

Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments Supplementary Data Howell County



Howell County is located along the Arkansas border and between years 2013 to 2017 had an estimated population of 40,139. Howell County ranks 28 in population size among Missouri's 114 counties plus the independent city of St. Louis. The 2013-2017 unemployment rate in the county was 5.0%. This was lower than the statewide unemployment rate of 5.8%. In 2013-2017, the poverty rate was 22.9%, which was higher than the statewide poverty rate of 14.6%. The 2013-2017 median income of the county was \$34,984. The population distribution is as follows:

Demographics – Total Population											
Sex	Count	Percent		Age Group	Percent						
Male	19,656	49.0		0 – 9 years	5,145	12.8					
Female	20,483	51.0		10 – 14 years	7.2						
Race				15 – 19 years	2,472	6.2					
Black/African American alone	130	0.3		20 – 24 years	2,500	6.2					
White alone	38,497	95.9		25 – 39 years	6,976	17.4					
Other	1,512	3.8		40 – 59 years	10,281	25.6					
Ethnicity				Over 60 years	9,866	24.6					
Hispanic	823	2.1		Median Age	40.2 years						
Non-Hispanic	39,316	97.9									

Figure 1: Howell County Population 2013-2017 5-Year Estimates

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

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	Opioid Overdose	Both	Bloodborne Infection							
tcomes c 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 Outo (Weight x 3	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							
actors (1)		Median Income ⁺ ‡								
Fact x 1)		Poverty ⁺								
ımunity (Weight		Lack of a High School Education ⁺								
Community (Weight		Unemployment ⁺ ‡								
Con		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, Howell County ranked 90 (4th quintile) for vulnerability to opioid overdoses. Howell County ranked 99 (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.

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

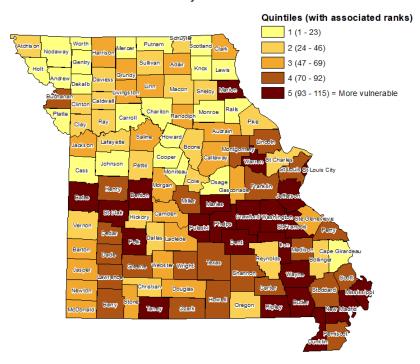


Figure 5: Individual Outcome Indicators

NOTE: Rates based on counts of 1 to 19 are considered unreliable and are shaded in gray.

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
Howell	12	10.0	10	8.3	103	0.9	22	54.9	494	1,231.8	16.9
Missouri	3,784	20.7	3,868	21.1	25,889	1.4	6,754	110.5	43,232	707.2	13.7

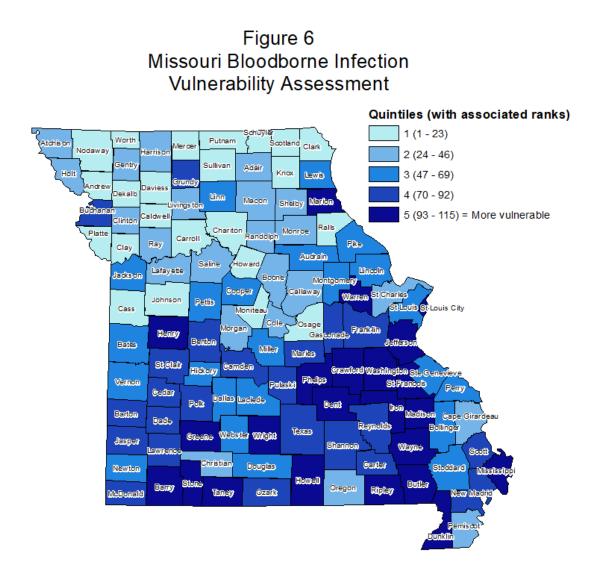


Figure 7: Individual Outcome Indicators

NOTE: Rates based on counts of 1 to 19 are considered unreliable and are shaded in gray.

