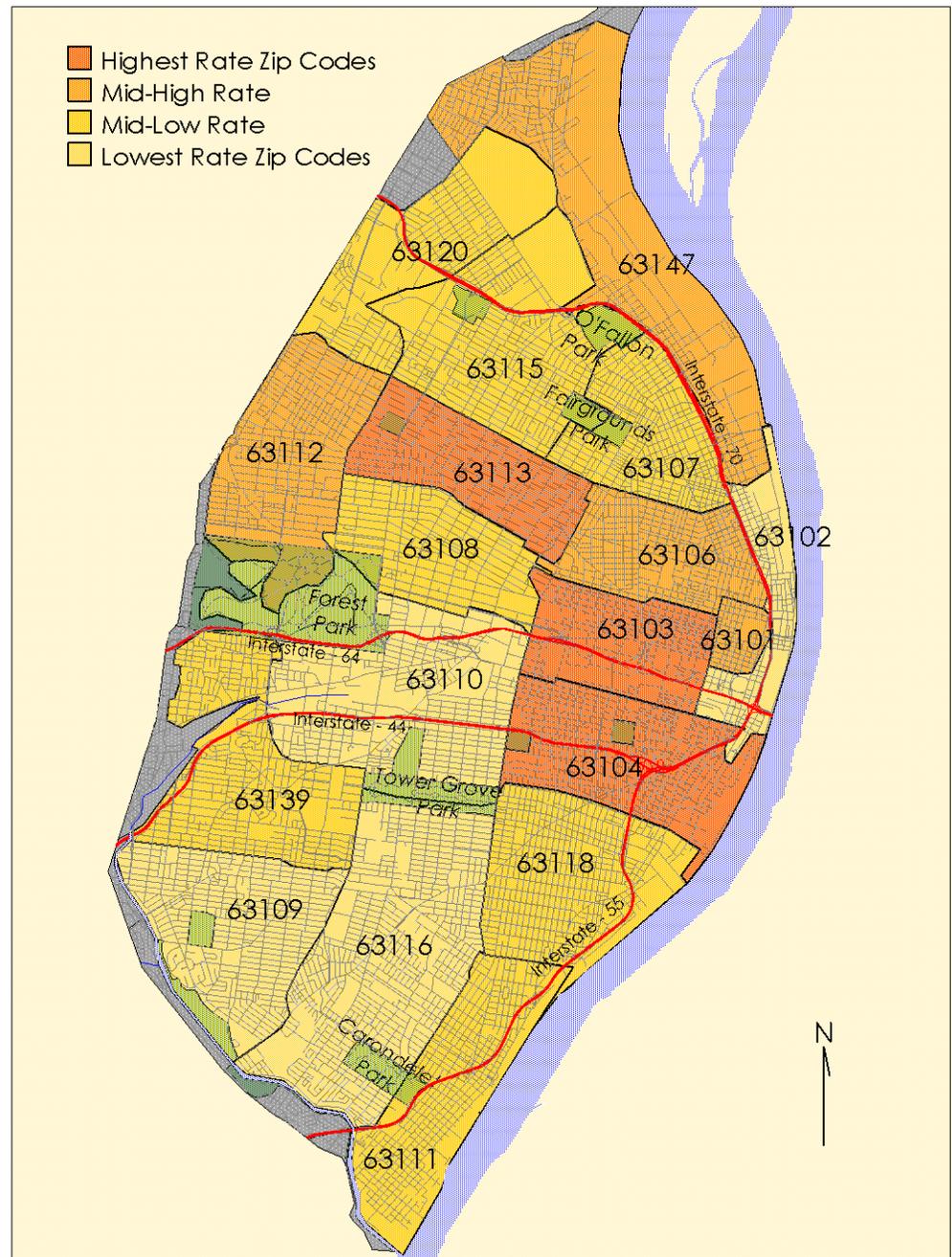
Diabetes detection and diabetes-related preventive-care practices are important for reducing the development and progression of diabetes complications and disability. Effective strategies should focus among groups at highest risk in the City of Saint Louis such as African-American and pregnant women.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Diabetes Mortality Rates / 100,000 99-01 average

