



VULNERABILITY ASSESSMENT REPORT AND JURISDICTIONAL PLAN: SOUTH CAROLINA

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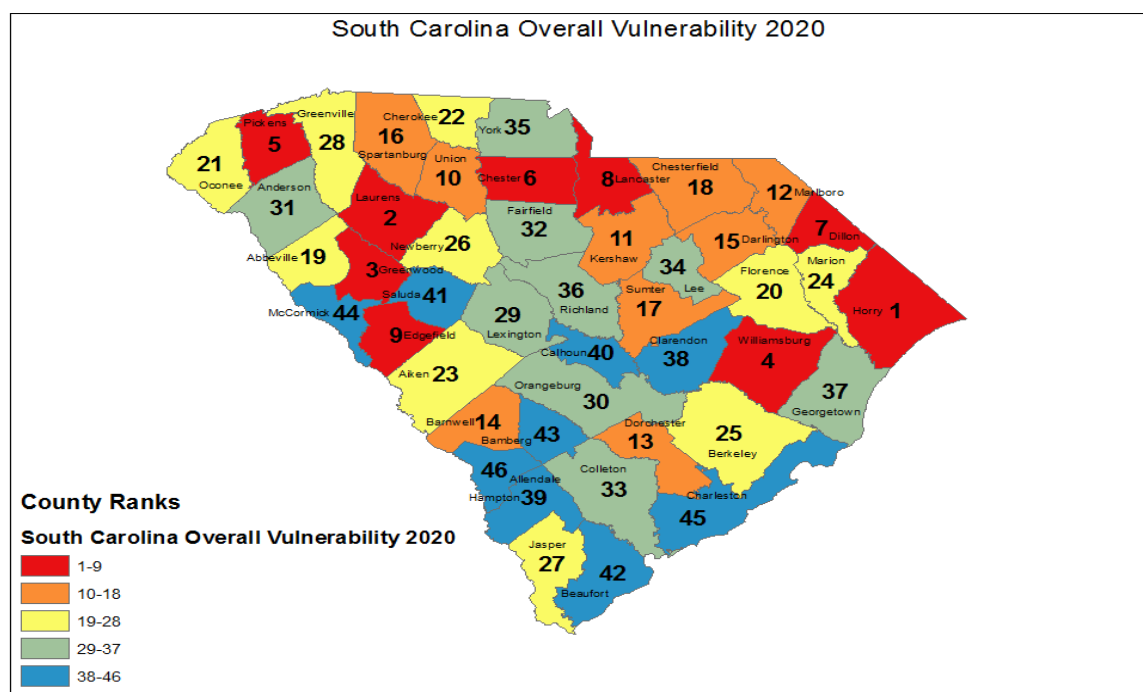
Executive Summary

Background:

In November 2014, Scott County, IN, experienced simultaneous outbreaks of Human Immunodeficiency Virus (HIV) and Hepatitis C Virus (HCV). Investigators were able to attribute the outbreaks to needle-sharing among the rural county's prescription opioid abusers, which ultimately resulted in 215 new cases of HIV; over 90% of these HIV cases had coinfections of HCV.

Purpose:

The purpose of this report is threefold: first, to **identify the South Carolina (SC) counties at the highest risk for injection drug use and resultant bloodborne infection outbreaks**; second, to **identify the resources SC currently has that could help reduce the burden of addiction and bloodborne infection outbreaks**; and third, to **present evidence-based interventions and identify preventative services both at the state- and county-level that may lead to reducing the risk of substance abuse and infection outbreaks resulting from unsafe injection drug use (IDU)**.



Key Messages:

- **The counties identified as most vulnerable to bloodborne infection outbreaks because of unsafe injection practices among persons who inject drugs are concentrated in the Pee Dee Region of the state.** The most vulnerable counties, in order, are Horry, Laurens, Greenwood, Williamsburg, Pickens, Chester, Dillon, Lancaster and Edgefield.
- **Opioid abuse is still a problem in South Carolina and has begun to cross previous demographic boundaries; introduction of injection drug use to new demographic categories increases the risk of bloodborne infection transmission.**
- **Prevention and treatment services for both substances use disorders and bloodborne infections are concentrated in urban areas, leaving rural populations particularly vulnerable to outbreaks of bloodborne infections.**
- **Implementation of evidence-based solutions, in conjunction with current efforts across the state, could minimize the risk of bloodborne infection outbreaks as a result of the sharing of injection drug equipment among persons who inject drugs (PWID).** These include, but are not limited to:
 - Increase naloxone distribution and accessibility
 - Increase the number of MAT-waivered primary care providers
 - Promote full utilization of MAT waivers to dispense and oversee medicated-assisted treatment for opioid use disorder, particularly in rural areas of the state
 - Introduce syringe service programs that provide:
 - Risk-reduction education
 - Sterile injection equipment to reduce the spread of bloodborne infections
 - Link persons who inject drugs to substance use disorder treatment options
 - Link persons who inject drugs to HIV and hepatitis C testing and treatment
 - Offer vaccinations to prevent other illnesses
 - Distribute naloxone for overdose reversals
 - Dispose of used needles to reduce needlesticks of law enforcement and other first responders
 - Provide other medical, social, and mental health services to those in need
 - Increase hepatitis C screening efforts to include all adults ages 18-79 in accordance with US Preventive Services guidelines and promote routine hepatitis C screening in persons with any known risk factor(s) for HCV

Methods:

A Social Vulnerability approach (Flanagan et al, 2011) was used to rank SC counties on their overall vulnerability to substance abuse and possible bloodborne infection outbreaks resulting from IDU. Based on literature and feedback from statewide stakeholders, several relevant variables were identified; advisors from Centers for Disease Control and Prevention (CDC) provided further guidance on categorizing the variables, resulting in an Overdose and Bloodborne Infection Index (OBII) with two domains: risk factors and mitigating factors. Z-scores for each variable in the Risk and Mitigating domains were calculated and summed by county; overall Vulnerability was calculated by subtracting the sum of the Mitigating Factors from the sum of the Risk Factors.

Variables Used:

Most data are from the year 2020. Urgent Care Clinics is taken from 2018 data due to classification changes during the COVID-19 pandemic. Counts of clinics and providers serving each county are taken from the year 2021 as a more accurate measure of current Social Vulnerability. Counts are as of the date taken, and these data are updated monthly.

Risk Factors: Percent Unemployment, Morphine Milligram Equivalents per capita, Overdose deaths per 100,000, HIV incidence per 100,000, Opioid Overdose %, EMS Naloxone administrations per 1,000, Drug Arrests per 10,000, Endocarditis cases per 100,000, Acute HCV (defined as any HCV case diagnosed in persons under 40 years) cases per 100,000, Difference in HCV and HIV rates, Medicaid opioid diagnoses per 1,000, HIV cases who reported IDU per 100,000.

Mitigating Factors: Median per capita household income, Substance use clinics per 100,000, EMS personnel per 1,000, Urgent care facilities per 100,000, Mental health clinics per 100,000, Buprenorphine-waivered providers per 100,000, Law enforcement personnel per 100,000, Hospitals/Emergency departments per 100,000, Primary care providers per 100,000, After School Programs, Mental health providers per 100,000, PrEP users per 100,000.

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Part I: Vulnerability Assessment

1.a. Background & Rationale

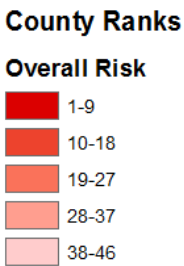
November 2014 saw the beginning of an outbreak of human immunodeficiency virus (HIV) among the residents of Scott County, IN. Within the following year, a total of 181 new HIV cases were diagnosed in the area, in stark contrast to the five cases diagnosed in the 10 years prior. Most (87.7 percent) of those diagnosed with HIV between November 2014 and November 2015 reported having injected a prescription opioid; furthermore, 92.3 percent of these new HIV cases were coinfecting with hepatitis C virus (HCV) (Peters et al, 2016). Scott County had no HIV or HCV testing sites, limited substance abuse treatment facilities, no syringe service programs (SSPs), and was overall unprepared to handle the outbreaks. The lack of resources in the community contributed to the quick and pervasive spread of disease.

The relative speed and ease with which the HIV and HCV infections spread through Scott County highlighted not only the opioid epidemic that has been building in the US since the early 2000s, but the additional public health burdens that may occur in tandem. HCV is the most common infection associated with injection drug use (IDU); prevalence estimates of HCV among long term (>3 years) persons who inject drugs (PWID) are 75 percent to 90 percent and 18 percent to 38 percent in short term (<3 years) PWID (Amon et al 2008). While HIV is not as easily transmitted via the sharing of drug injection equipment, the Scott County outbreak illustrates that the introduction of a single HIV strain into the close community of PWID can have far-reaching consequences.

In response to the Scott County outbreaks of HIV and HCV, the CDC recognized the threat of additional HIV/HCV outbreaks in areas with similar conditions. Using acute HCV cases as a proxy for IDU, Van Handel et al (2017) conducted a vulnerability assessment where they built a prediction model using indicators of IDU (drug overdoses, prescription opioid sales, median per capita income, percent white population, percent unemployed, and buprenorphine prescribing potential) and HIV proximity (likelihood of HIV introduction by neighboring areas) to identify counties at a high risk of HIV and HCV outbreaks as a result of the sharing of injection drug use equipment among PWID. Because of constraints inherent in national analyses, and a lack of follow up on both suspected and confirmed HCV cases in the state, South Carolina received funding to conduct its own vulnerability assessment using data and methods at their discretion. This report details the findings and methodology of that assessment, as well as suggestions for decreasing vulnerability to HIV/HCV outbreaks via IDU across the state.

The vulnerability assessment of South Carolina has three domains: Risks, Mitigators, and Overall Vulnerability. The Risks domain includes variables that help describe each county's risk for opioid overdose and transmission of HIV/HCV from needle sharing among PWID. The Mitigator domain includes variables that help describe each county's ability to prevent and treat opioid abuse and incident cases of HIV/HCV cases. Scores for the Risk and Mitigator domains were calculated by summing the z-scores (a standardization transformation that relates each county's data point for a variable to the distribution of that variable for all counties) for all variables within each domain. The Overall Vulnerability domain contains no unique variables, but simply weights each county's risk factors in

*Data presented is for the 2020 assessment



List of variables

- Percentage Unemployed
- Morphine Milligram Equivalents per capita
- Drug Deaths per 100,000
- HIV Incidence per 100,000
- Percentage of Reported Overdoses Attributable to Opioids
- EMS Naloxone Administration per 1,000
- Drug Arrests per 10,000
- Opioid prescription holders per 100,000
- Cases of Acute HCV per 100,000
- Difference of HCV and HIV rates
- Medicaid Opioid Diagnoses per 1,000
- Prevalence of HIV positive persons not in care per 100,000

Methodology

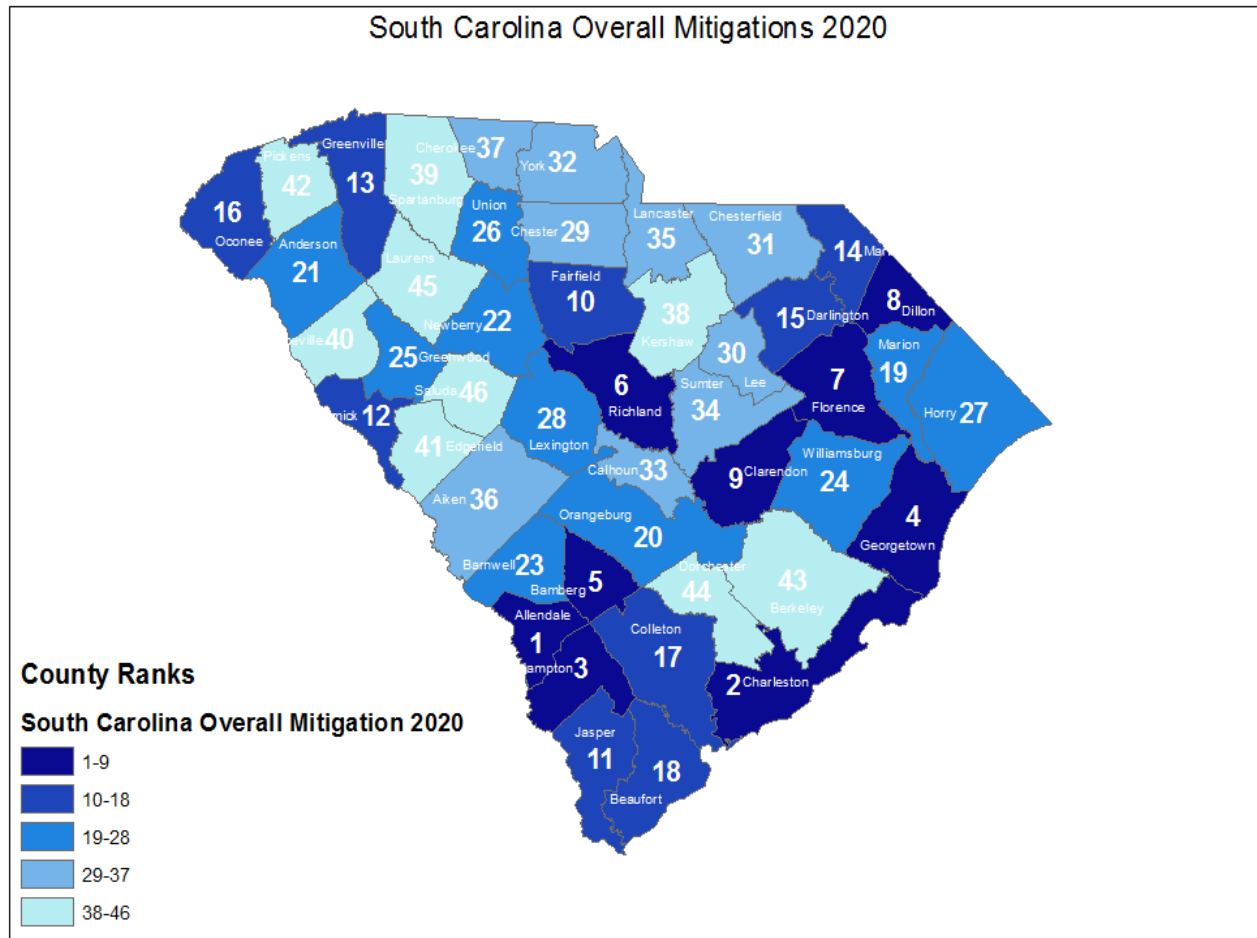
For details on where data for each variable was obtained, the raw data for each variable by county, the z-scores for each variable by county, and how z-scores are calculated, please refer to Part III: Technical Notes – Methods. For county rank maps of each risk variable, please refer to Part III: Technical Notes – Indicator Maps.

Comments

The risk ranking map includes data only on factors that were determined to quantify potential risk of outbreaks of bloodborne infections as a result of needle sharing. The counties that had the highest risk, according to 2020 data, are (in order, highest first): Dillon, Horry, Greenwood, Florence, Williamsburg, Marlboro, Chester, Union and Darlington. The counties with the least risk, according to 2020 data, are (in order, lowest first): Saluda, Calhoun, Beaufort, McCormick, Hampton, Berkeley, York, Aiken and Lee.

In the above map we see a risk cluster of counties in the northeast section of the state, known as the PeeDee Region. Horry county, the second highest-ranked county for risk, is a known hot spot of opioid abuse, and has greater potential for HIV and hepatitis transmission due to its larger population size. The surrounding counties are thought to be high risk due to their proximity to Horry County and the I-95 interstate, which is a commonly used thoroughfare for transporting both drugs and people. The other high-risk counties outside of the Pee Dee Region (Richland, Chester, Union and Greenwood) achieved their ranks through a combination of high rates of bloodborne infection transmission, drug use and crime.

