

Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments Supplementary Data



St. Louis City

St. Louis City is located on the eastern boundary of Missouri along the Mississippi River and between years 2013 to 2017 had an estimated population of 314,867. St. Louis City ranks 4 in population size among Missouri's 114 counties plus the independent city of St. Louis. The 2013-2017 unemployment rate in the county was 9.4%. This was higher than the statewide unemployment rate of 5.8%. In 2013-2017, the poverty rate was 25.0%, which was higher than the statewide poverty rate of 14.6%. The 2013-2017 median income of the county was \$38,664. The population distribution is as follows:

Figure 1: St. Louis City Population 2013-2017 5-Year Estimates

Demographics – Total Population									
Sex	Count	Percent		Age Group	Count	Percent			
Male	152,224	48.3		0 – 9 years	37,091	11.7			
Female	162,643	51.7		10 – 14 years	16,432	5.2			
Race				15 – 19 years	17,146	5.4			
Black/African									
American alone	149,895	47.6		20 – 24 years	24,057	7.6			
White alone	144,506	45.9		25 – 39 years	84,173	26.7			
Other	20,466	6.5		40 – 59 years	78,425	24.9			
Ethnicity				Over 60 years	57,543	18.3			
Hispanic	12,280	3.9		Median Age	35.2 years				
Non-Hispanic	302,587	96.1							

The Department of Health and Senior Services conducted two vulnerability assessments of Missouri counties. The indicators used for these assessments are included in the table below.

Figure 2: Comparison of Indicators for Missouri Vulnerability Assessments

	Opioid Overdose	Both	Bloodborne Infection
Outcomes ht x 3)	Opioid-related Substance Use Disorder Treatment (SUDT) Admissions	Drug Overdose Deaths†‡¥	Bloodborne Illnesses (HIV, Acute and Chronic Hepatitis B, and Acute and Chronic Hepatitis C)†‡
Individual Out (Weight x	Self-reported Frequent (>14 Per Month) Poor Mental Health Days	Opioid Misuse Emergency Room (ER) Visits	Hepatitis C Virus Among Ages 18 to 40
Indiv		Drug-related Arrests	Injection Drug Use (IDU) Among Persons Receiving SUDT
ors		Median Income†‡	
Factors x 1)		Poverty†	
ımunity (Weight		Lack of a High School Education†	
Community (Weight		Unemployment†‡	
Cor		Uninsured†	

[†] These indicators were considered for the National Vulnerability Assessment.

[‡] Analysis completed for the National Vulnerability Assessment found these indicators to be more strongly associated with acute hepatitis C virus infection, which was considered a proxy for unsafe injection drug use.

[¥] Drug Overdose Deaths = (0.5 weight x county of residence rate) + (0.5 weight x county of record rate).

Figure 3: Distribution of Final Ranks

Figure 3 shows the distribution of the final ranks among five quintiles. In the Missouri vulnerability assessments, St. Louis City ranked 114 (5th quintile) for vulnerability to opioid overdoses. St. Louis City ranked 114 (5th quintile) for vulnerability to bloodborne infections. In the Missouri assessments, counties in the fifth quintile are considered to be more vulnerable. Please note that Figure 3 shows the distribution when no ties occur. When a tie occurs on a break point, a shift in the distribution may occur.

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Final Ranks	Quintile Points	Vulnerability Level
1-23	1	
24-46	2	
47-69	3	
70-92	4	
93-115	5	More vulnerable