Stl City	40.8
Stl County	23.5
Stl City/Co	27.6
MO	25.6
US	24.8
<b>Stl City Black</b>	<b>53.4</b>
Stl City White	31.1
Stl Co Black	37.7
Stl Co White	21.9
Stl City/Co Black	45.3
Stl City/Co White	23.4
MO Black	49.6
MO White	23.9
US Black	49.2
US White	23.3



diabetes mortality

# years life expectancy

## Definition

Years life expectancy at birth is defined as the number of years a baby born in an area or a specific subpopulation could be expected to live if it experienced the current age-specific mortality rates of that area or specific subpopulation. The years life expectancy is based on 1999 – 2001 averaged mortality rates.

## Public Health Implications

Studies show that the two factors that have the most significant impact on life expectancy are infant mortality (death under one year of age) and income distribution (gap between high and low incomes) in an area.

## Saint Louis Rates and Comparative Info

Life expectancy in years based on the mortality rates in the time period 1999 through 2001 in Saint Louis City is .93 that seen in the U.S., and .94 that seen in Missouri. The ZIP Codes with life expectancy being of most concern are 63106, 63107 and 63113. The ZIP Codes with the most favorable life expectancy are 63109 and 63139

Zip Code (ZCTA)	Years Life Expectancy at Birth	Map Quartile
63102*	64.7	4
63101*	64.7	4
63106	65.4	4
63107	65.8	4
63113	65.9	4
63103	67.7	4
63120	67.9	4
63115	68.0	4
63147	68.9	3
63118	69.8	3
63112	70.5	3
63111	70.5	3
63104	70.7	3
63110	71.8	2
63108	72.3	2
63116	74.5	2
63139	75.6	1
63109	78.2	1

## Black/white Disparity

Life expectancy in years based on the mortality rates in the time period 1999 through 2001 in Saint Louis City for African Americans is .92 the life expectancy for the white population in Saint Louis City. Life expectancy in the Saint Louis City African-American community is .95 the life expectancy of the U.S. African-American population.

**Disparity Ratio: .92**

## Focus Group Comments/Concerns

“If you can’t see the benefits of staying well you don’t seek preventive care.” “Ignorance on basic health care.” “Lifestyle issues with the elderly.” “Stress getting care early – through many communication channels – churches, food pantry, etc.” “Compliance with medical regimes – health education, cost of medicines.” “Saint Louis City is a “fat” city.” “...nutrition and exercise.”