1.c. Overdose and Bloodborne Infection Mitigating Factors



List of variables

- Median Per Capita Household Income
- Substance Use Clinics per 100,000
- Emergency Medical Service Personnel per 1,000
- Urgent Care Facilities per 100,000
- Mental Health Clinics per 100,000
- Buprenorphine Doctors per 100,000
- Law Enforcement Officers per 100,000
- Hospitals and Emergency Departments per 100,000
- Medicaid-registered Primary Care Providers per 100,000
- Mental Health Providers per 100,000
- After School Programs per 100,000
- PrEP Users per 100,000

Methodology

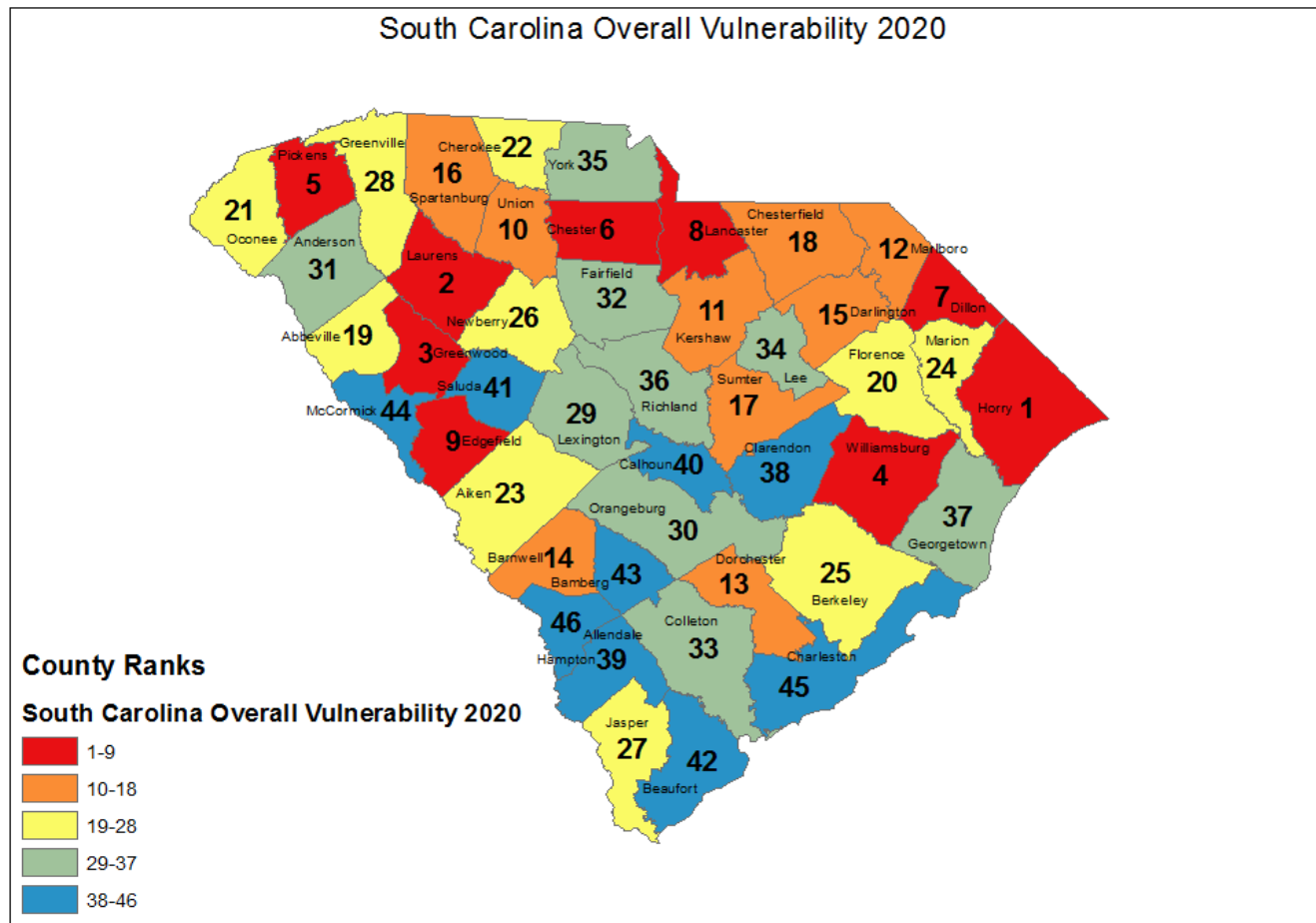
For details on where data for each variable was obtained, the raw data for each variable by county, the z-scores for each variable by county, and how z-scores are calculated, please refer to Part III: Technical Notes – Methods. For county rank maps of each mitigating variable, please refer to Part III: Technical Notes – Indicator Maps.

Comments

The mitigator ranking map includes data only on factors that were determined to quantify the ability to prevent or treat substance misuse or bloodborne infection. The counties that showed to have the highest mitigating factors, according to 2020 data, in order, are: Allendale, Charleston, Hampton, Georgetown, Bamberg, Richland, Florence, Dillon and Clarendon. The counties with the least mitigating factors according to 2020 data (in order, lowest first) are: Saluda, Laurens, Dorchester, Berkeley, Pickens, Edgefield, Abbeville, Spartanburg and Kershaw.

The counties with the fewest mitigators tend to be more rural, less populated, and among the least funded counties of the state and typically are not near high-income and high-population counties; providing additional funding to these areas is a factor to consider when addressing resource gaps.

1.d. Overall Vulnerability for Overdose and Bloodborne Infection



Methodology

The Overall Vulnerability score is a function of how many overdose and disease risks remain in a county after accounting for the resources available to that county for prevention and treatment of substance abuse and bloodborne infection.

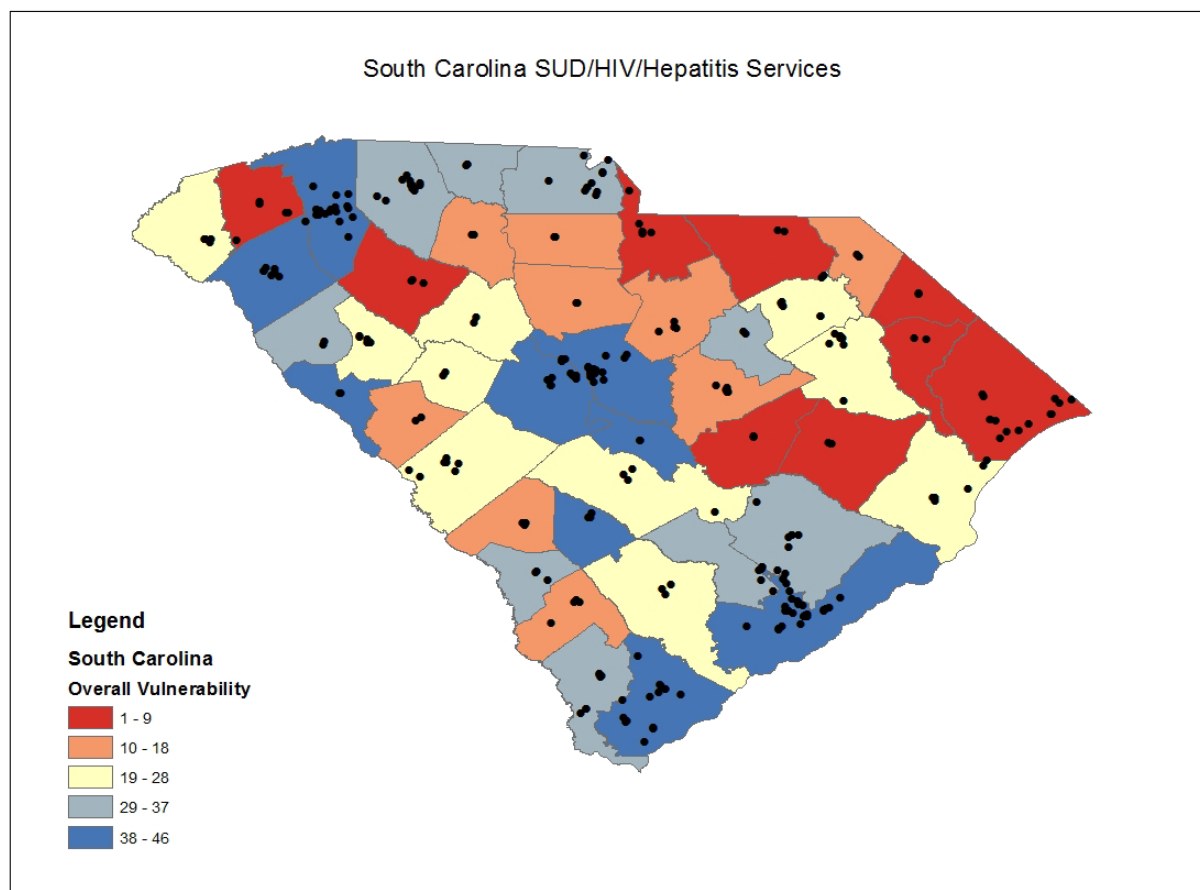
Comments

The above map displays the overall Vulnerability Rank for each county in South Carolina. Risk factors and mitigating factors were considered in producing the ranks for each county. The most vulnerable counties identified based on this approach, in order, are Horry, Laurens, Greenwood, Williamsburg, Pickens, Chester, Dillon, Lancaster and Edgefield. The least vulnerable counties, according to 2020 data, in order, are: Hampton, Charleston, McCormick, Bamberg, Beaufort, Saluda, Calhoun, Allendale and Clarendon. It is most likely assumed that all the counties that are most vulnerable or least vulnerable have many factors in common. However, Horry, the most vulnerable county, its coastal geography, high population and tourism economy contrast starkly with Laurens County, a land-locked rural county. Counties adjacent to Horry such as Williamsburg and Dillon counties are suspected to be highly vulnerable due to their proximity to Horry and the I-95 interstate highway. In previous iterations of this assessment, there was a common theme associated with most of the least vulnerable counties:

Beaufort, Charleston, Lexington, Greenville and Richland were some of the highest per capita income counties in the state and the least vulnerable. Their abundance of resources mitigated the impact of an HIV/HCV outbreak and addressed substance abuse disorders. However, in the 2022 analysis York County (which has the second highest per capita income) dropped from 38th in 2020 to 30th most vulnerable. Counties with low vulnerability scores, such as Charleston, may have high rates of drug crime or other risk factors but also have large numbers of police officers, medical personnel and substance abuse clinics. When discussing vulnerability among the counties in South Carolina, it is important to not only identify which counties are most vulnerable, but also to identify what is contributing to these counties' vulnerability. Further maps (Part III: Technical Notes, Indicator Maps) go into more detail on the contributing factors of the ranking system.

Part II: Resource Inventory, Resource Gaps, and Jurisdictional Plan

2.a. Resource Inventory



*Resources reflect those available as of July 2021; for interactive map and full contact information for state-acknowledged HIV, HCV, sexually transmitted disease, and substance use disorder testing and treatment facilities, please visit gis.dhec.sc.gov/HIVLocator/.

The map above shows where the listed services are available across South Carolina in relation to vulnerability status:

- HIV testing
- HIV treatment
- HIV linkage and re-engagement services
- HCV testing
- HCV treatment
- Substance Use Disorder treatment
- PrEP for HIV Prevention

For a complete listing of each agency/provider, location, and specific services provided, please see Appendix 1 – Resource Inventory.

2.b. Resource Gaps

In a country, every state has different challenges. This also applies at the county level, and South Carolina has a surplus of evidence to show this. With no true metropolitan areas, rurality is common and the disbursement of rural areas in the state is uneven, as shown by this project and the generated maps. **A large proportion of the counties that are identified as highly vulnerable are resource deprived: they have fewer available services, lower proximity to population-dense areas, and lower per capita income.** For example, the median household income among the most vulnerable counties is on average \$48,847 compared to an average median income of \$51,792 among the least vulnerable counties.

The state of South Carolina is challenged by the distribution of its populace and lack of adequate services within reasonable reach of its residents. **This study provides evidence that living in a rural area and having a low income can contribute to an increased risk for HIV and HCV acquisition due to opioid use.** Allocation of resources to the areas identified should be prioritized, due to the lack of access and availability of preventative programs and treatment options.

Jurisdictional Plan

2.c. Strategy Recommendations

Increased Naloxone distribution and overdose patient follow up

Naloxone (often identified by the brand names Narcan® and Evzio) is a medication used to treat opioid (including heroin, morphine, oxycodone, etc.) overdoses. It is an opioid antagonist that works by temporarily blocking opioid receptor sites in the nervous system. **Naloxone can be administered by injection (intramuscular, subcutaneous, or intravenous) or intranasal spray. Multiple doses can be used safely if the primary dose does not restore respiratory function, and naloxone has no effect if the person has not used opioids. This versatility allows nonmedical respondents, such as police officers or family members, to easily and effectively use naloxone when an overdose occurs.** Given the ease of administration and safety of ingestion, naloxone has become a primary treatment of opioid overdose.

Beginning in 2016, federal funding from the Substance Abuse and Mental Health Services Administration (SAMHSA) via the S.C. Department of Alcohol and Other Drug Abuse Services (DAODAS) expanded S.C.'s naloxone distribution to law enforcement officers through the LEON (Law Enforcement Officer Narcan) program, which provides Narcan to police officers and trains them on opioid overdose identification, treatment and reporting. Since implementation in 2016, the LEON program has trained and equipped 10,705 officers across 228 agencies, and they continue to expand; total Narcan administrations equal 1,718 among 1,605 persons treated, with an estimated 95.0 percent successful rate of opioid overdose reversal. 2020 Narcan administrations currently tally at 544 (as of Sept. 17, 2020), which is a 30 percent increase in administration over the same period in 2019. Fire departments across the state also have the option of enrolling in ROLL (Reducing Opioid Loss of Life), which provides education, training and overdose reversal kits. Enrollment in ROLL includes 108 departments with 1,736 firefighters, and in 2020 the program has logged 178 Narcan administrations (as of Sept. 17), which is more than twice the total number of ROLL administrations during the entire year in 2019 (n=72). All training and supplies are fully funded to maximize utilization among the state's emergency services.

Another program being implemented in South Carolina is the Community Outreach Paramedic Education (COPE) program, a joint effort between paramedics and law enforcement that is focused on facilitating entry into treatment programs for patients who survived an overdose event. After a Narcan administration or opioid overdose-related hospital discharge, a paramedic and police officer follow-up with the overdose survivors at their residence to educate them and any household members on substance abuse treatment options. If the person is willing to enter treatment that day, they are escorted to a treatment facility and enrolled immediately, which removes the barrier of waiting that prohibits many from entering treatment (MacMaster 2005; Redko, Rapp & Carlson 2006). Originally begun a joint project between S.C.'s DAODAS and DHEC, DHEC is hoping to expand the program by enrolling more agencies after evaluating the 2019 statistics on treatment utilization.

To further the accessibility of naloxone, The South Carolina Overdose Prevention Act was passed in 2015, laying the foundation for South Carolina to apply for federal funds to distribute naloxone on a population scale and pass good Samaritan laws. In 2016, DAODAS received federal funding for the Overdose Prevention Project, which allowed prescribers to issue standing orders of naloxone for first responders and persons with OUD plus their caregivers and prevented criminal prosecution for those

administering naloxone in perceived overdose situations. **By 2017, a joint protocol signed by the SC Board of Medical Examiners and the SC Board of Pharmacy) authorized any pharmacist practicing and licensed in SC to dispense Naloxone to persons without a prescription; this allows anyone to legally obtain naloxone as a preventative measure.** The benefits of the described legislation would be maximized by increasing awareness of naloxone's availability to the community at large, as the public remains confused on the legality of obtaining and using naloxone; further promotion of the public awareness campaign at justplainkillers.com on naloxone's availability and use would decrease ambiguity regarding the legality of naloxone possession, encourage education on naloxone administration techniques, and promote procurement among citizens concerned about family and friends currently abusing opioids.

In May 2018, the S.C. Overdose Prevention Act was amended to allow organizations that provide substance use disorder services and assistance to apply for designation as Community Distributors of naloxone. Under the new law, any organization that is interested in providing naloxone to the public as part of their counseling, advocacy, harm reduction, or drug and alcohol screening and treatment services may apply to DAODAS, which is designated as a Community Distributor of Narcan and has 32 county AOD sites that are community distributors of Narcan. DHEC regional pharmacies serve as the pharmacy hubs to receive the Narcan and then ship to county agencies (as is required by law). Community distributors can acquire quantities of naloxone without the need for the medication to be patient specific.

Increased medication-assisted treatment (MAT) access, particularly in rural areas

Medication-assisted treatment (MAT) for opioid use disorder, including opioid substitution therapy (OST), helps curtail transmission of HIV and HCV among PWID by replacing injection opioid use with administration of controlled level medication that alleviates withdrawal symptoms and psychological cravings. **MAT is not simply replacing one drug for the other; rather, MAT allows for the cessation of illicit drug use while minimizing the negative physical and psychological consequences of withdrawal and usually includes additional therapy and behavioral modification strategies.** Administration of MAT is closely supervised by a physician and may continue for as long as deemed necessary.

There are three medications currently approved for MAT of Opioid Use Disorder (OUD): methadone, buprenorphine and naltrexone. Each medication offers its own benefits and drawbacks. Methadone has been used for decades to successfully treat substance abuse disorders and is the only MAT option approved for use in pregnant and breastfeeding women. The biggest concern with methadone MAT is that methadone itself can become addictive, so administration (oral) is closely monitored (at least initially) and requires physical presence at a Substance Abuse and Mental Health Services Administration (SAMHSA)-certified opioid treatment program (OTP). This inhibits use among rural and poor populations, where daily transportation to and from the OTP site is unfeasible. Since methadone is the only option for pregnant and breastfeeding women and some patients require high levels of supervision during treatment, increasing the number of OTPs offering methadone in rural and suburban settings should be a priority.

Naltrexone is another MAT treatment option and can be dispensed by any health care provider authorized to prescribe medications. For OUD, it is commonly administered as an extended-release injectable but requires a full seven to 10 days of detoxification from opioids and may result in life-

threatening conditions if drugs or alcohol are taken while on naltrexone. This is because naltrexone does not activate opioid receptors in the nervous system, as methadone and buprenorphine do, but blocks them; this can increase sensitivity to previously tolerable levels of opioids and alcohol. Therefore, close supervision of patient intake is required for naltrexone use and may not be a good option for patients with multiple relapse episodes or unstable conditions. In conjunction with therapy and good social support, naltrexone is a safe (non-habit forming) option for OST and should be promoted as part of a comprehensive recovery plan.

The last FDA-approved medication to treat OUD is buprenorphine. **While the chemical effects of buprenorphine are like those of methadone, buprenorphine has been approved for both prescribing and dispensing outside of certified OTPs; this greatly increases the availability and convenience of MAT to those with OUD in rural and suburban settings.** Because buprenorphine is an opioid partial agonist that can produce the euphoric effects of opioid drugs, it has potential for misuse and abuse. To counteract this, buprenorphine is often combined with naloxone into tablets that, when taken orally, can safely satisfy cravings while blocking withdrawal. Injection of crushed pills, however, results in onset of withdrawal and acts as a deterrent to misuse.

Currently, the federal government requires registration of health care professionals with SAMSHA's Center for Substance Abuse Treatment (CSAT) prior to any buprenorphine treatment. Registration for buprenorphine waivers is an approval process, and practitioners must wait up to 45 days after application submission for final determination. Once approved, the number of patients receiving buprenorphine from the provider is limited to 30; waivers to increase the number of patients receiving buprenorphine can be applied for after a year from the date of the initial application. **Amendments to the current process, including shorter physician approval times and waiver distribution based on need and utilization, could increase timely access to care in areas where it is most needed, particularly in rural and underserved parts of the state.** The South Carolina Office of Rural Health (SCORH) is using monies from the Rural Communities Opioid Response Program implementation grant to coordinate the expansion of MAT providers and services, tandem psychosocial interventions, and cost-coverage of medication and treatment with several state agencies to better serve South Carolina's rural populations.