Figure 4 Missouri Opioid Overdose Vulnerability Assessment

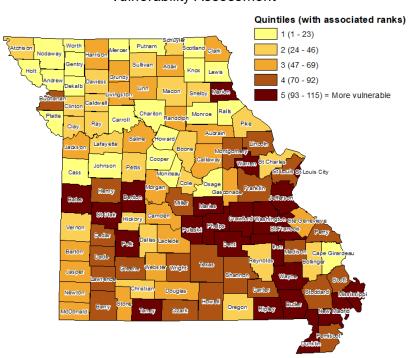


Figure 5: Individual Outcome Indicators

Opioid Overdose Vulnerability Assessment Indicators											
County	Count: Drug Overdose (OD) Deaths by Residence County	Rate: Drug OD Deaths by Residence County	Count: Drug OD Deaths by County of Record	Rate: Drug OD Deaths by County of Record	Count: Opioid Misuse ER Visits	Rate: Opioid Misuse ER Visits	Count: Opioid- related SUDT	Rate: Opioid- related SUDT	Count: Drug-related Arrests	Rate: Drug-related Arrests	Rate: Self-reported Frequent Poor Mental Health Days
St. Louis City	517	55.3	717	76.6	4,906	5.2	1,516	491.2	2,373	768.9	17.5
Missouri	3,784	20.7	3,868	21.1	25,889	1.4	6,754	110.5	43,232	707.2	13.7

Figure 6
Missouri Bloodborne Infection
Vulnerability Assessment

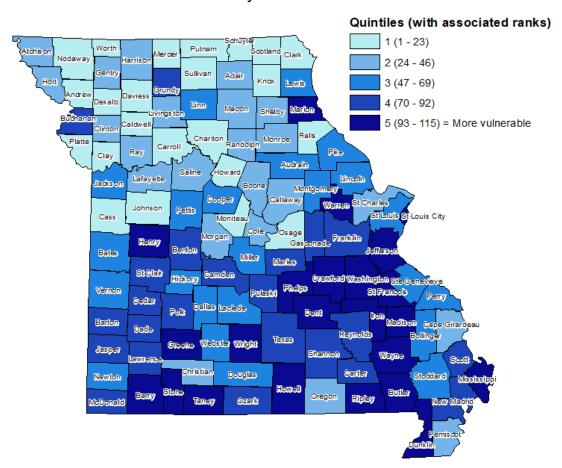


Figure 7: Individual Outcome Indicators

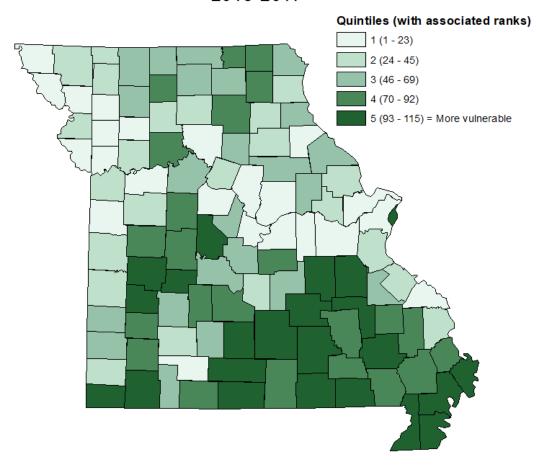
	Bloodborne Infection Vulnerability Assessment Indicators													
County	Count: Drug OD Deaths by Residence County	Rate: Drug OD Deaths by Residence County	Count: Drug OD Deaths by County of Record	Rate: Drug OD Deaths by County of Record	Count: HIV, HBV, HCV	Rate: HIV, HBV, HCV	Count: HCV Among Ages 18 to 40	Rate: HCV Among Ages 18 to 40	Count: Opioid Misuse ER Visits	Rate: Opioid Misuse ER Visits	Count: IDU Among SUDT Recipients	Rate: IDU Among SUDT Recipients	Count: Drug-related Arrests	Rate: Drug-related Arrests
St. Louis City	517	55.3	717	76.6	2,364	252.6	573	160.8	4,906	5.2	859	278.3	2,373	768.9
Missouri	3,784	20.7	3,868	21.1	17,628	96.4	5,532	100.0	25,889	1.4	6,958	113.8	43,232	707.2