## Potential Public Health Interventions

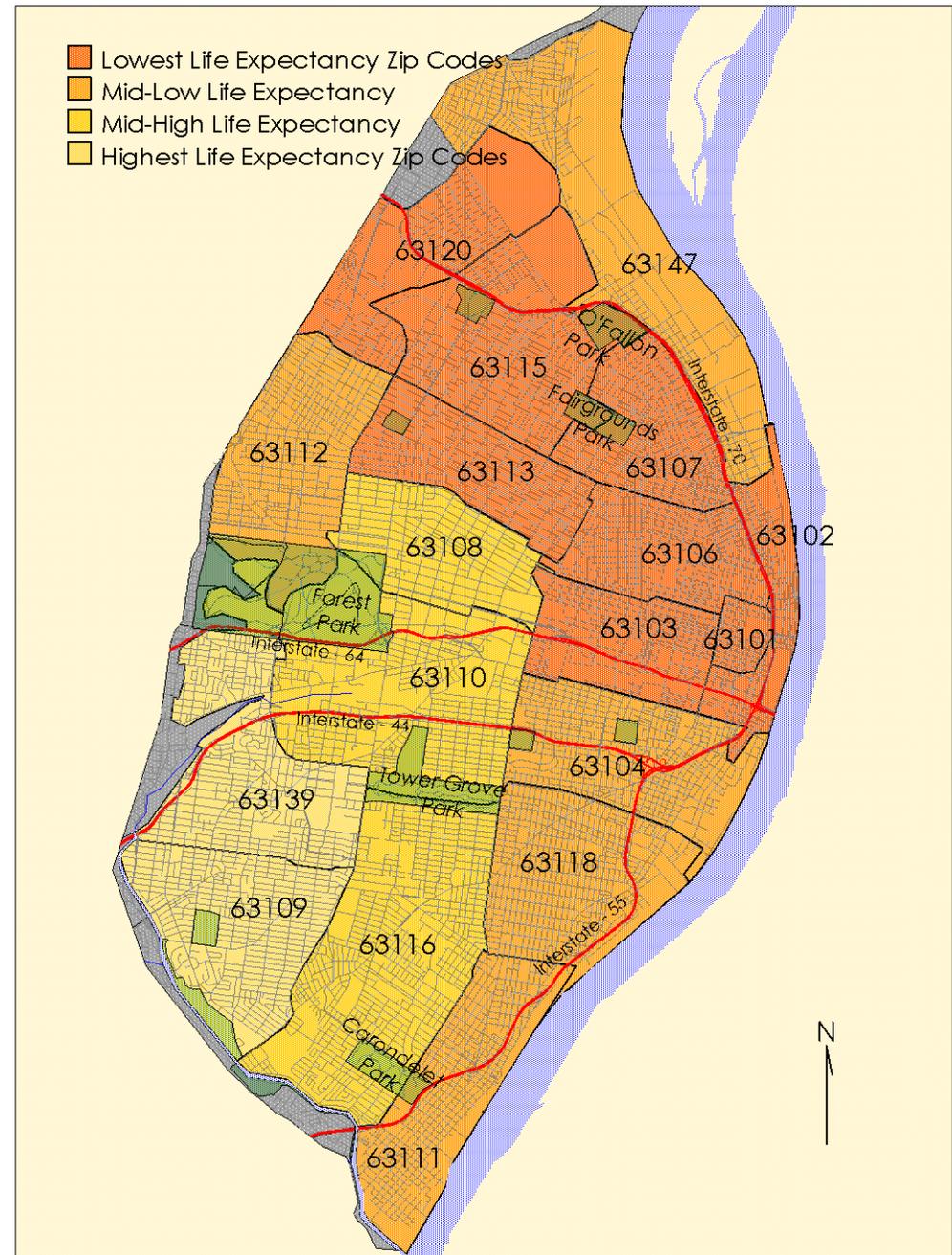
Public health interventions include surveillance and epidemiological studies to determine high-risk behaviors and populations.

## Data Source

Missouri Department of Health and Senior Services, Center for Health Information & Evaluation; Vital Records Data

## Life Expectancy in years

Stl City	71.4
Stl County	77.8
Stl City/Co	76.1
MO	76.3
US	76.9
<b>Stl City Black</b>	<b>68.2</b>
<b>Stl City White</b>	<b>74.3</b>
Stl Co Black	71.8
Stl Co White	78.8
Stl City/Co Black	70.2
Stl City/Co White	78.1
MO Black	N/A
MO White	N/A
US Black	71.8
US White	77.4



years life expectancy

# glossary

## Age-adjusted rates

Since the difference in the age composition of the population will influence mortality rates, it is preferable to use age specific mortality rates when comparing the mortality experiences in geographic areas or population groups. For this report, a direct method of calculating age-adjusted mortality rates is used to calculate a summary statistic. For this report the 2000 U.S. population is used as the “standard population”. The age stratum may differ from other published age-adjusted rates and therefore any comparisons to other reports must be done with caution.

## Cancer

ICD-10 codes: C00-C97

## Case

In epidemiology, a person in the population or study group identified as having the particular disease, health disorder or condition under investigation. A variety of criteria may be used to identify cases. The epidemiologic definition of a case is not necessarily the same as the ordinary clinical definition.