Introduction of syringe service programs (SSPs) in South Carolina

Syringe service programs (SSPs), also known as needle and syringe programs (NSPs), are an evidence-based intervention that provides education and materials to reduce the risk of transmission of bloodborne infections among PWID. According to the latest CDC statistics, injection drug use is the most common risk factor identified in new HCV diagnoses and is a reported risk factor in approximately 10 percent of new HIV/AIDS diagnoses. **Both the U.S. Department of Health and Human Services (HHS) and the CDC acknowledge SSPs are a key component of comprehensive strategies aimed at treating substance abuse disorders and preventing the spread of infectious disease through injection drug use** (HHS 2019, CDC 2019). Services offered by SSPs include, but are not limited to:

- Sterile needle and syringes, safe equipment disposal, education, and counseling
- HIV, HCV, and sexually transmitted disease screenings
- Naloxone for overdose reversals, treatment referrals, medical care, and mental health services

- Vaccination services and pre-exposure/post-exposure prophylaxes (PrEP & PEP)

Thirty years of scientific literature show that SSPs are safe and effective at preventing bloodborne disease transmission and engaging PWID in treatment services at a cost savings to taxpayers; there is no evidence that SSPs promote illegal drug use or crime (CDC 2019).

In January 2019, the CDC verified that South Carolina is at high risk for HIV and HCV outbreaks due to increased opioid use and unsafe drug injection practices across the state; they recommended the establishment of SSPs as part of the state’s public health intervention for these co-occurring epidemics. However, SSPs are currently illegal to operate in South Carolina. According to Article 7, Sections 44-53-391 of South Carolina Code of Laws, it is unlawful to “manufacture, possess, sell, or deliver ... paraphernalia” (including hypodermic needles and syringes) or provide “instructions, written or oral, with the [paraphernalia] concerning its use” or any other “descriptive materials accompanying the [paraphernalia] which explain or depict its use.” Section 44-53-930 of the same Article stipulates that hypodermic needles and syringes be sold only by “registered pharmacists or registered assistant pharmacists through a permitted pharmacy” or “persons lawfully selling veterinary medicines.” **If state law were amended, DHEC and DAODAS are prepared to submit federal funding applications that specifically request monies for the establishment of SSPs as part of comprehensive community-based interventions addressing both opioid and bloodborne infection epidemics in accordance with CDC guidance.**

A recent (December 2019) policy brief titled “Addressing the Opioid Epidemic and Preventing the Spread of Infectious Disease Through the Provision of Syringe Services Programs” drafted by the South Carolina Institute of Medicine & Public Health (SC IMPH) explains the interrelatedness of the opioid, HIV, and HCV epidemics currently affecting South Carolina and highlights the many ways SSPs attenuate all three problems at savings to the state. To read the full report, please visit http://imph.org/wp-content/uploads/2019/12/PolicyBrief_OpioidEpidemicInfectiousDisease.pdf.

Increased Hepatitis C testing

Previous HCV screening recommendations only covered specific populations at increased risk of hepatitis C infection. **In response to the increased cases of HCV observed nationally, the US Preventive Services Task Force (USPSTF) released a new screening recommendation in March 2020 advocating for one-time HCV testing for all American adults ages 18-79 and repeat testing for high-risk groups. They recognize that the most important risk factor for HCV is injection drug use, and that the national opioid epidemic has spread HCV to previously low-risk populations.**

Treatment options have improved, and early treatment is more cost-effective; increasing HCV testing in South Carolina is the first step to reducing the spread and eventually eradicating HCV in the state. Current surveillance methods of HCV do not differentiate between acute and chronic types well and reporting of both has been limited. Educating primary care providers on the symptoms of acute HCV, risk factors for HCV transmission, and benefits of early detection would improve state surveillance and, over time, decrease the number of new infections. SC DHEC is also funding a pilot program for rapid HIV/HCV testing among persons who are administered naloxone; rapid testing takes 1-5 minutes and helps health officials identify those potentially spreading the infection among PWID. **Ultimately, integration of HCV testing into standard blood panels across SC healthcare systems would identify**

more hepatitis C cases and provide more opportunities to link HCV+ persons to treatment and care resources.

Part III: Technical Notes

3.a. Stakeholder Input

| SC Vulnerability Assessment - Stakeholders (Internal & External) | |
|--|---|
| Stakeholder | Organization |
| A Bochette | Tandem Health SC |
| Ali Mansaray | DHEC - STD/HIV & Viral Hepatitis |
| Antony Price | DHEC - STD/HIV, Intervention Specialist |
| Arnold Alier | DHEC - EMS & T |
| Dr. Bambi Gaddist | Wright Wellness Center |
| Brittaney Desjardins | DHEC - Social Worker |
| Christina Galardi | CDC Foundation -Public Health Analyst |
| Claire Youngblood | DHEC - Acute Disease Epi, Research Analyst |
| Clayton Catoe | Lancaster EMS |
| Constance Marin | DHEC - Epidemiology Case Investigator |
| Demetria Carswell | SCDHHS - Director of Enterprise Reporting |
| Divya Ahuja | USC School of Medicine |
| Emma Kennedy | DHEC - Director, Division of Substance Abuse and Injury Prevention |
| Eric Meissner | MUSC |
| Greg Barabell | Clear Bell Solutions, Chief Medical Officer |
| Harley Davis | DHEC - PHSIS |
| Ian Hamilton | DHEC - Opioid Prevention Coordinator |
| Jessica Seel | South Carolina Office of Rural Health |
| Jillian Wilks | DHEC - Research and Planning Administrator |
| Joe Lane | Sumter Police - Sgt. |
| Katherine Richardson | DHEC |
| Kenneth Polson | DHEC - Narcan Coordinator |
| Larisa Bruner | DHEC - Director, Division of Surveillance, Assessment, and Evaluation |
| Linda Bell | DHEC - State Epidemiologist |
| Linda Brown | DAODAS |
| M Wilson | CAN Community Health |
| Marlene Al-Barwani | DHEC - Statistical and Research Analyst III |
| Marlene Williams | USC School of Medicine |
| Marya Barker | DHEC - Acute Disease Epidemiology |
| Maurice Adair | AID Upstate - Prevention Coordinator |
| Meisha Thomas | CareSouth - Carolina |
| Melanie Davis | DOC - Infection Control Officer |
| Nekia Robinson | DHEC - Health Education II |
| Ona Adair | DHEC - Laboratory |
| Pam Davis | DHEC - STD/HIV, Lab Consultant |
| Sazid Khan | DAODAS |
| Scott DB | Hold Out the Lifeline - Executive Director |
| Shenicka McCray | DHEC - Upstate Region Nursing Director |

| Stakeholder | Organization |
|------------------|---|
| Stephen Feetham | SCDHHS |
| Sueann Crowther | Aid Upstate |
| Susan Jackson | DHEC - Division of Injury & Violence Prevention |
| Suzanne Sanders | DHEC - External Systems Manager |
| Thomas VanDemark | Myrtle Beach Fire Dept. |
| Victor Grimes | DHEC - EMS & T |
| Zakiya Grubbs | DHEC - STD/HIV, CDC Assignee (HCV) |

MINUTES:

South Carolina Vulnerability Assessment Stakeholder's Meeting

August 2, 2021

- Introduction
 - Introducing Kendra Neely, newest member working on the VA team.
 - Thank you to all the stakeholders!
 - The input and dissemination opportunities you provide are so important.
- Reviewed Goal of the VA
 - Identify counties at high risk for: opioid overdose, blood-borne infection (HIV/HCV/HBV) associated with non-sterile drug injection
- Reviewed Rationale
 - Experience in Scott County, IN put a spotlight on the threat of HIV/HCV outbreak in similar regions due to the nationwide Opioid Epidemic
 - High rates of HIV and HCV coinfection are seen among PWID
 - In 2015, 64 percent of acute HCV cases were diagnosed in PWID
 - ALL EQUIPMENT USED TO PREPARE AND INJECT DRUGS CAN SPREAD HCV
 - Unsafe injection practices are No. 1 cause of acute HCV infections in US
- Reviewed VA methodology
 - Most data used are publicly available and are from 2019, reviewed data sources
 - A Social Vulnerability Index approach is used in the VA to assess regions with higher vulnerability. Chosen variables are standardized with a z-score approach.
 - Calculated scores for 3 domains: risk, mitigation, and overall vulnerability
 - Risk: included 13 variables with association to drug use/HIV/HCV (for list of variables, see PowerPoint)
 - Mitigation: included 13 variables with association to treatment/prevention of drug use/HIV/HCV (for list of variables, see PowerPoint)
 - Stakeholder feedback: make variable descriptions more specific, such as clarifying that the Naloxone variable is specifically rate of occurrences of EMS administration of Naloxone

- Stakeholder feedback: suggestion to include a variable related to availability of fentanyl test strips. Availability and use of fentanyl test strips can be a factor in overdose prevention
 - Overall Vulnerability: Risk score – Mitigation score; high scores a function of more risks and fewer mitigators
- Results (for full results, see PowerPoint)
 - 2019
 - Risk ranks
 - Mitigation Ranks
 - Overall Vulnerability
 - Compared 2018 and 2019 top 10 most vulnerable
 - Stakeholder feedback: Lancaster and Dillon, which are in the top 10 most vulnerable for the 2019 iteration, have experienced an increase in overdoses
 - A lot of interest was expressed in seeing results of the 2020 iteration of the VA, due to the impact of the Covid-19 pandemic
 - Reviewed map plotting available community resources over counties coded by vulnerability rank to highlight the impact of resource distribution to vulnerability
- Jurisdictional Plan
 - Part of report that prioritizes problems and offers solutions
 - Analysts' priority suggestions:
 1. Increased Naloxone distribution
 2. Increased access to medicated assisted treatment (MAT)
 3. Introduction of syringe service programs (SSPs)
 4. Increase HCV testing
 - Further suggestions provided on slides
- Dissemination materials
 - Presentation/printed materials
 - Resource Guides
 - Connections with interested parties for further dissemination
 - Stakeholder feedback: Jessica Seel with the Office of Rural Health requested follow up for more information/presentation regarding rural counties Georgetown, Lancaster, Orangeburg, and Beaufort
- Post-evaluation Survey
 - Will be coming soon, be on the lookout for an email!
- Contact Us
 - Please contact Samira Khan or Kendra Neely for further comments, questions, requests
 -

NOTE: Due to COVID-19 several conferences and state level meetings were cancelled, we had one stakeholders' meeting on August 2, 2021. In this meeting we provided a brief overview of 2019 VA report; showed comparison between 2018 and 2019 data and county rankings. We had a low survey completion rate last year, so we plan to conduct another stakeholder survey

again in the near future. We have updated annual report with 2019 data and created fact sheets and other educational materials to help our stakeholders help us disseminate information during this pandemic.

We would like to specifically acknowledge our Stakeholders for donating their time, expertise, and energy on this project; their contributions were invaluable, as is their commitment to reducing substance abuse and bloodborne infection transmission. Special thanks also to Lara Schneider, MSPH, PhD(c), whose efforts getting this project started remain very impactful for current implementation.

3.b. Methods

The 2020 South Carolina Vulnerability Assessment (SC VA) is the fourth iteration of this analysis. The pilot study was funded on NCHHSTP's Opioid Crisis CoAg grant (Grant TP18-1802-Opioid Supplemental) and guided by the Centers for Disease Control and Prevention. The intended methodology for the pilot study was meant to closely follow that of Van Handel, et al. (2016) and Rickles, et al. (2017), who used counts of acute hepatitis C virus (HCV) as a proxy for injection drug use in Poisson regression analyses to predict counties with high risk of injection drug use (IDU) and incident human immunodeficiency virus (HIV) and HCV infections resulting from needle sharing among persons who inject drugs (PWID). Due to issues with model fit and questions of data quality, a social vulnerability approach was used instead.

The Social Vulnerability Index (SVI) was created to identify socially vulnerable populations and rank US census tracts according to their ability to respond to and recover from a disaster (natural or otherwise) based on the resident population's demographics. The SVI ranks four domains (Socioeconomic Status, Household Composition & Disability, Minority Status & Language, Housing & Transportation) based on 2-5 demographic indicators in addition to Overall Vulnerability, which aggregates all the indicators into a single summary rank. A complete description of the Social Vulnerability Index methodology is detailed in the 2011 article by Flannagan et al.

This vulnerability index serves a similar purpose, in that it identifies geographic areas at risk for the specific disasters of overdose and bloodborne infection outbreaks based on each area's resident population, precipitating events and available aid services. The Overdose and Bloodborne Infection Index (OBII) includes 2 domains, one to quantify and rank each SC county's risk of overdose and one to quantify and rank each SC county's services and ability to prevent and treat overdose and bloodborne infection. When approached this way, overall vulnerability become a function of how high a county's risk is minus how many services to prevent and treat are in that county:

$$\text{Overall Vulnerability} = \text{Risk Factors} - \text{Mitigating Factors}$$

We felt it important to have an equal number of risk factors and mitigating factors, so that in theory, a county's overall vulnerability could be 0, representing a situation where a county's risk of overdose and bloodborne infection outbreak is equal to its ability to treat such events. It is also important to note that a negative vulnerability score is also possible; this indicates that a county's ability to respond to an outbreak event is greater than its risk.

Twenty-four variables thought to quantify risk and prevention/treatment capacity were pulled at the county level from mostly publicly available sources; hospitalization data and internal SC Department of Health and Environmental Control (DHEC) data were obtained with permission through data sharing agreements. Table 1 lists all the variables included in the SC VA, where the data was obtained, and the year data was collected. The decision to include each of these variables was thoroughly considered in the pilot study; the 2022 analyses made minor edits to the previously used variables. Due to COVID-19 the change in definition for urgent care resulted in the use of the previous assessments data points. A mitigation variable was added, after school programs, and two variables were removed, one from each section, Highway access and rurality.

Table 1: Indicator Source, Format & Year

| Indicator | Source | Type & Year |
|---|--|------------------------|
| Percent Unemployed | ACS | %, 2020 |
| MME per capita | SCRIPTS | Rate, 2020 |
| Overdose Deaths per 100,000 | SC DHEC – Vital Statistics | Rate, 2020 |
| HIV Incidence per 100,000 | SC DHEC - STD/HIV/AIDS | Rate, 2020 |
| Percent Overdose Attributable to Opioids | RFA | %, 2020 |
| Naloxone per 100,000 | RFA | Rate, 2020 |
| Drug Crime per 100,000 | SLED | Rate, 2020 |
| Opioid Prescriptions | SC DHEC – Prescription Drug Monitoring | Rate, 2020 |
| Acute HCV under 40 per 100,000 | SC DHEC – STD/HIV/AIDS | Rate, 2020 |
| HCV HIV Difference per 1,000 | Derived from SC DHEC - STD/HIV/AIDS | Rate difference, 2020 |
| Opioid Medicaid per 100,000 | RFA | Rate, 2020 |
| HIV+ Not in Care | SC DHEC - STD/HIV/AIDS | Rate, 2020 |
| Per Capita Income | ACS | Household Median, 2020 |
| Substance Abuse Clinics per 100,000 | SAMHSA | Rate, 2022 |
| EMS personnel per 100,000 | SC DHEC - EMS | Rate, 2020 |
| Mental Health Providers per 100,000 | SCDHHS | Rate, 2022 |
| Buprenorphine-waivered Drs per 100,000 | SAMHSA | Rate, 2022 |
| Law Enforcement Officers per 100,000 | SLED | Rate, 2020 |
| Hospitals/ED per 100,000 | SCHA | Rate, 2020 |
| Medicaid-registered Primary Care Providers per 100,000 | SCDHHS | Rate, 2022 |
| Urgent Care per 100,000 | SolvHealth urgent care registry | Rate, 2018 |
| Mental Health Clinics per 100,000 | SAMHSA | Rate, 2022 |
| PrEP users per 100,000 | AIDSVu.org | Rate, 2020 |
| Afterschool Programs | SCafterschool.com | Rate, 2020 |
| Abbreviations: ACS=American Community Survey, CHR=County Health Rankings, RFA=SC Revenue and Fiscal Affairs Office, SAMHSA=Substance Abuse and Mental Health Services, SC DHEC=South Carolina Department of Health and Environmental Control, SC DOT=South Carolina Department of Transportation, SCDHHS=South Carolina Department of Health and Human Services | | |

The decision to include each indicator was a combination of evidence from the Poisson and Negative Binomial exploratory regressions (i.e., magnitude of beta coefficient) from the pilot study, stakeholder input (i.e., singled out as important to include), logistic considerations (i.e., reciprocal variables) and data availability. While not a perfect reciprocal match, each risk factor identified as important by either Stakeholders or analyses was then included into the analysis as either a mitigating factor that would counteract risk or a risk factor that would increase the risk of HIV contraction. There was a total of 12 risk and 13 mitigating factors selected. This was done to approximate balance across the risks and mitigators. The list of Risks, along with their Mitigating counterparts is below.