Figure 8: Community Factors

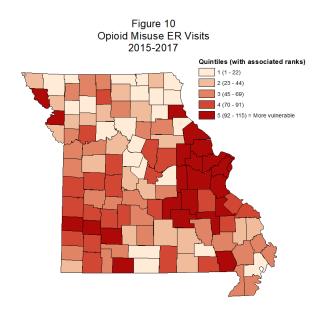
rigare of community ractors										
St. Louis City										
ACS Data 2013-2017 Rate Rank Quintile										
Lack of a High School Education	14.3%	69	3rd							
Median Income	\$38,664	90	4th							
Poverty	25.0%	105	5th							
Unemployment	9.4%	107	5th							
Uninsured	13.2%	69	3rd							

Social and economic factors within a community may impact available resources and influence vulnerability to opioid overdoses and bloodborne infections. Many of these indicators are interrelated. Data are from the U.S. Census Bureau's 2013-2017 American Community Survey (ACS).

Figure 9 Community Factors 2013-2017



Selected Individual Outcome Indicators

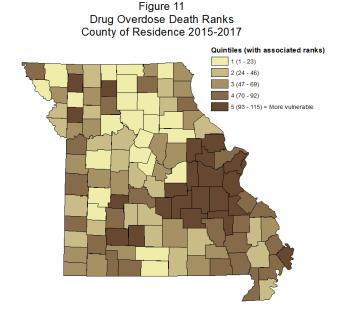


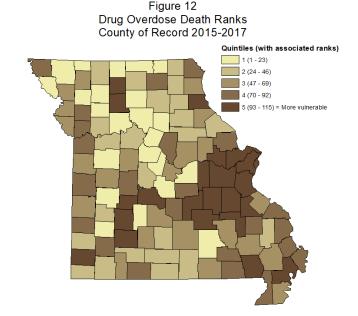
The 2015-2017 number of emergency room visits due to opioid misuse was 4,906, at a rate of 5.2 visits per 1,000 residents. This is rank 115 (5th quintile) for this indicator.

St. Louis City ranks 115 (5th quintile) on the 2015-2017 combined drug overdose death rate indicator. This indicator considers both the decedent's county of residence and the decedent's county of record, which can be considered a proxy for the location of death.

By county of residence, the 2015-2017 number of St. Louis City drug overdose deaths was 517, at a rate of 55.3 deaths per 100,000 population.

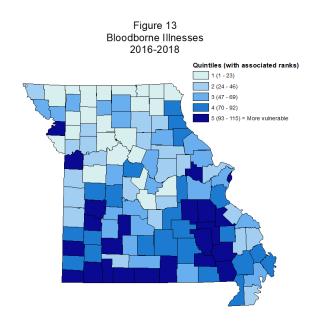
By county of record, the 2015-2017 number of St. Louis City drug overdose deaths was 717, at a rate of 76.6 deaths per 100,000 population.

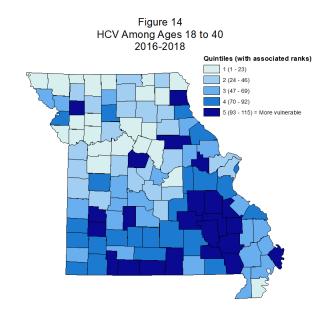




New cases of reported bloodborne illnesses (acute and chronic hepatitis B virus (HBV), acute and chronic hepatitis C virus (HCV), and human immunodeficiency virus (HIV)) in St. Louis City totaled 2,364 for 2016-2018, at a rate of 252.6 cases per 100,000 residents. This is rank 115 (5th quintile) for bloodborne illnesses.

Per the Centers for Disease Control and Prevention (CDC), "adults under 40 have the highest rate of new infections, largely because of the opioid crisis." In St. Louis City, 573 new cases of acute and chronic HCV were identified among the 18- to 40-year-old age group in 2016-2018, for a rate of 160.8 cases per 100,000 residents. St. Louis City ranks 87 (4th quintile) for this indicator.





Acute and chronic hepatitis C also significantly impact the 41- to 65-year-old age group. In 2016-2018, there were 1,031 new cases of acute and chronic hepatitis C identified in this age group, at a rate of 355.4 cases per 100,000 residents.