## CDC Centers for Disease Control and Prevention

The CDC is one of the major operating components of the Department of Health and Human Services. It “is recognized as the lead federal agency for protecting the health and safety of people at home and abroad, providing credible information to enhance health decisions, and promoting health through strong partnerships. The CDC serves as the national focus for developing and applying disease prevention and control, environmental health, and health promotion and education activities designed to improve the health of the people of the United States”. CDC, located in Atlanta, Georgia, is an agency of the Department of Health and Human Services.

## Cerebrovascular accident

ICD-10 codes: I60-I69, “stroke”.

## Chronic Obstructive Pulmonary Disease (COPD), now Chronic Lower Respiratory Disease

ICD-10 codes: J40-J47

## Descriptive statistics

The branch of statistics used to simply describe the data and to provide simple summaries. Descriptive statistics help to simplify large amounts of data in a manageable and sensible way. Descriptive statistics are distinguished from inferential statistics where inferences are drawn from the data such as making judgements of probability.

## Diabetes

ICD-10 codes: E10-E14

## Diagnosis-related group (DRG) system

DRG’s are a system of categorizing hospitalized patients based on the primary and secondary diagnosis, primary and secondary procedures, age and length of hospital stay. The patient’s actual diagnosis is converted into a DRG that is used to calculate a hospital’s reimbursement.

## Epidemic

From the Greek epi (upon) and demos (people); the occurrence in a community or region of cases of an illness, specific health-related behavior, or other health-related events clearly in excess of normal expectancy. The community or region and the period of time in which the cases occur are precisely specified.

## Epidemiology

The study of the distribution and determinants of health-related states or events in defined populations.

## Focus groups

A qualitative research technique that involves 1 to 2 hour structured discussions among 6 to 10 participants, led by a trained neutral moderator from a list of topic areas or questions. People chosen to participate in the group are chosen to meet certain criteria designed to ensure that they have the requisite target audience characteristics. Results are not to be projected to the general population from which participants were drawn.

## Healthy People 2000

Now revised to Healthy People 2010, is a national health promotion and disease prevention initiative. Its goals are to increase the quality and years of healthy life and eliminate disparities. It is a statement of national opportunities—a tool that identifies the most significant preventable threats to health and focuses public and private sector efforts to address those threats. The first set of national health targets, published in 1997 was supported by objectives with 2000 targets. Healthy People 2010 builds on initiatives pursued over the last two decades to achieve over the first decade of the 21<sup>st</sup> Century.

## Heart disease

ICD-10 codes: I00-I09, I11-I13, I20-151

## Homicide

ICD-10 codes: X85-Y09, Y87.1

## ICD-10 codes

The Tenth Revision, International Classification of Diseases, 1992, World Health Organization, is the classification structure used to code and classify mortality data from death certificates. It is designed to promote international comparability in the collection, processing, classification and presentation of mortality statistics. The ICD has been revised periodically to incorporate changes in the medical field. To date, there have been 10 revisions of the ICD. The 10<sup>th</sup> revision has been used since 1999.



# glossary

## **Incidence**

A measurement of only the new cases of a disease or other events occurring during a given period of time. Incidence rates have new cases as the numerator and the population at risk for being a case as the denominator.

## **Mean**

The average, the sum of all the values divided by the number of values.

## **Morbidity**

Refers to illness or some other (morbid) condition, it does not refer to death.

## **Mortality**

Refers to death, usually measured through death certificates. In the United States, State laws require death certificates for all deaths, and Federal law mandates national collection and publication of deaths and other vital statistics data. Underlying causes of death are determined using procedures in coding the cause of death and are then coded using the Tenth Revision, International Classification of Diseases, 1992 (ICD-10).