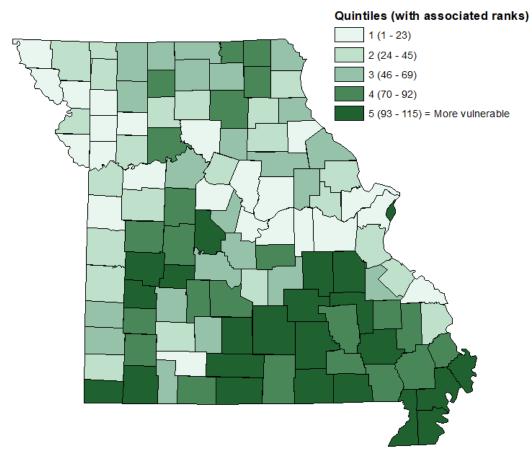
	Bloodborne Infection Vulnerability Assessment Indicators													
County	Count: Drug OD Deaths by Residence County	Rate: Drug OD Deaths by Residence County	Count: Drug OD Deaths by County of Record	Rate: Drug OD Deaths by County of Record	Count: HIV, HBV, HCV	Rate: HIV, HBV, HCV	Count: HCV Among 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
Howell	12	10.0	10	8.3	172	142.8	67	210.7	103	0.9	38	94.8	494	1,231.8
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

Howell County											
ACS Data 2013-2017 Rate Rank Quintile											
Lack of a High School Education	14.3%	68	3rd								
Median Income	\$34,984	103	5th								
Poverty	22.9%	99	5th								
Unemployment	5.0%	41	2nd								
Uninsured	12.3%	59	3rd								

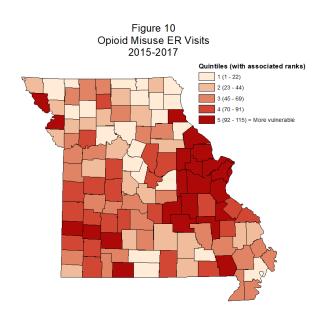
Figure 8: Community Factors

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



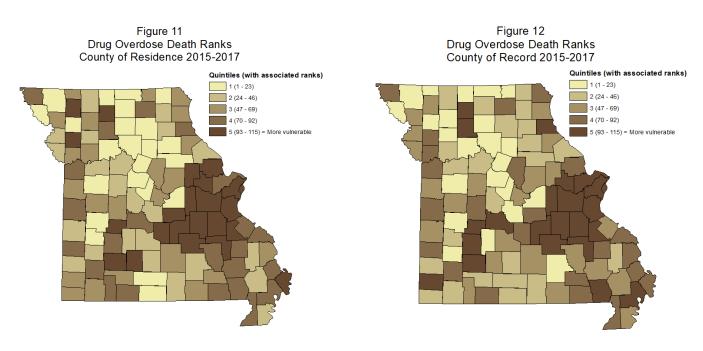
Selected Individual Outcome Indicators



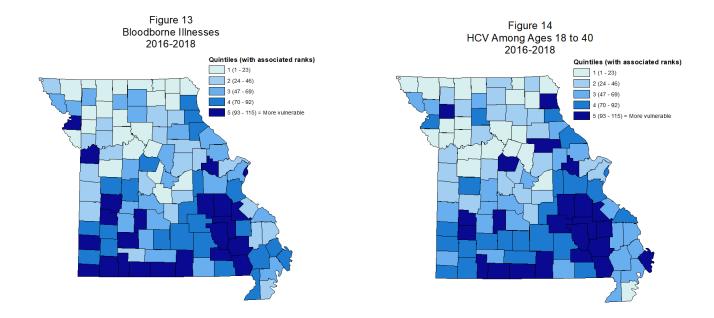
The 2015-2017 number of emergency room visits due to opioid misuse was 103, at a rate of 0.9 visits per 1,000 residents. This is rank 73 (4th quintile) for this indicator.