Table 2: Risk and Mitigator Variables used in Vulnerability Assessment Analysis

| Risks | Mitigators |
|---|--|
| % Unemployed | Median Per Capita Income |
| Rx MME per 100,000 | Substance Abuse Clinics per 100,000 |
| Overdose Deaths per 100,000 | EMS personnel per 100,000 |
| HIV Incidence per 100,000 | PrEP Users per 100,000 |
| % Overdose Attributable to Opioids | Mental Health Providers per 100,000 |
| EMS Naloxone Administration per 100,000 | Buprenorphine-waivered Drs per 100,000 |
| Drug Arrests per 100,000 | Law Enforcement Officers per 100,000 |
| HIV+ Not in Care | Hospitals and EDs per 100,000 |
| Acute HCV per 100,000 | Primary Care Providers per 100,000 |
| Opioid Prescriptions | Afterschool Programs per 100,000 |
| HCV HIV Difference | Urgent Care Facilities per 100,000 |
| Medicaid Opioid Diagnoses per 100,000 | Mental Health Clinics per 100,000 |

In order to rank each county on its risk, mitigation and overall vulnerability, the decision was made to calculate a z-score for each variable by county. A z-score is a standardized score that relates each county's indicator value to how many standard deviations away it is from the indicator's mean value. The formula is shown below:

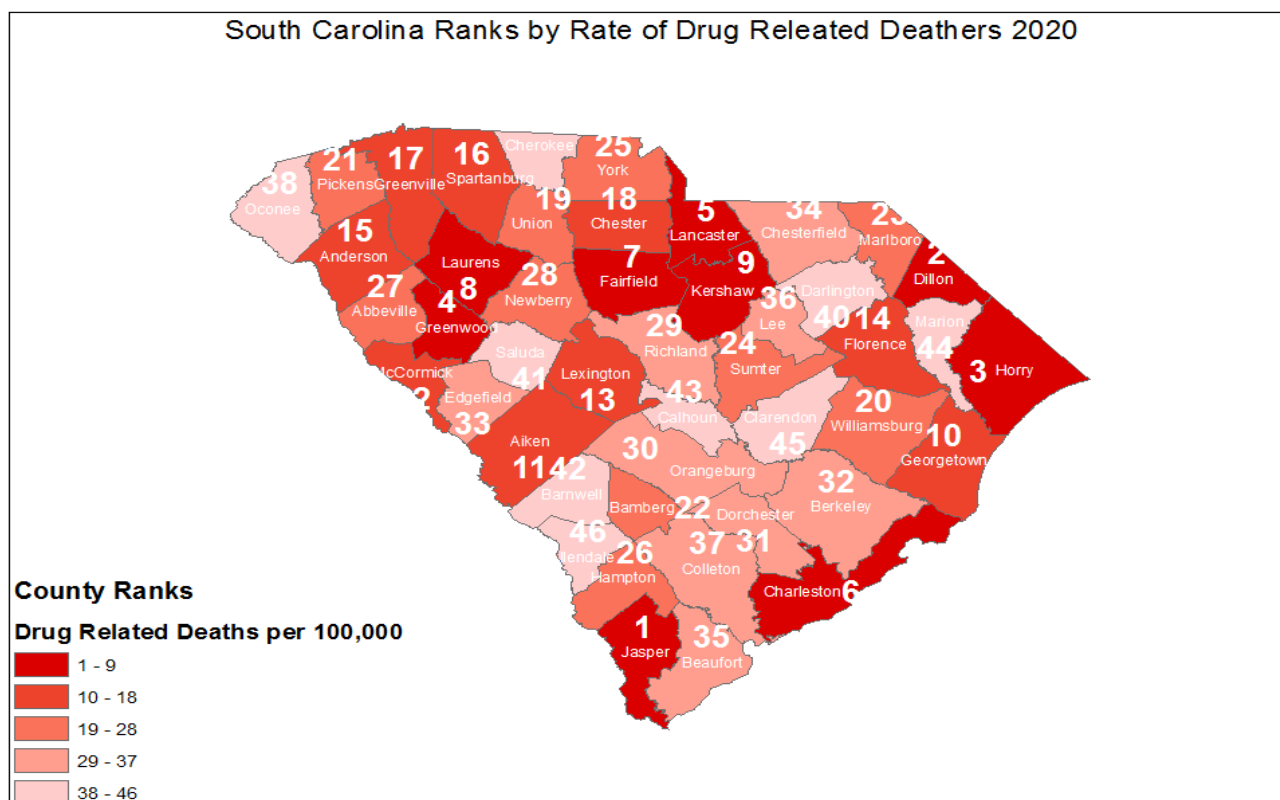
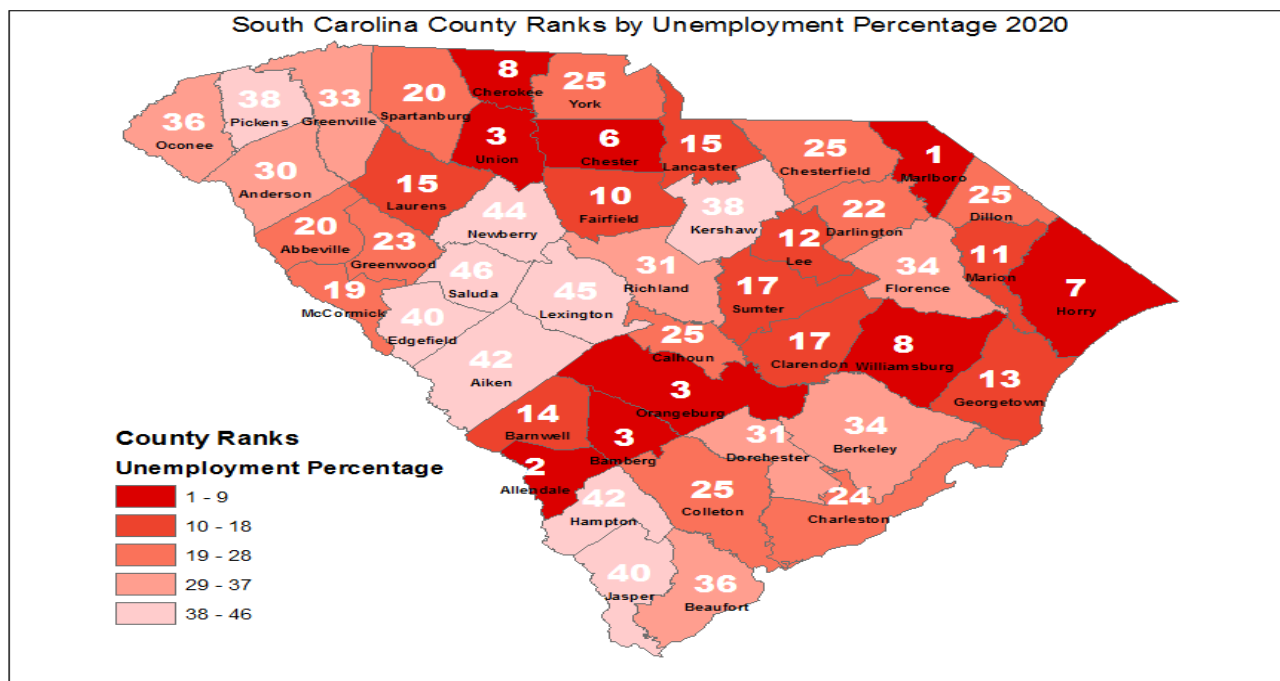
$$Z = \frac{x - \bar{x}}{s}$$

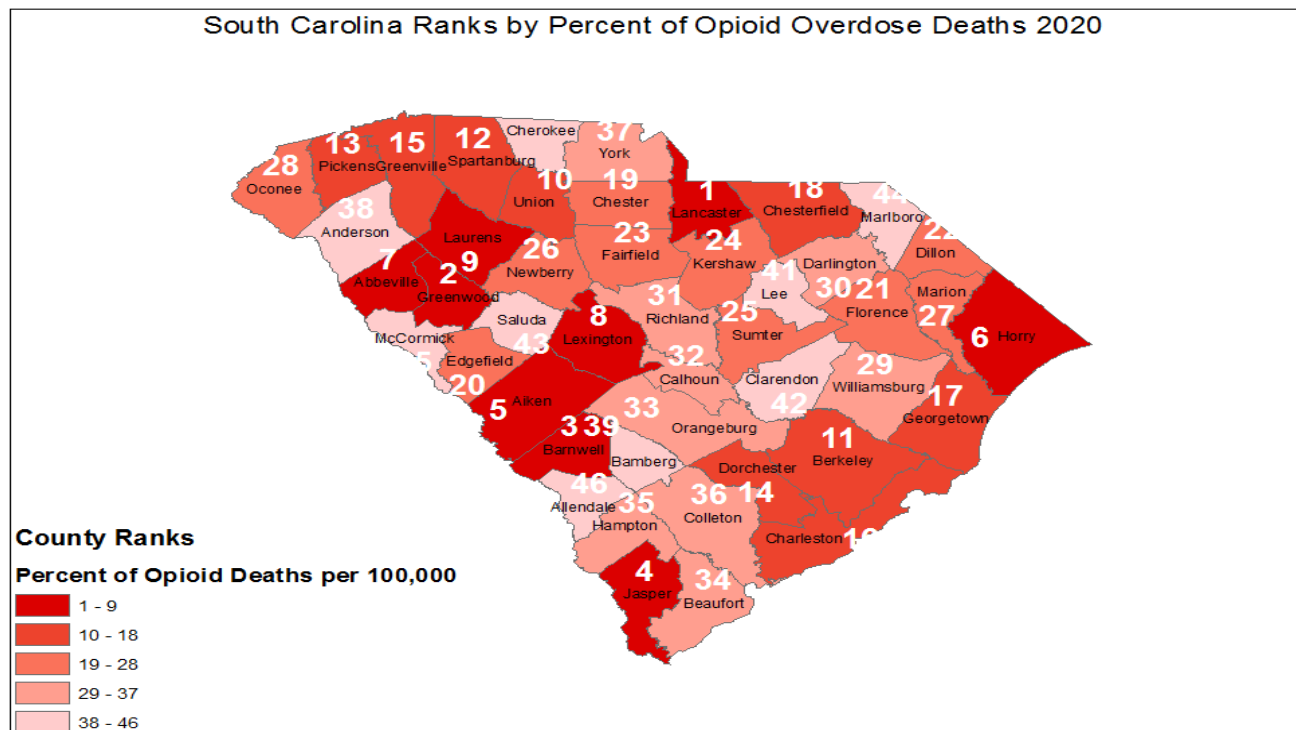
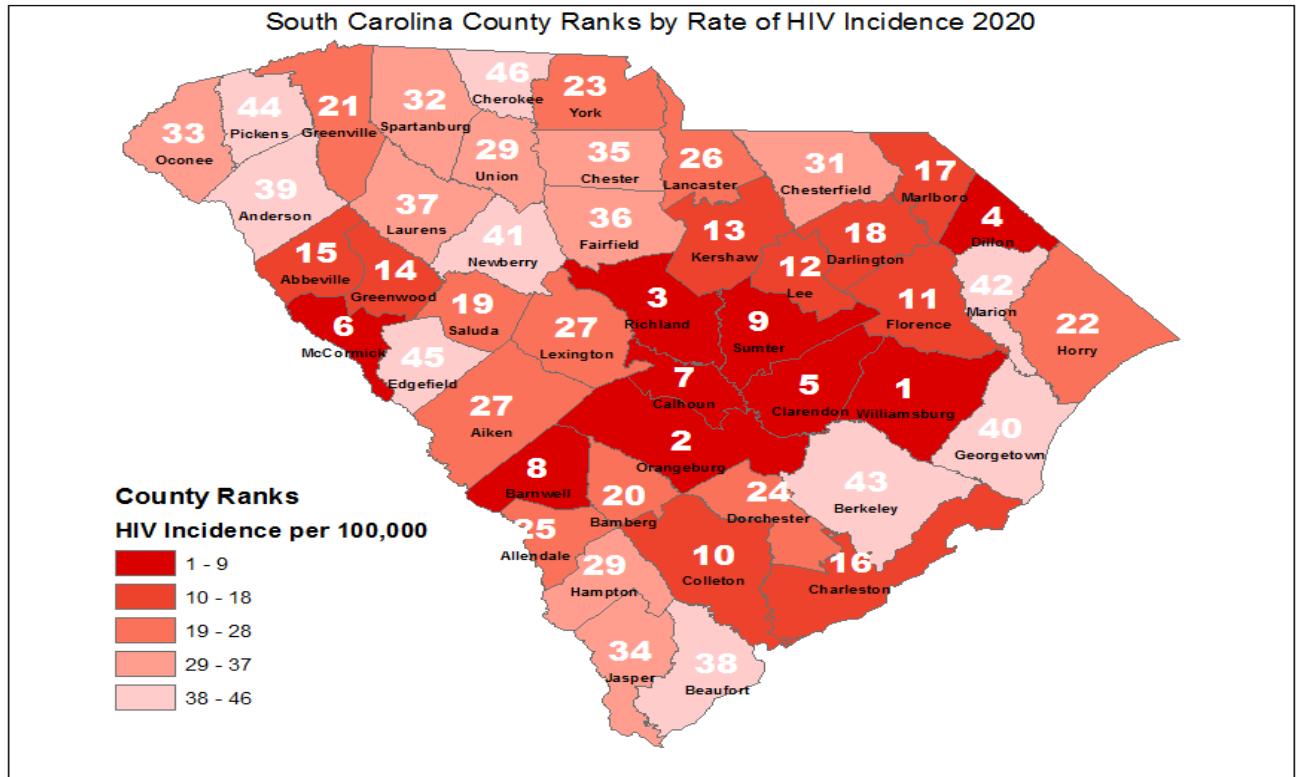
Where x equals the county's indicator value, \bar{x} equals the mean indicator value for all counties, and s equals the standard deviation of the indicator's distribution. Standardizing each indicator allows for intradomain addition and interdomain subtraction by scaling each variable into a unitless value that represents the direction and relative magnitude of that county to the mean value (with z-scores, the mean always equals zero). Z-scores were calculated for all risk and mitigator indicators, then summed by county to create the Risk and Mitigation scores, respectively. The Overall Vulnerability score was, as stated, simply the Risk score minus the Mitigation score. These scores were then ordered from highest to lowest, with the highest in each category receiving a rank of 1 and the lowest receiving a rank of 46 to convey that the county in each domain with the highest score represented the county with the highest level of risk, resources, and overall vulnerability to overdose and bloodborne infection outbreak. These ranks were then categorized into high (ranks 1-9), above average (ranks 10-18), average (ranks 19-28), below average (ranks 29-37), and low (ranks 38-46) to focus attention on counties with the most risks and/or lowest resources.

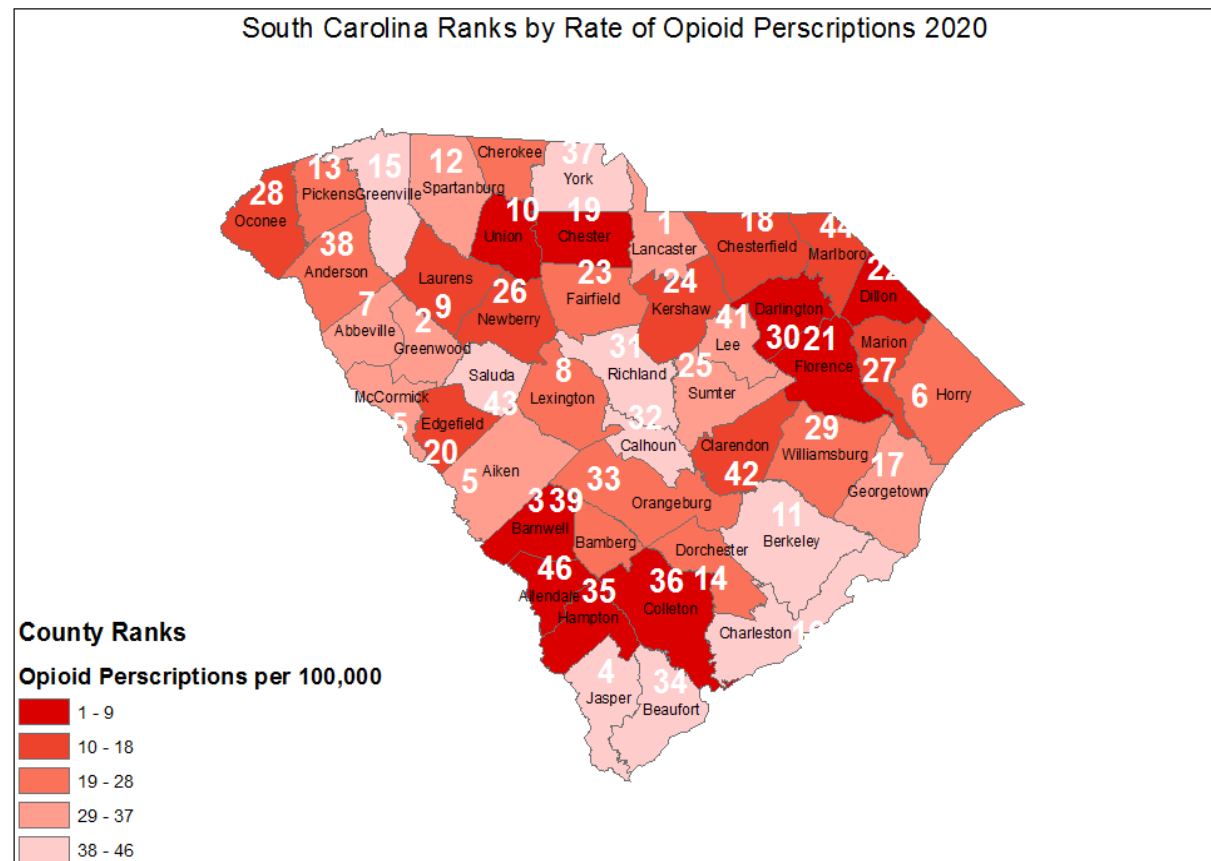
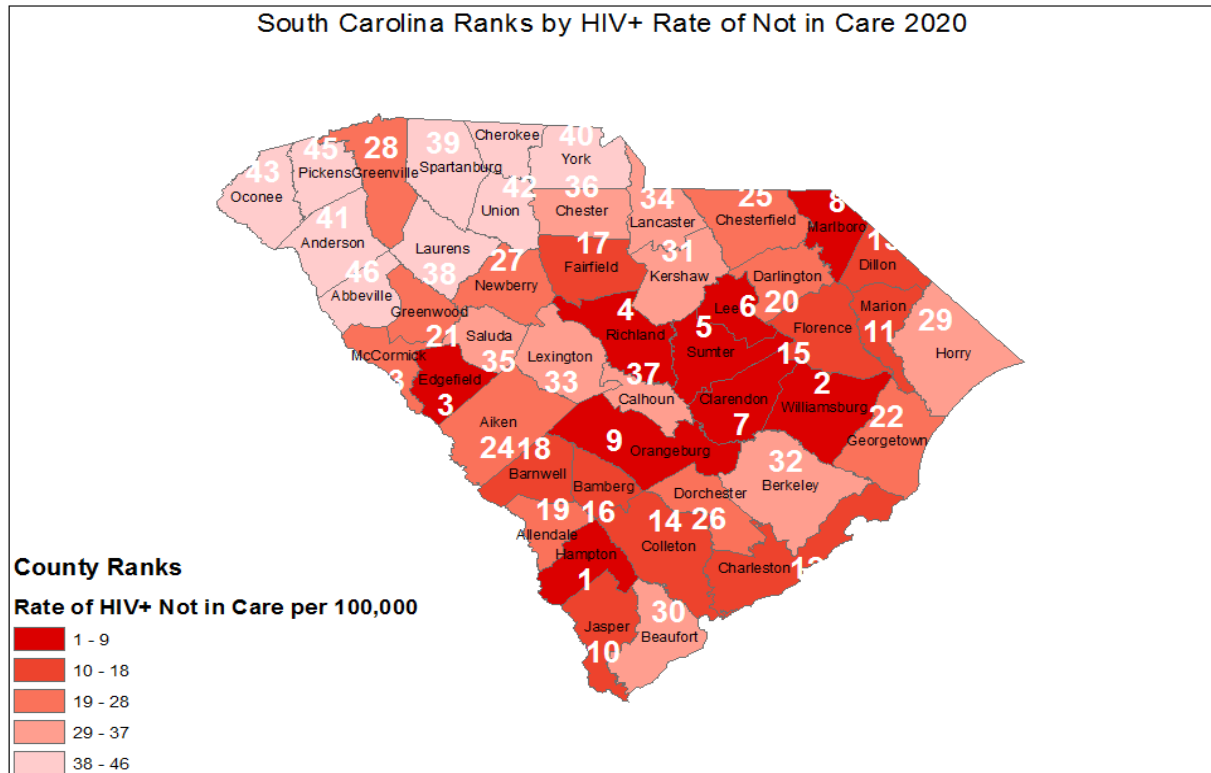
Preliminary analyses and ranks were derived using Statistical Analysis Software (SAS) version 9.4 (Carey, NC). All maps were generated using ArcGIS® ArcMap™ 10.7 (Esri®, Redlands, CA).