## **Motor vehicle accidents**

ICD-10 codes: V01-V04, V09.0, V09.2, V12-V14, V19.0-V19.2, V19.4-V19.6, V20-V79, V80.3-V80.5, V81.0-V81.1, V82.0-V82.1, V83-V86, V87.0-V87.8, V88.0-V88.8, V89.0, V89.2

## **Non motor vehicle accidents (Unintentional Injuries)**

ICD-10 codes: V01, V05-V06, V09.1, V09.3-V09.9, V10-V11, V15-V18, V19.3, V19.8-V19.9, V80.0-V80.2, V80.6-V80.9, V81-V82, V87.9, V88.9, V89.1, V89.3, V89.9, V90-X59, Y85-Y86

## **Pneumonia and influenza**

ICD-10 codes: J10-J18

## **Population at risk**

The population consisting of those to whom an event could happen to, whether it did or not.

## **Prevalence**

A measurement of all cases of disease or other events prevailing at a given time. It includes new cases and old cases that are still around. Prevalence rates have new and past existing cases as the numerator and the population at risk for being a case as the denominator.

## **Primary source data**

An original source of data such as that information obtained from interviews, focus groups and surveys.

## **Quartile**

A division of the total cases, observations or rates into four groups of equal size.

## **Rate**

A measure of the frequency of occurrence of a phenomenon. In epidemiology, demography and vital statistics, a rate is an expression of the frequency with which an event occurs in a defined population. The use of rates rather than raw numbers is essential for comparison of experience between populations at different times, different places or among different classifications of persons. The components of a rate are the numerator (all the events that happened), the denominator (all of the population that the event could have happened to), the specified time in which events occurred and usually a multiplier, a power of 10 frequently 1000 or 100,000, which converts the rate from an awkward fraction or decimal to a whole number.

## **Ratio**

The value obtained by dividing one quantity by another. A ratio is an expression of the relationship between a numerator and a denominator where the two are usually separate and distinct quantities, neither being included in the other.

## **Risk factor**

A factor that increases the risk of some event happening.

## **Secondary source data**

A source that provides non-original data or information such as vital records data.

## **Standard deviation (SD)**

A measure of dispersion or variance. It is equal to the positive square root of the variance. The mean tells where the values for a group are centered. The standard deviation is a summary of how widely dispersed the values are around this center

## **Standard population**

A population in which the age composition is known precisely, for all practical purposes as a result of a census. A standard population is used as a comparison group in age adjustment such as in the calculation of mortality rates. All mortality data in this report are age-adjusted to the 2000 U.S. population.

## **Surveillance**

The ongoing systematic collection, analysis and interpretation of health data that are essential to the planning, implementation and evaluation of public health practice.

## **Suicide**

ICD-10 codes: X80-X84, Y87.0

## **Weighted data**

Any information given different weights or importance in calculations; one criterion counts more than another criterion.

## **ZIP Code Tabulation Areas (ZCTAs)**

ZCTAs are a new statistical entity developed by the US Census Bureau for tabulating summary statistics from Census 2000. ZCTAs are generalized area representations of US Postal Service (USPS) ZIP Code service areas. They represent either USPS five- or three-digit ZIP Code areas. ZCTAs are made up of census blocks that have the same predominant ZIP Code associated with the addresses in the U.S. Census Bureau's Master Address File. ZCTAs do not precisely depict ZIP Code delivery areas, and do not include all ZIP Codes used for mail delivery such as those for post office boxes or individual businesses.



# appendix a

## ZIP Codes – City of Saint Louis

These ZIP Codes are entirely contained within the city limits:

63101\*  
63102\*  
63103  
63104  
63106  
63107  
63108  
63109  
63110  
63111  
63112  
63113  
63115  
63116  
63118  
63120 (very small portion is in St Louis County)  
63139  
63147

These ZIP Codes are shared with Saint Louis County, only a very small portion of each ZIP Code is contained within the city limits. Since the population and events are so small, these were not included in the assessment.

63105	Central fringe
63117	South fringe
63119	South fringe
63123	South fringe
63125	South fringe
63143	South fringe
63130	North fringe
63133	North fringe
63136	North fringe
63137	North fringe