Howell County ranks 39 (2nd 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 Howell County drug overdose deaths was 12, at a rate of 10.0 deaths per 100,000 population. By county of record, the 2015-2017 number of Howell County drug overdose deaths was 10, at a rate of 8.3 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)) for Howell County totaled 172 for 2016-2018, at a rate of 142.8 cases per 100,000 residents. This is rank 110 (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 Howell County, 67 new cases of HCV were identified among the 18- to 40year-old age group in 2016-2018, for a rate of 210.7 cases per 100,000 residents. Howell County ranks 103 (5th quintile) for this indicator.

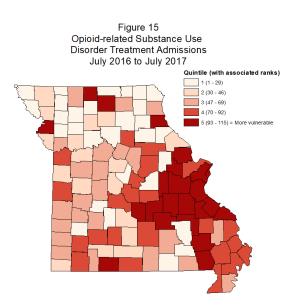


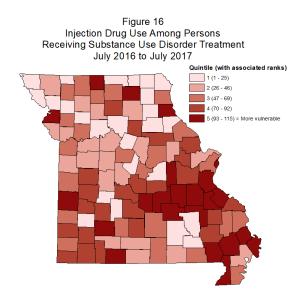
Acute and chronic hepatitis C also significantly impact the 41- to 65-year-old age group. In 2016-2018, there 91 new cases of acute and chronic hepatitis C identified in this age group, at a rate of 238.3 cases per 100,000 residents.

Out of 165 acute and chronic HCV cases in Howell County, 96 (58.2%) were male. For the cases in which race was identified, <5 (<2.1%) were African American. However, please interpret race data for HCV with caution, as race was not identified in 68 (41.2%) of all 2016-2018 HCV cases Howell County.

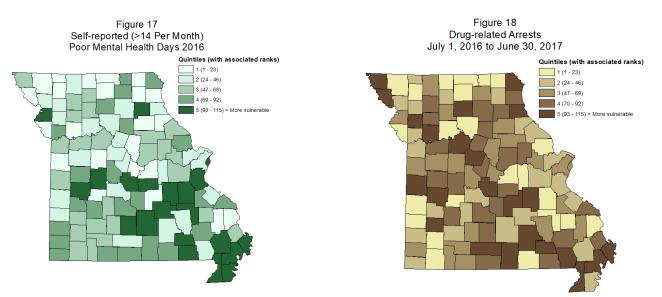
⁺ Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. CDC Estimates Nearly 2.4 Million Americans Living with Hepatitis C. (November 6, 2018). Accessed October 8, 2019, from https://www.cdc.gov/nchhstp/newsroom/2018/hepatitis-c-prevalence-estimates-press-release.html.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

The number of people who received opioid-related substance use disorder treatment from July 1, 2016 to June 30, 2017 was 22, a rate of 54.9 persons per 100,000 population, placing this county in rank 57 (3rd 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 38, a rate of 94.8 persons per 100,000 population, placing this county in rank 61 (3rd quintile). This indicator was used only in the bloodborne infection vulnerability assessment.





In 2016, 16.9 percent of Howell County adults 18 years of age or older reported more than 14 poor mental health days per month. This placed Howell County in rank 93 (5th quintile) for this indicator in the opioid overdose vulnerability assessment. Between July 1, 2016 and June 30, 2017, a total of 494 drug-related arrests occurred in Howell County, at a rate of 1,231.8 arrests per 100,000 population. Howell County ranks 98 (5th 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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Suggested Citation:

Missouri Department of Health and Senior Services, Bureau of Reportable Disease Informatics. Missouri Opioid Overdose and Bloodborne Infection Vulnerability Assessments Supplementary Data: Howell County. Available at https://health.mo.gov/data/opioids/assessments.php. Accessed Month Day, Year.

Prepared by the Missouri Department of Health and Senior Services, Bureau of Reportable Disease Informatics