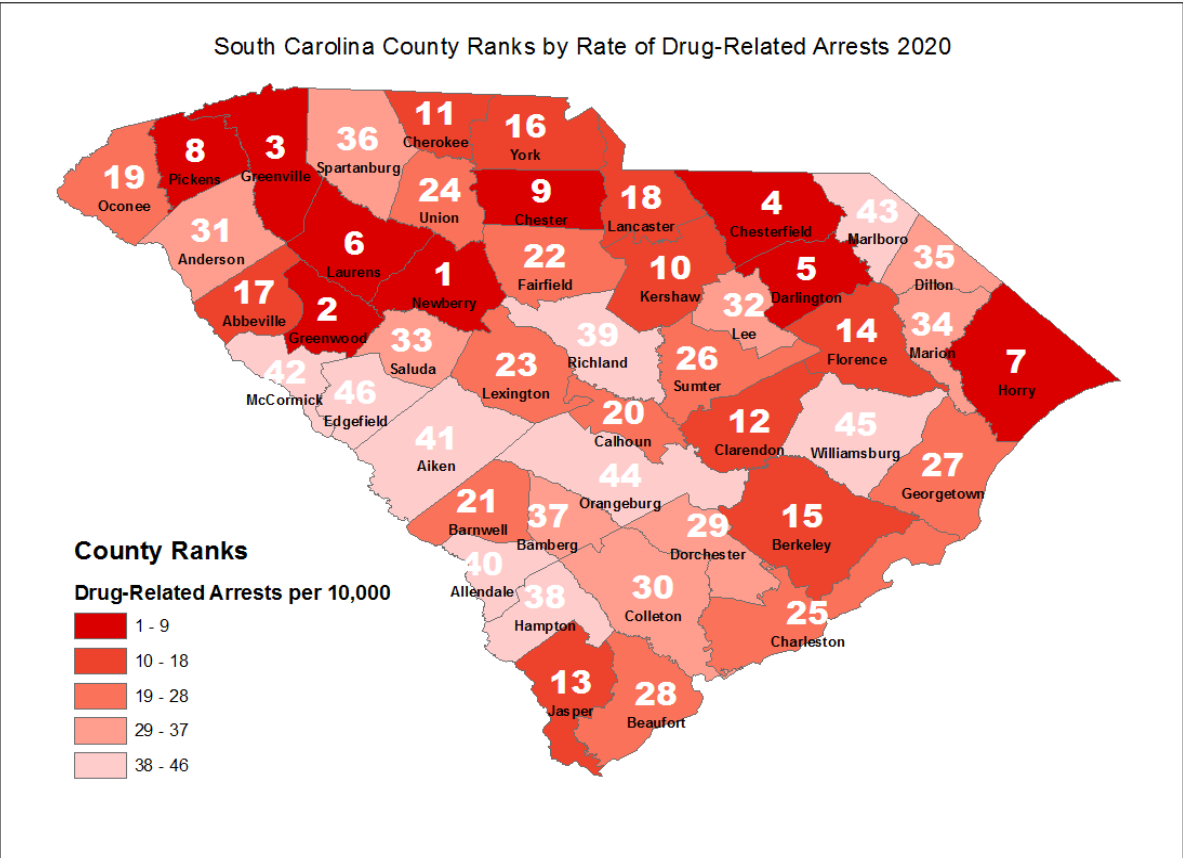
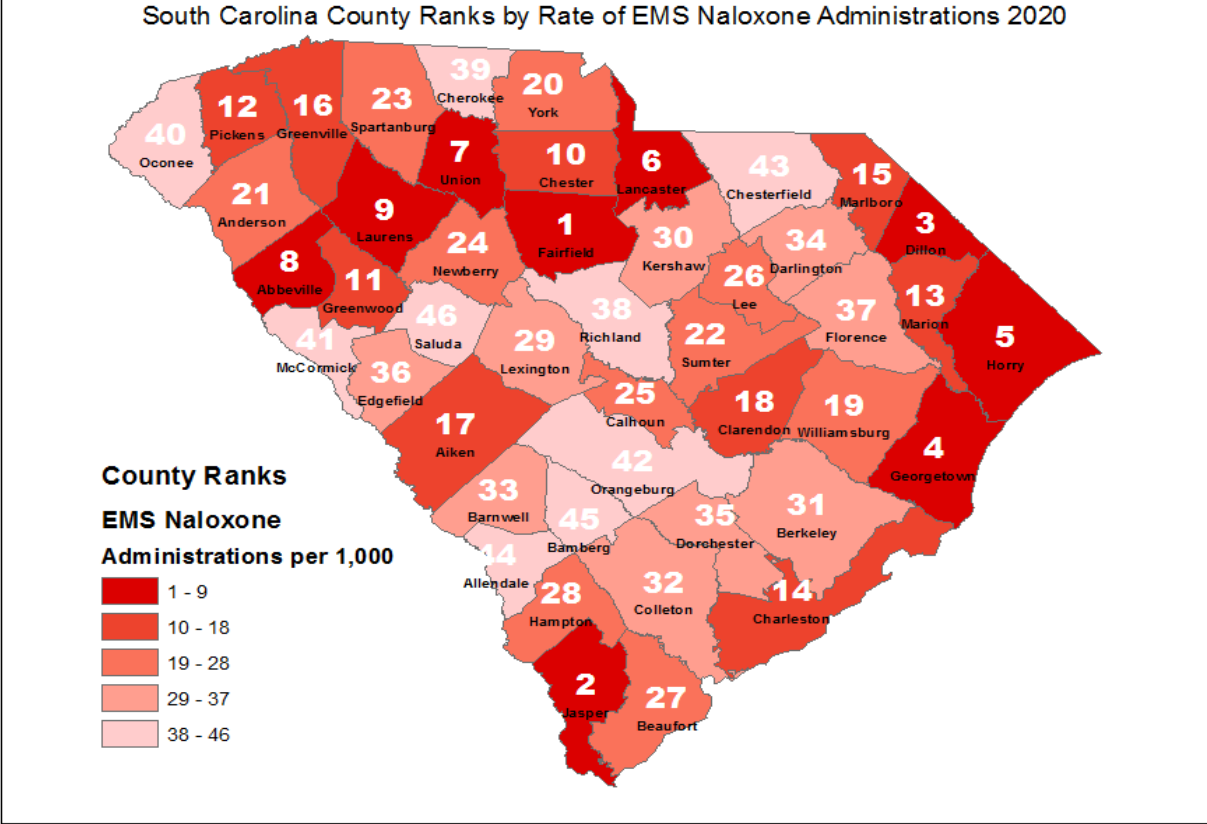
3.c. Indicator Maps

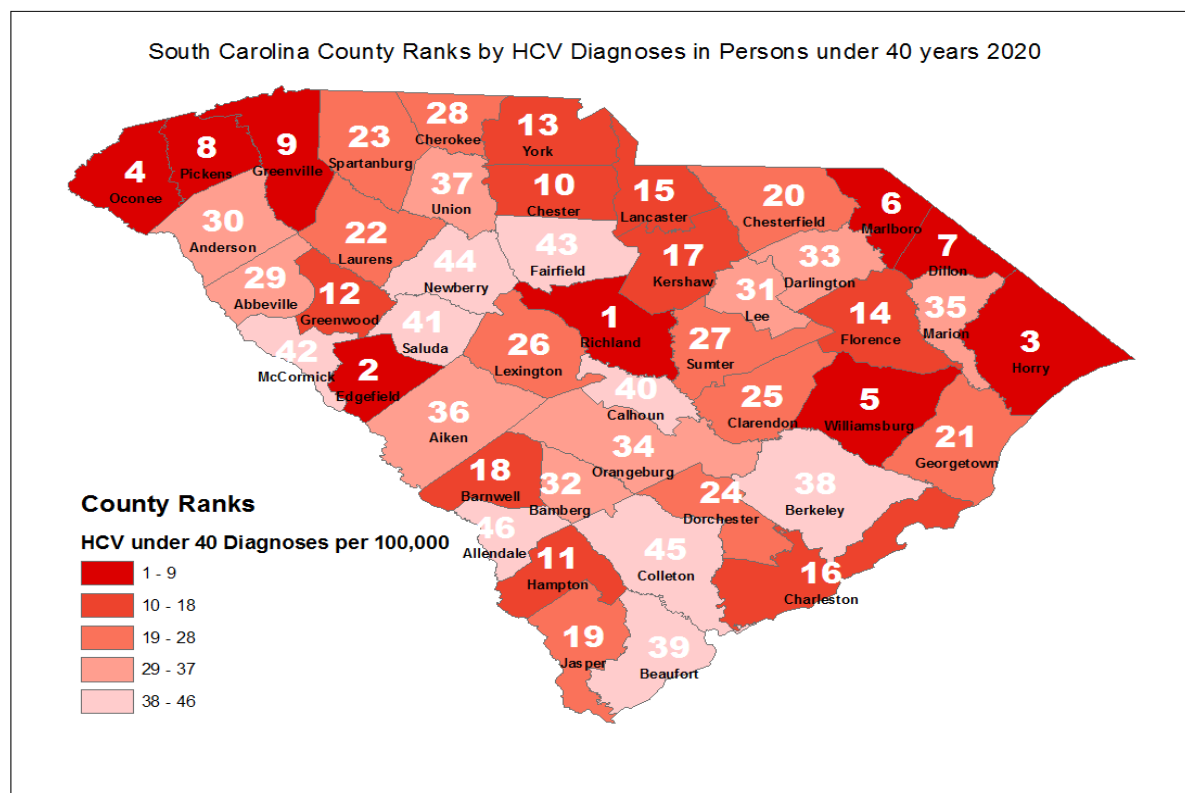
Risk Indicators

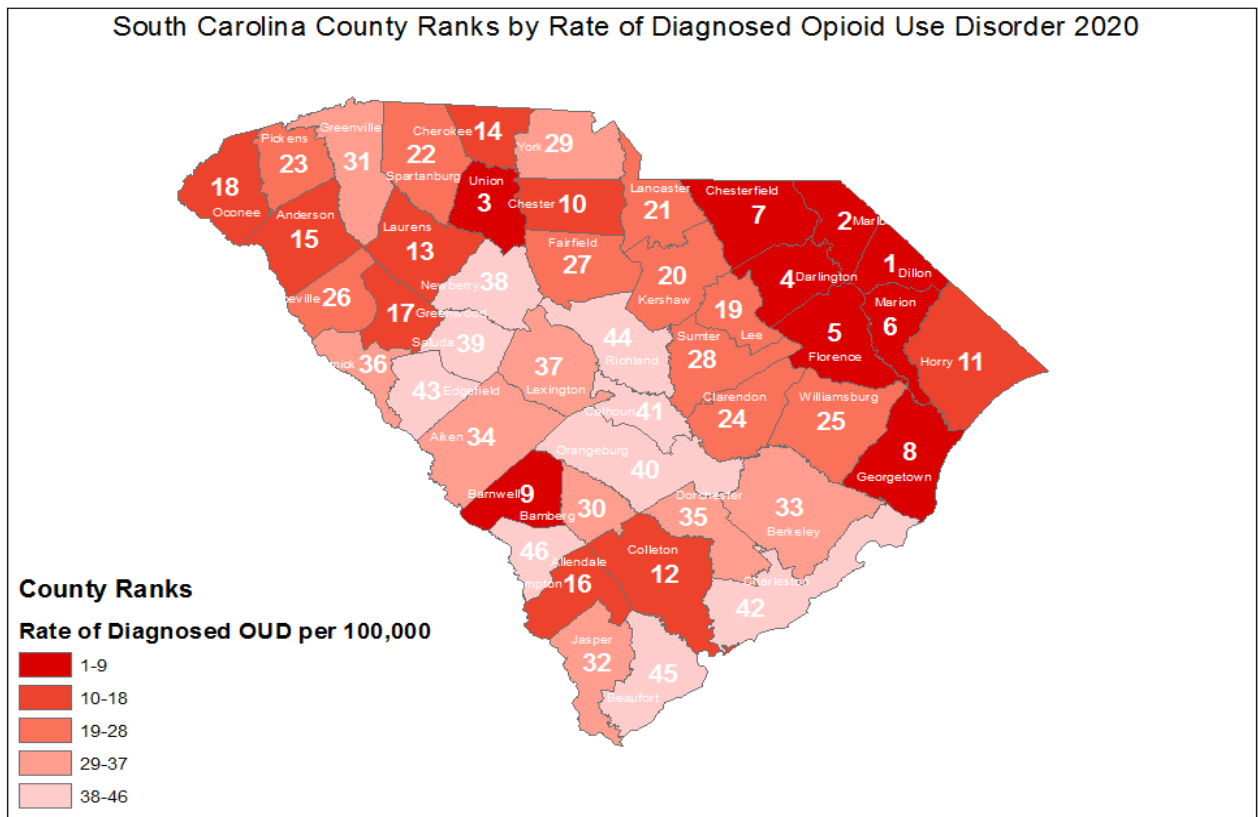
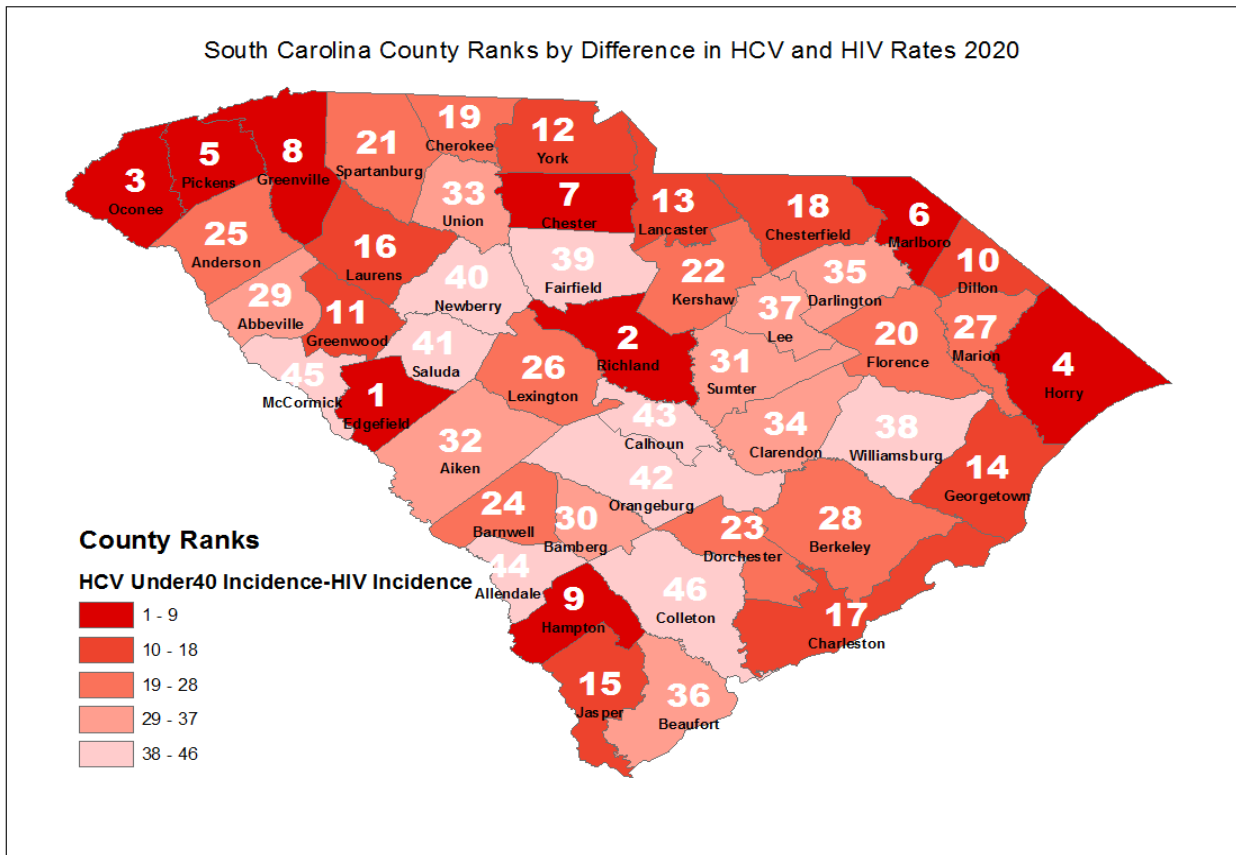