Out of 1,834 acute and chronic HCV cases in St. Louis City, 1,245 (67.9%) were male. For the cases in which race was identified, 808 (68.4%) were African American. However, please interpret race data for HCV with caution, as race was not identified in 653 (35.6%) of all 2016-2018 HCV cases in St. Louis City.

AIDS = Acquired Immunodeficiency Syndrome

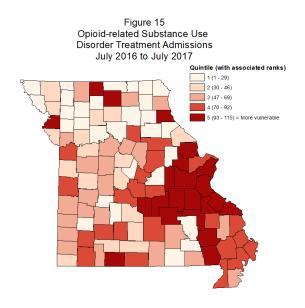
STD = Sexually Transmitted Disease

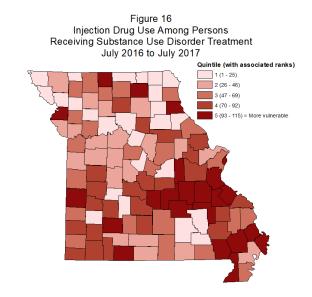
TB = Tuberculosis

[†] Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. CDC Estimates Nearly 2.4 Million Americans Living with Hepatitis C. (November 6, 2018). Accessed October 8, 2019, from https://www.cdc.gov/nchhstp/newsroom/2018/hepatitis-c-prevalence-estimates-press-release.html.

The number of people who received opioid-related substance use disorder treatment from July 1, 2016 to June 30, 2017 was 1,516, a rate of 491.2 persons per 100,000 population, placing this county in rank 115 (5th quintile). This indicator was used only in the opioid overdose vulnerability assessment.

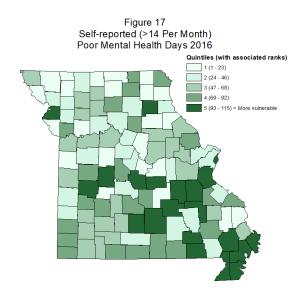
The number of persons receiving substance use disorder treatment and prior to treatment reported injecting drugs was 859, a rate of 278.3 persons per 100,000 population, placing this county in rank 112 (5th quintile). This indicator was used only in the bloodborne infection vulnerability assessment.

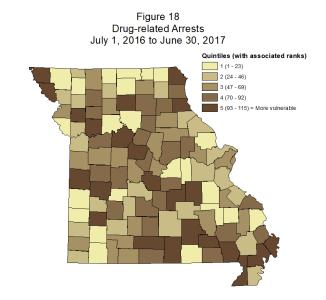




In 2016, 17.5 percent of St. Louis City adults 18 years of age or older reported more than 14 poor mental health days per month. This placed St. Louis City in rank 96 (5th quintile) for this indicator in the opioid overdose vulnerability assessment.

Between July 1, 2016 and June 30, 2017, a total of 2,373 drug-related arrests occurred in St. Louis City, at a rate of 768.9 arrests per 100,000 population. St. Louis City ranks 61 (3rd quintile) for this indicator, which was used in both assessments.





References

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- Drug-related Arrests: Missouri Department of Mental Health. Calculated from a data file of FY 2017 arrests (as of December 2018) provided by the Division of Behavioral Health on December 3, 2019, and population data from 2017. Rates reported per 100,000 population.
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- Median Age: U.S Census Bureau. 2013-2017 American Community Survey 5-Year Estimates. B01002 Median Age by Sex. Accessed March 10, 2020, from American FactFinder at https://factfinder.census.gov/.
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- Population Ethnicity: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates. B03003 Hispanic or Latino Origin. Accessed March 10, 2020, from American FactFinder at https://factfinder.census.gov/.
- Population Race: U.S. Census Bureau. 2013-2017 American Community Survey 5-Year Estimates. B02001 Race. Accessed March 10, 2020, from American FactFinder at https://factfinder.census.gov/.
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Suggested Citation:

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