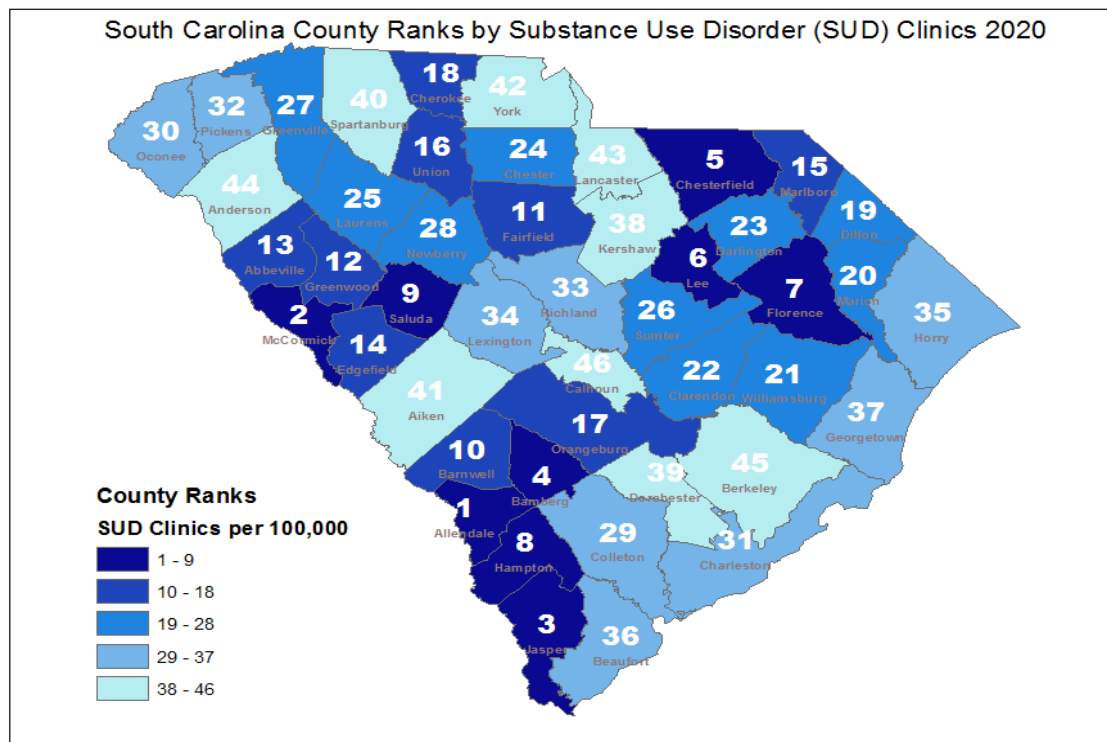
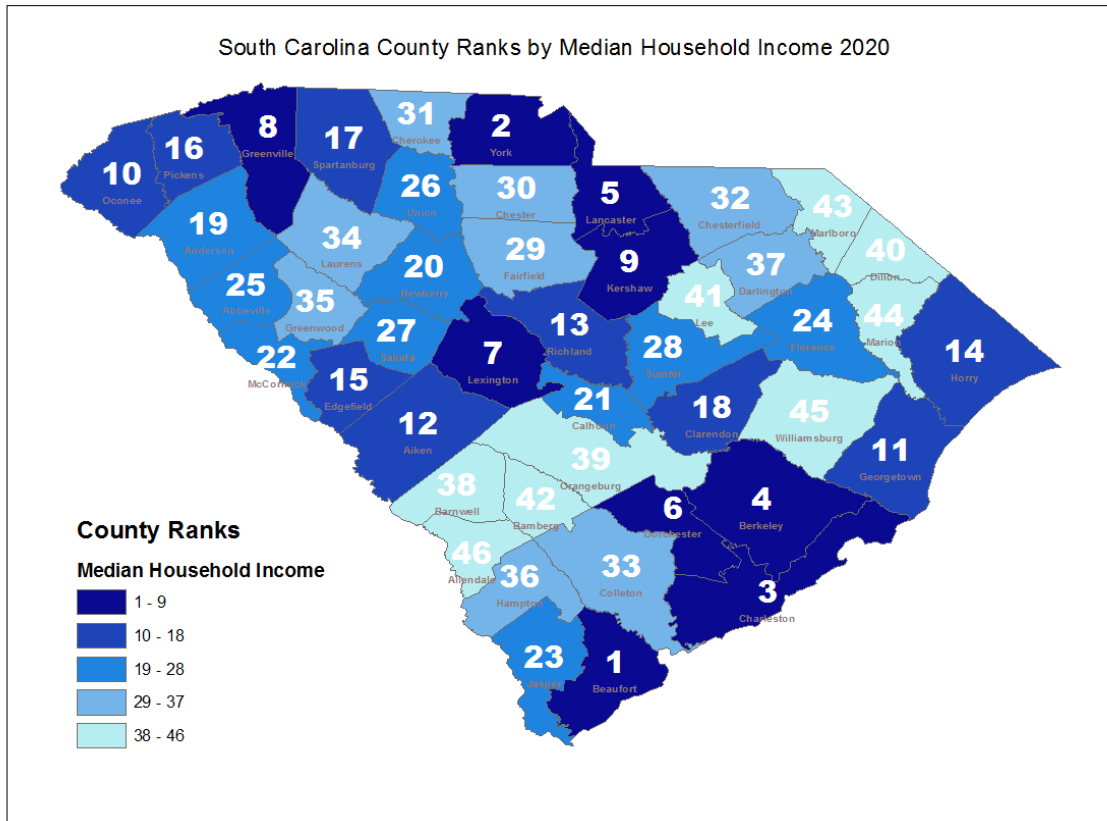


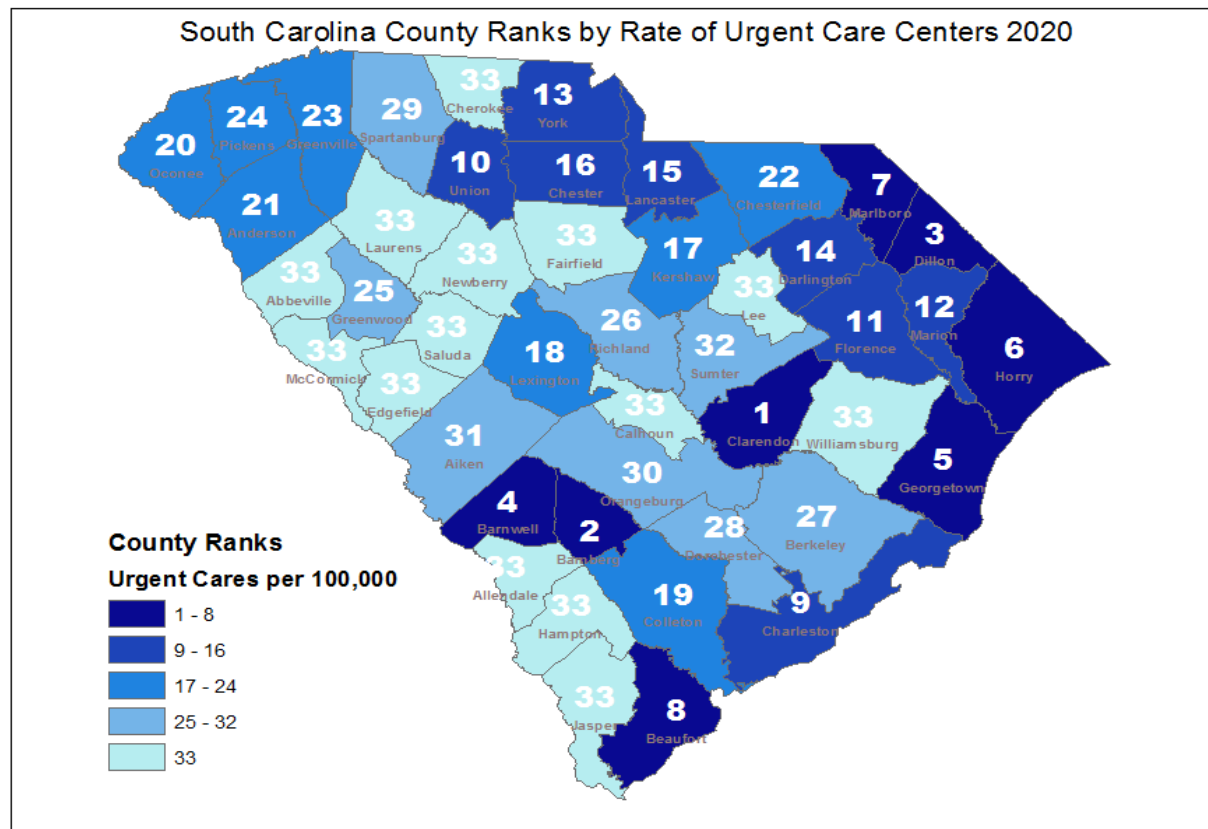
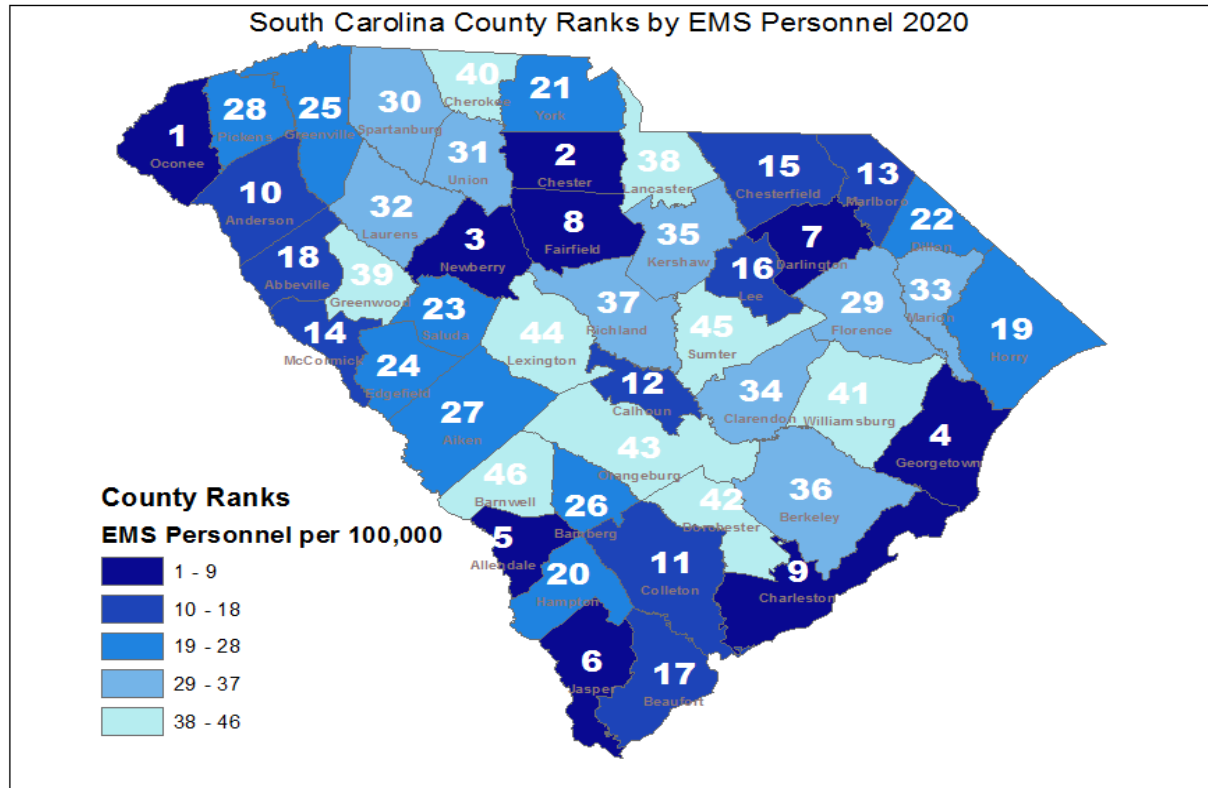


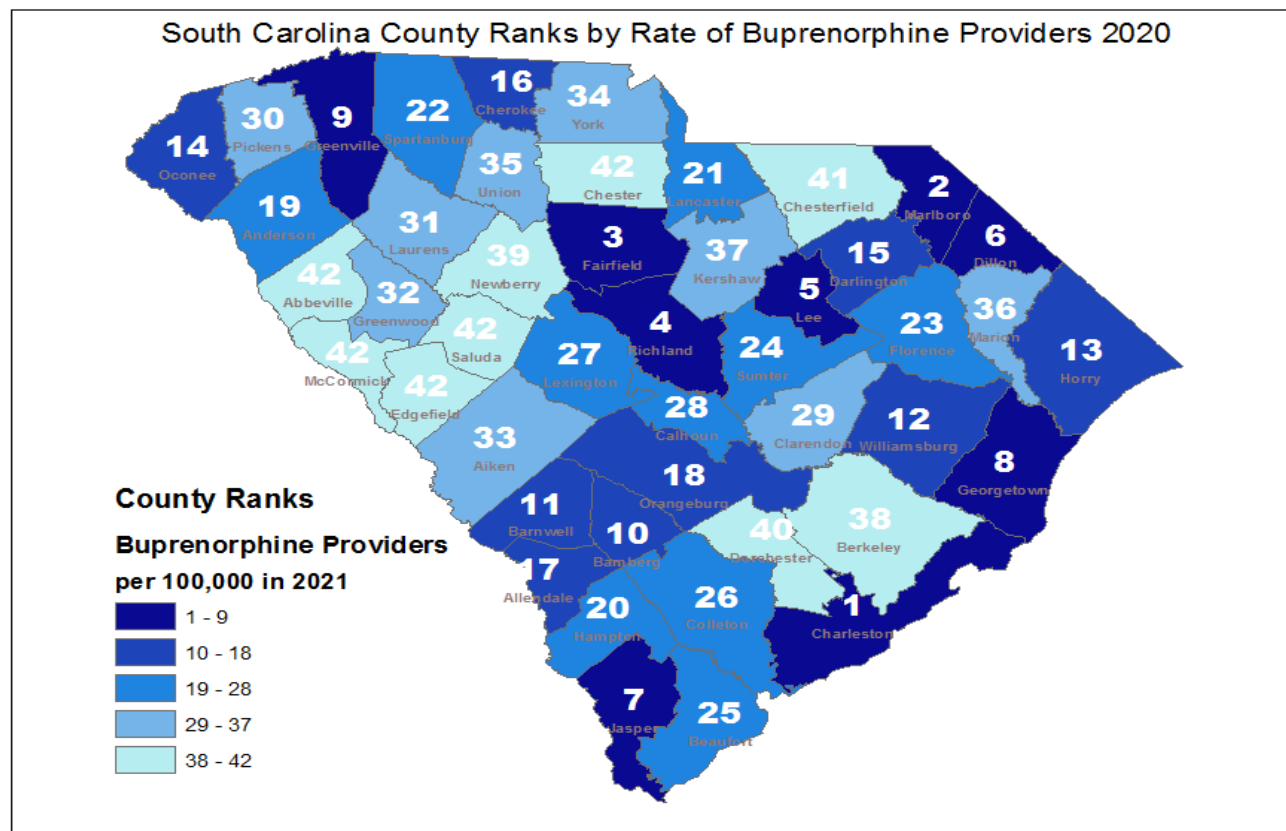
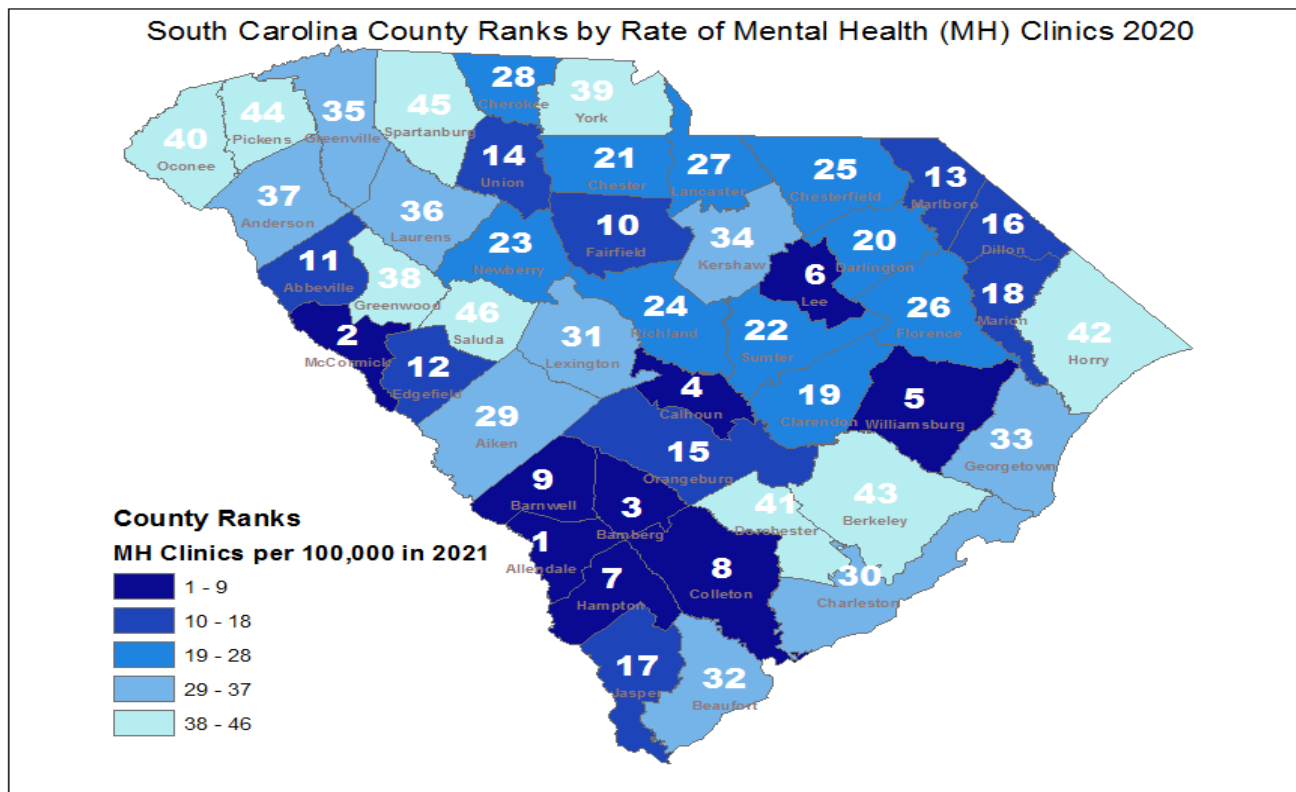


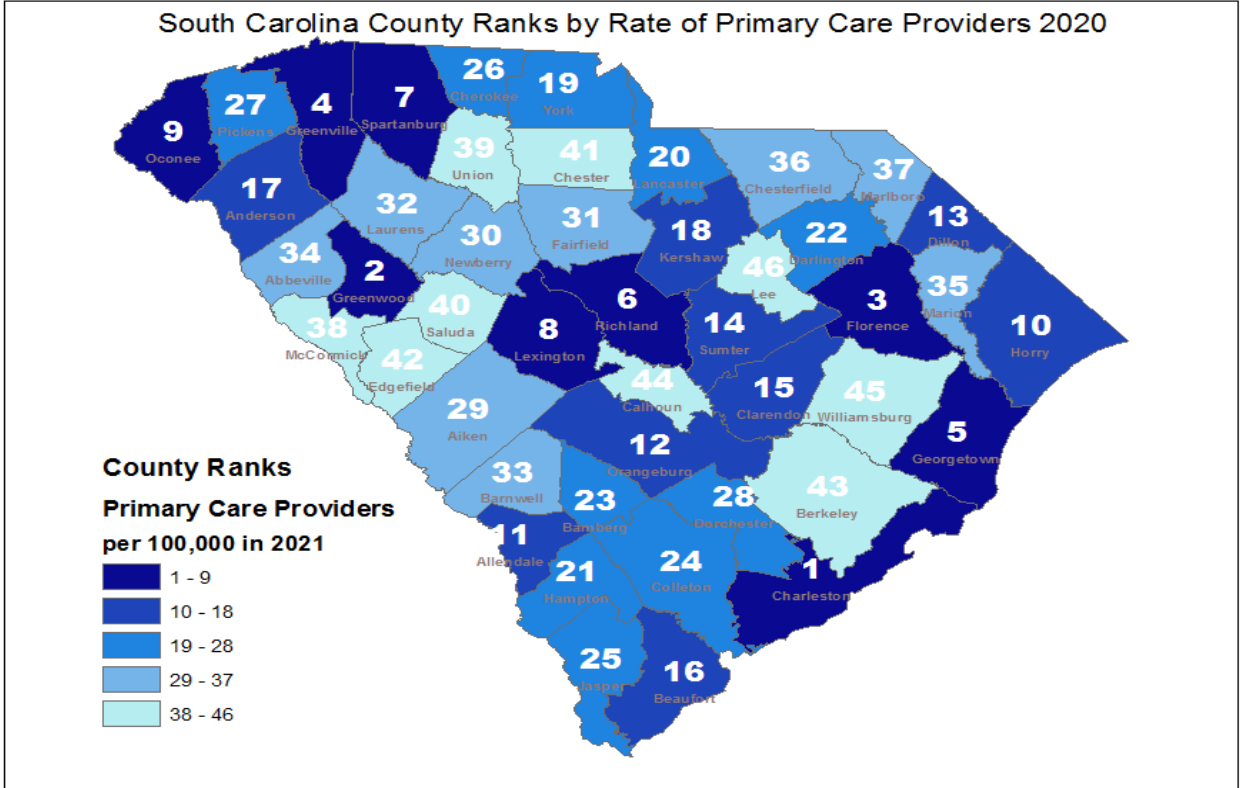
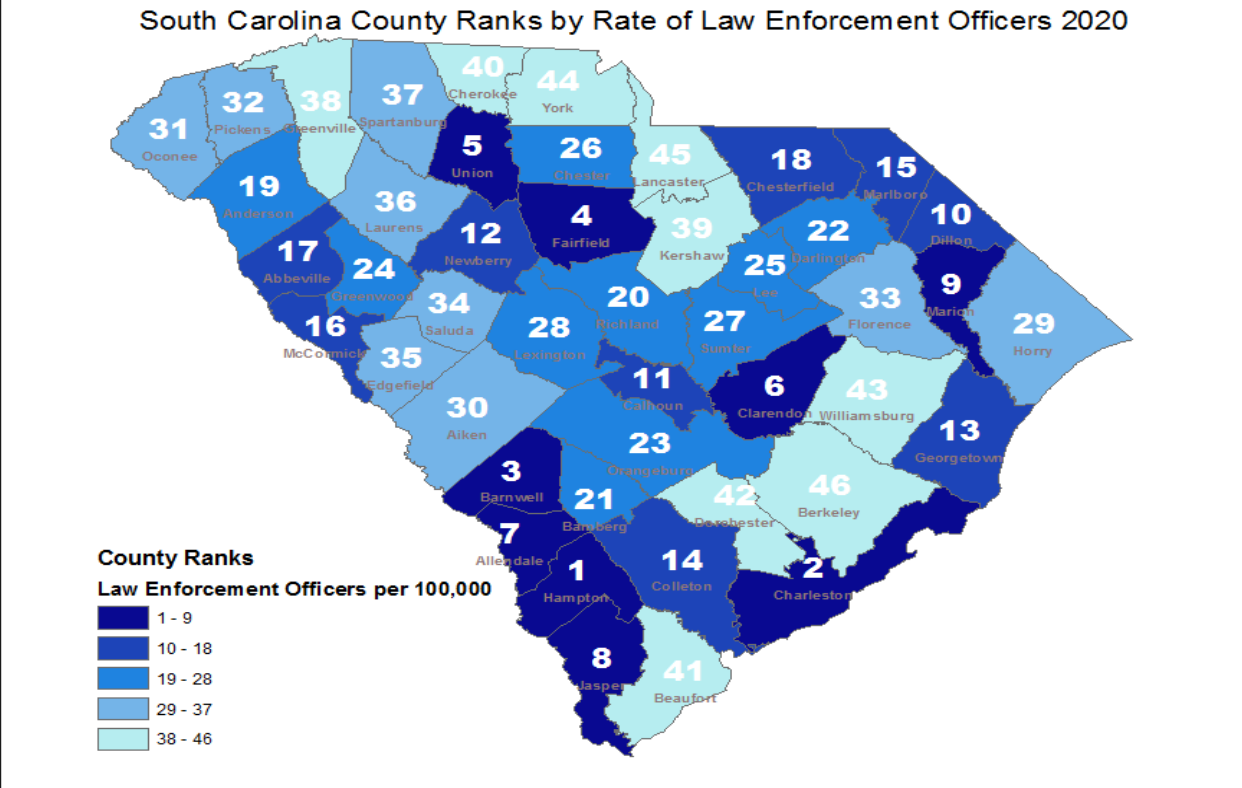


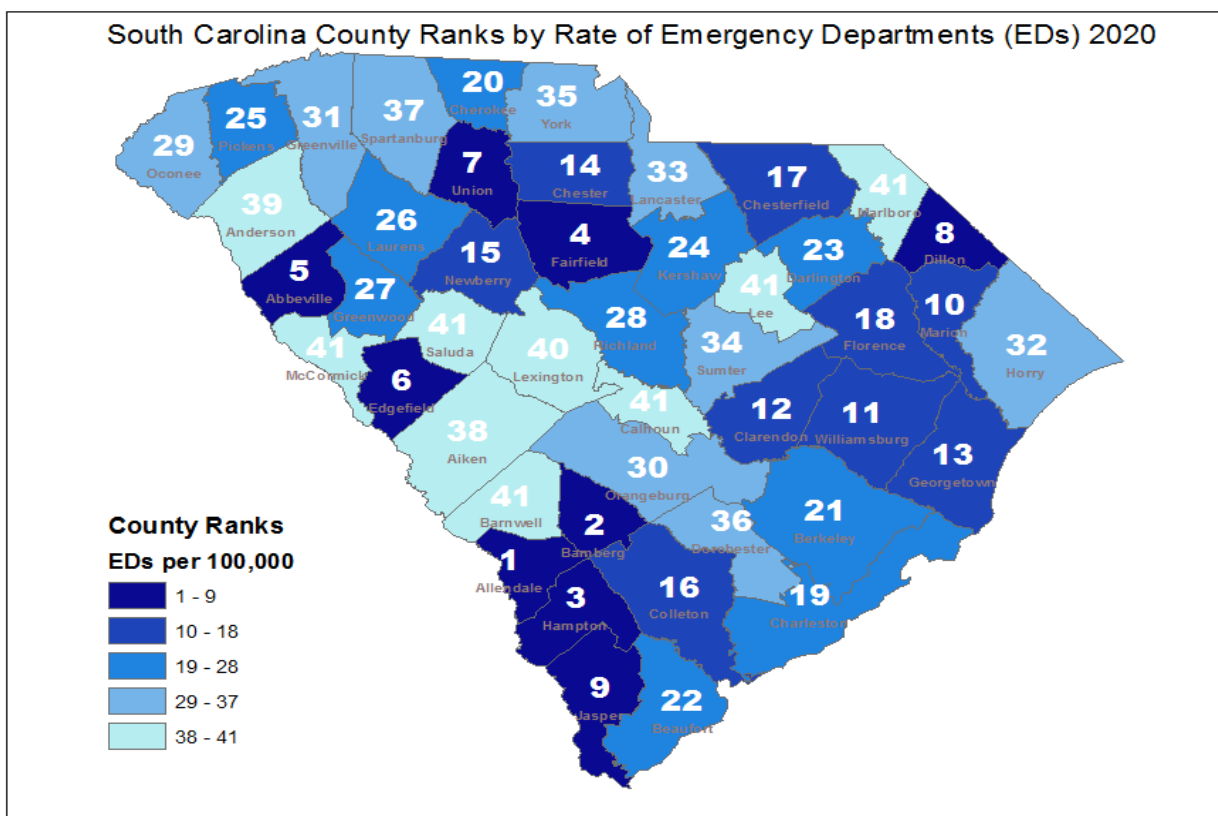
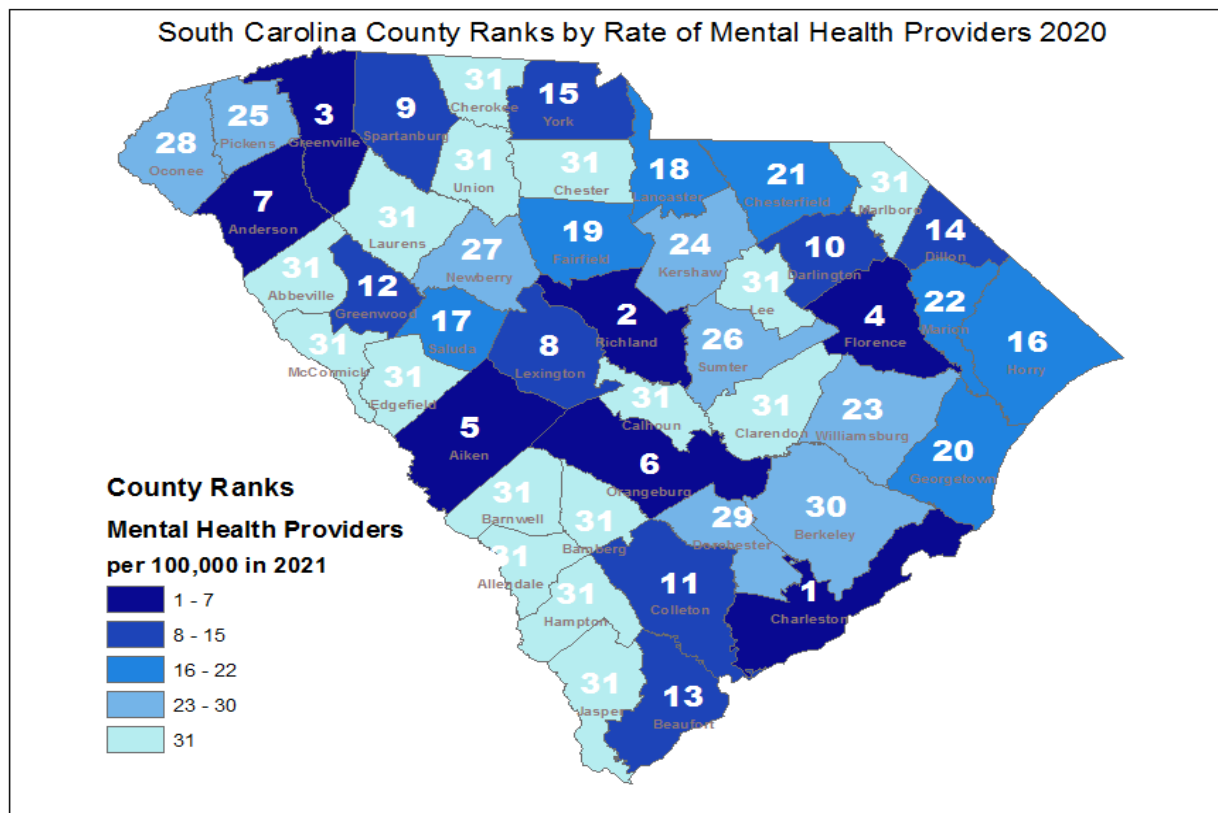
Mitigation Indicators











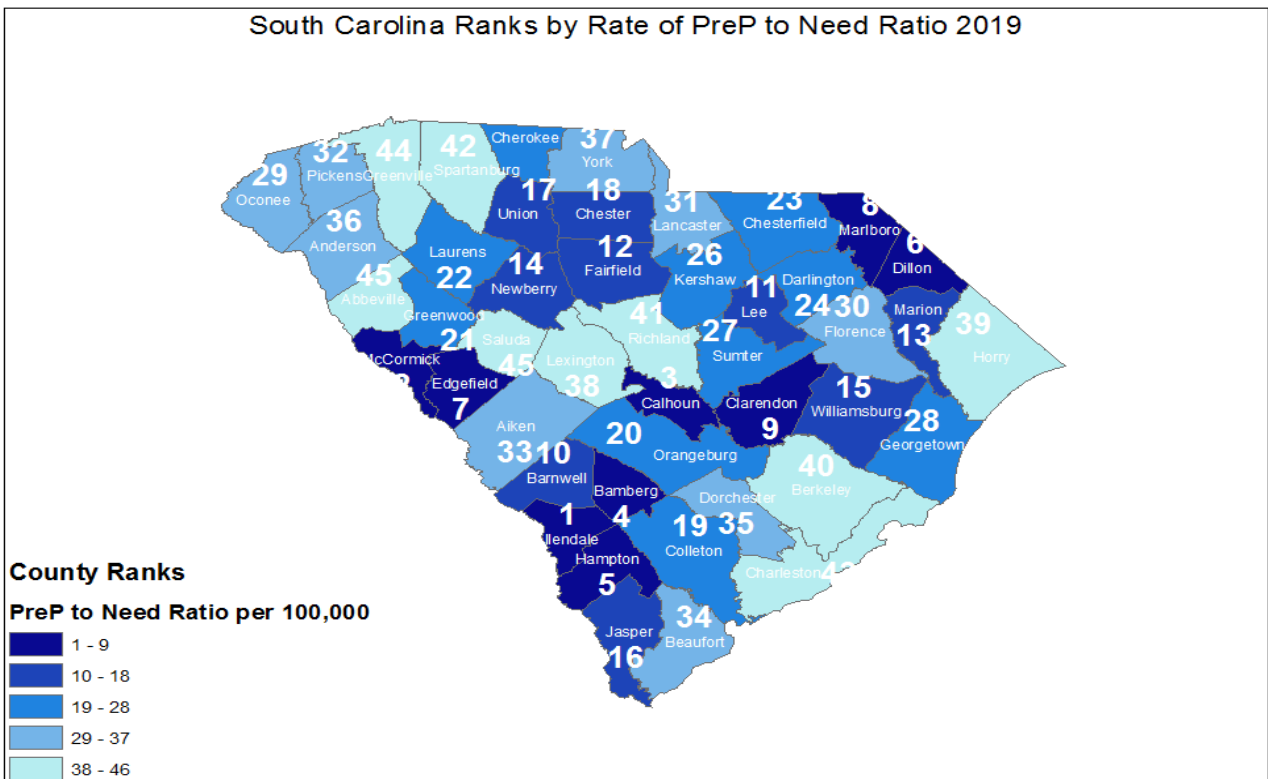
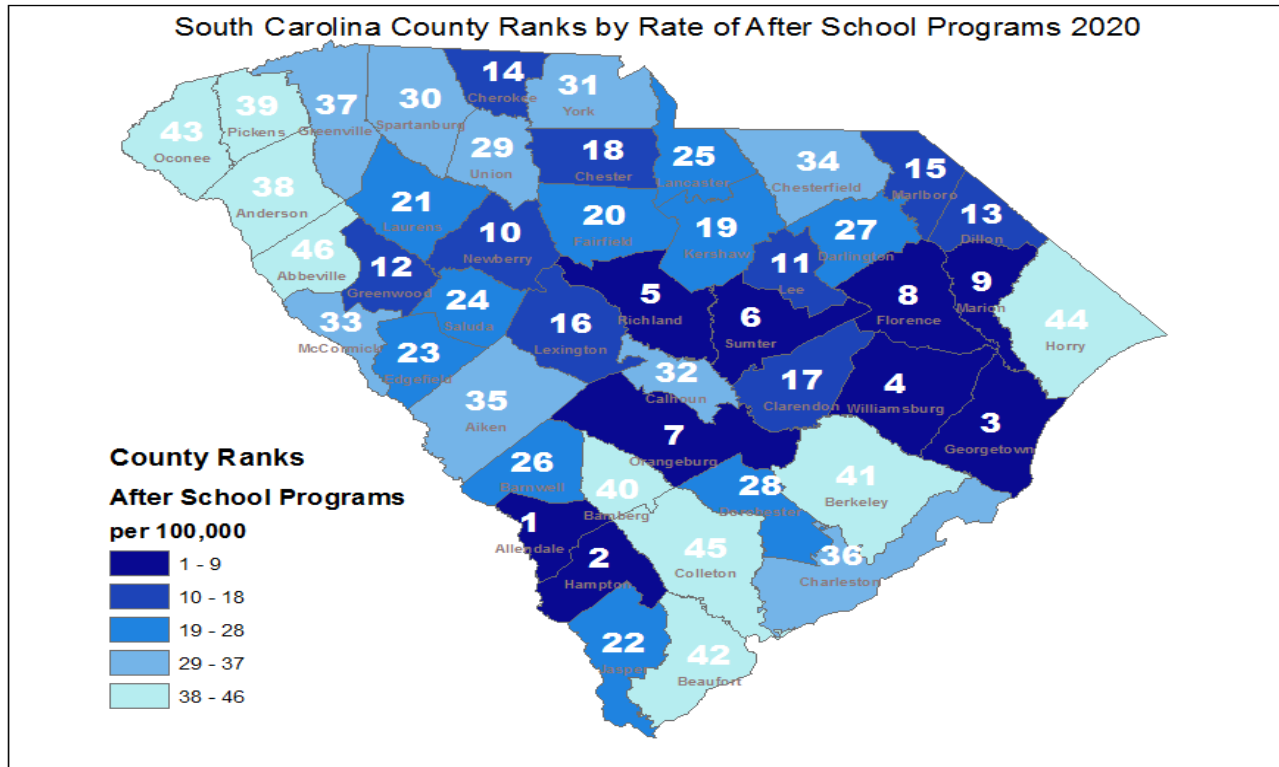


Table 3: County Ranks for each Risk Indicator, Mitigating Indicator, and Overall Vulnerability

| Name | % Unemployed | Rx MME | Drug Mortality | HIV Incidence | Overdoses Opioid % | Naloxone | Drug Crime | Acute HCV | Opioids Scripts | HI+ Not In Care | HCV- HIV Difference | OD Medicaid | Per Capita Income | SUD Treatment | EMS | Urgent Care | Mental Health Clinic | Buprenorphine Drs. | Police Officers | Primary Care | Mental Health Prov. | Afterschool Progs | Hospitals/EDs | PrEP | Risk * | Mitigators * | Vulnerability * |
|--------------|--------------|--------|----------------|---------------|--------------------|----------|------------|-----------|-----------------|-----------------|---------------------|-------------|-------------------|---------------|-----|-------------|----------------------|--------------------|-----------------|--------------|---------------------|-------------------|---------------|------|--------|--------------|-----------------|
| Abbeville | 20 | 33 | 27 | 15 | 7 | 7 | 17 | 29 | 37 | 46 | 29 | 26 | 25 | 13 | 25 | 33 | 11 | 42 | 17 | 34 | 31 | 46 | 5 | 45 | 32 | 40 | 19 |
| Aiken | 42 | 25 | 11 | 27 | 5 | 5 | 41 | 36 | 36 | 24 | 32 | 34 | 12 | 41 | 31 | 31 | 25 | 34 | 30 | 29 | 5 | 35 | 38 | 33 | 39 | 36 | 23 |
| Allendale | 2 | 5 | 46 | 25 | 46 | 46 | 40 | 46 | 9 | 19 | 44 | 46 | 46 | 1 | 2 | 33 | 1 | 18 | 7 | 11 | 31 | 1 | 1 | 1 | 42 | 1 | 46 |
| Anderson | 30 | 4 | 15 | 39 | 15 | 38 | 31 | 30 | 27 | 41 | 25 | 15 | 19 | 44 | 11 | 21 | 37 | 14 | 19 | 17 | 7 | 38 | 39 | 36 | 33 | 21 | 31 |
| Bamberg | 3 | 27 | 22 | 20 | 22 | 39 | 3 | 32 | 21 | 16 | 30 | 30 | 42 | 4 | 36 | 2 | 3 | 10 | 21 | 23 | 31 | 40 | 2 | 4 | 35 | 5 | 43 |
| Barnwell | 14 | 38 | 42 | 8 | 42 | 3 | 21 | 18 | 6 | 18 | 24 | 9 | 38 | 10 | 46 | 4 | 9 | 11 | 3 | 33 | 31 | 26 | 41 | 10 | 16 | 23 | 14 |
| Beaufort | 36 | 16 | 35 | 38 | 35 | 34 | 28 | 39 | 40 | 30 | 36 | 45 | 1 | 36 | 23 | 8 | 32 | 25 | 41 | 16 | 13 | 42 | 22 | 34 | 44 | 18 | 42 |
| Berkeley | 34 | 39 | 32 | 43 | 32 | 11 | 15 | 38 | 39 | 32 | 28 | 33 | 4 | 45 | 26 | 27 | 43 | 38 | 46 | 43 | 30 | 41 | 21 | 40 | 41 | 43 | 25 |
| Calhoun | 25 | 44 | 43 | 7 | 43 | 32 | 20 | 40 | 41 | 37 | 43 | 41 | 21 | 46 | 9 | 33 | 4 | 28 | 11 | 44 | 31 | 32 | 41 | 3 | 45 | 33 | 40 |
| Charleston | 24 | 3 | 6 | 16 | 6 | 16 | 25 | 16 | 44 | 12 | 17 | 42 | 3 | 31 | 8 | 9 | 30 | 1 | 2 | 1 | 1 | 36 | 19 | 43 | 18 | 2 | 45 |
| Cherokee | 8 | 21 | 39 | 46 | 39 | 40 | 11 | 28 | 20 | 44 | 19 | 14 | 31 | 18 | 15 | 33 | 29 | 17 | 40 | 26 | 31 | 14 | 20 | 25 | 37 | 37 | 22 |
| Chester | 6 | 35 | 18 | 35 | 18 | 19 | 9 | 10 | 5 | 36 | 7 | 10 | 30 | 24 | 1 | 16 | 21 | 42 | 26 | 41 | 31 | 18 | 14 | 18 | 7 | 29 | 6 |
| Chesterfield | 25 | 28 | 34 | 31 | 34 | 18 | 4 | 20 | 12 | 25 | 18 | 7 | 32 | 5 | 19 | 22 | 26 | 41 | 18 | 36 | 21 | 34 | 17 | 23 | 24 | 31 | 18 |
| Clarendon | 17 | 18 | 45 | 5 | 45 | 42 | 12 | 25 | 15 | 7 | 34 | 24 | 18 | 22 | 20 | 1 | 19 | 30 | 6 | 15 | 31 | 17 | 12 | 9 | 25 | 9 | 38 |
| Colleton | 25 | 9 | 37 | 10 | 37 | 36 | 30 | 45 | 4 | 14 | 46 | 12 | 33 | 29 | 12 | 19 | 8 | 26 | 14 | 24 | 11 | 45 | 16 | 19 | 30 | 17 | 33 |
| Darlington | 22 | 2 | 40 | 18 | 40 | 30 | 5 | 33 | 1 | 20 | 35 | 4 | 37 | 23 | 6 | 14 | 20 | 16 | 22 | 22 | 10 | 27 | 23 | 24 | 9 | 15 | 15 |
| Dillon | 25 | 19 | 2 | 4 | 2 | 22 | 35 | 7 | 2 | 13 | 10 | 1 | 40 | 19 | 14 | 3 | 16 | 6 | 10 | 13 | 14 | 13 | 8 | 6 | 1 | 8 | 7 |
| Dorchester | 31 | 24 | 31 | 24 | 31 | 14 | 29 | 24 | 22 | 26 | 23 | 35 | 6 | 39 | 45 | 28 | 41 | 40 | 42 | 28 | 29 | 28 | 36 | 35 | 36 | 44 | 13 |
| Edgefield | 40 | 41 | 33 | 45 | 33 | 20 | 46 | 2 | 13 | 3 | 1 | 43 | 15 | 14 | 35 | 33 | 12 | 42 | 35 | 42 | 31 | 23 | 6 | 7 | 22 | 41 | 9 |
| Fairfield | 10 | 26 | 7 | 36 | 7 | 23 | 22 | 43 | 19 | 17 | 39 | 27 | 29 | 11 | 18 | 33 | 10 | 2 | 4 | 31 | 19 | 20 | 4 | 12 | 15 | 10 | 32 |
| Florence | 34 | 1 | 14 | 11 | 14 | 21 | 14 | 14 | 7 | 15 | 20 | 5 | 24 | 7 | 13 | 11 | 27 | 20 | 33 | 3 | 4 | 8 | 18 | 30 | 4 | 7 | 20 |
| Georgetown | 13 | 14 | 10 | 40 | 10 | 17 | 27 | 21 | 32 | 22 | 14 | 8 | 11 | 37 | 5 | 5 | 33 | 8 | 13 | 5 | 20 | 3 | 13 | 28 | 12 | 4 | 37 |
| Greenville | 33 | 15 | 17 | 21 | 17 | 15 | 3 | 9 | 38 | 28 | 8 | 31 | 8 | 27 | 27 | 23 | 35 | 9 | 38 | 4 | 3 | 37 | 31 | 44 | 20 | 13 | 28 |
| Greenwood | 23 | 12 | 4 | 14 | 4 | 2 | 2 | 12 | 29 | 21 | 11 | 17 | 35 | 12 | 41 | 25 | 38 | 32 | 24 | 2 | 12 | 12 | 27 | 21 | 3 | 25 | 3 |
| Hampton | 42 | 37 | 26 | 29 | 26 | 35 | 38 | 11 | 3 | 1 | 9 | 16 | 36 | 8 | 38 | 33 | 7 | 21 | 1 | 21 | 31 | 2 | 3 | 5 | 19 | 3 | 39 |
| Horry | 7 | 6 | 3 | 22 | 3 | 6 | 7 | 3 | 24 | 29 | 4 | 11 | 14 | 35 | 24 | 6 | 42 | 12 | 29 | 10 | 16 | 44 | 32 | 39 | 2 | 27 | 1 |
| Jasper | 40 | 43 | 1 | 34 | 1 | 4 | 13 | 19 | 42 | 10 | 15 | 32 | 23 | 3 | 10 | 33 | 17 | 7 | 8 | 25 | 31 | 22 | 9 | 16 | 11 | 11 | 27 |
| Kershaw | 38 | 13 | 9 | 13 | 9 | 24 | 10 | 17 | 16 | 31 | 22 | 20 | 9 | 38 | 34 | 17 | 34 | 37 | 39 | 18 | 24 | 19 | 24 | 26 | 21 | 38 | 11 |
| Lancaster | 15 | 29 | 5 | 26 | 5 | 1 | 18 | 15 | 35 | 34 | 13 | 21 | 5 | 43 | 40 | 15 | 28 | 23 | 45 | 20 | 18 | 25 | 33 | 31 | 13 | 35 | 8 |
| Laurens | 15 | 30 | 8 | 37 | 8 | 9 | 6 | 22 | 18 | 38 | 16 | 13 | 34 | 25 | 43 | 33 | 36 | 31 | 36 | 32 | 31 | 21 | 26 | 22 | 14 | 45 | 2 |
| Lee | 12 | 46 | 36 | 12 | 36 | 41 | 32 | 31 | 34 | 6 | 37 | 19 | 41 | 6 | 21 | 33 | 6 | 5 | 25 | 46 | 31 | 11 | 41 | 11 | 38 | 30 | 34 |
| Lexington | 45 | 8 | 13 | 27 | 13 | 8 | 23 | 26 | 26 | 33 | 26 | 37 | 7 | 34 | 42 | 18 | 31 | 27 | 28 | 8 | 8 | 16 | 40 | 38 | 34 | 28 | 29 |
| Marion | 11 | 32 | 44 | 42 | 44 | 2 | 34 | 35 | 17 | 11 | 27 | 6 | 44 | 20 | 16 | 12 | 18 | 36 | 9 | 35 | 22 | 9 | 10 | 13 | 26 | 19 | 24 |
| Marlboro | 1 | 34 | 23 | 17 | 23 | 44 | 43 | 6 | 11 | 8 | 6 | 2 | 43 | 15 | 7 | 7 | 13 | 3 | 15 | 37 | 31 | 15 | 41 | 8 | 6 | 14 | 12 |
| McCormick | 19 | 45 | 12 | 6 | 12 | 45 | 42 | 42 | 33 | 23 | 45 | 36 | 22 | 2 | 22 | 33 | 2 | 42 | 16 | 38 | 31 | 33 | 41 | 2 | 43 | 12 | 44 |
| Newberry | 44 | 22 | 28 | 41 | 28 | 26 | 1 | 44 | 10 | 27 | 40 | 38 | 20 | 28 | 4 | 33 | 23 | 39 | 12 | 30 | 27 | 10 | 15 | 14 | 29 | 22 | 26 |
| Oconee | 36 | 10 | 38 | 33 | 38 | 28 | 19 | 4 | 14 | 43 | 3 | 18 | 10 | 30 | 3 | 20 | 40 | 15 | 31 | 9 | 28 | 43 | 29 | 29 | 23 | 16 | 21 |
| Orangeburg | 3 | 20 | 30 | 2 | 30 | 33 | 44 | 34 | 25 | 9 | 42 | 40 | 39 | 17 | 37 | 30 | 15 | 19 | 23 | 12 | 6 | 7 | 30 | 20 | 31 | 20 | 30 |
| Pickens | 38 | 7 | 21 | 44 | 21 | 13 | 8 | 8 | 23 | 45 | 5 | 23 | 16 | 32 | 33 | 24 | 44 | 29 | 32 | 27 | 25 | 39 | 25 | 32 | 17 | 42 | 5 |
| Richland | 31 | 17 | 29 | 3 | 29 | 31 | 39 | 1 | 45 | 4 | 2 | 44 | 13 | 33 | 39 | 26 | 24 | 4 | 20 | 6 | 2 | 5 | 28 | 41 | 10 | 6 | 36 |
| Saluda | 46 | 42 | 41 | 19 | 41 | 43 | 33 | 41 | 46 | 35 | 41 | 39 | 27 | 9 | 29 | 33 | 46 | 42 | 34 | 40 | 17 | 24 | 41 | 45 | 46 | 46 | 41 |
| Spartanburg | 20 | 11 | 16 | 32 | 16 | 12 | 36 | 23 | 30 | 39 | 21 | 22 | 17 | 40 | 32 | 29 | 45 | 22 | 37 | 7 | 9 | 30 | 37 | 42 | 28 | 39 | 16 |
| Sumter | 17 | 31 | 24 | 9 | 24 | 25 | 26 | 27 | 31 | 5 | 31 | 28 | 28 | 26 | 44 | 32 | 22 | 24 | 27 | 14 | 26 | 6 | 34 | 27 | 27 | 34 | 17 |
| Union | 3 | 23 | 19 | 29 | 19 | 10 | 24 | 37 | 8 | 42 | 33 | 3 | 26 | 16 | 30 | 10 | 14 | 35 | 5 | 39 | 31 | 29 | 7 | 17 | 8 | 26 | 10 |
| Williamsburg | 8 | 40 | 20 | 1 | 1 | 29 | 45 | 5 | 28 | 2 | 38 | 25 | 45 | 21 | 17 | 33 | 5 | 13 | 43 | 45 | 23 | 4 | 11 | 15 | 5 | 24 | 4 |
| York | 25 | 36 | 25 | 23 | 23 | 37 | 16 | 13 | 43 | 40 | 12 | 29 | 2 | 42 | 28 | 13 | 39 | 33 | 44 | 19 | 15 | 31 | 35 | 37 | 40 | 32 | 35 |

Notes:

*Risk (Hi = Bad)

*Mitigators (Lo = Bad)

*Vulnerability (Hi = Bad)

Appendix 1. Resource Inventory

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Trt. | Medication-Assisted Trt. |
|-----------|--|-------------|-------------------|------------------|-------------------------------|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|-----------------------------|--------------------------|
| Abbeville | Abbeville County Health Department | X | | | | | X | | | X | | X | X | | |
| Abbeville | Cornerstone | X | | | | | | | | | | | | X | |
| Aiken | Aiken County Health Department | X | | | | | X | | | X | | X | X | | |
| Aiken | Palmetto Gastro & Hepatology | | | | | | | | X | | | | | | |
| Aiken | Aiken Center for Alcohol and Other Drug Services | | | | | | | | | | | | | X | |
| Aiken | BHG Aiken Treatment Center | | | | | | | | | | | | | X | X |
| Aiken | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Aiken | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Aiken | HopeHealth- Aiken | X | X | X | X | X | X | X | X | | | X | | | |
| Aiken | Margaret J. Weston Community Health Center | | | | | X | | | | | | | | | |
| Allendale | Allendale County Health Department | X | | | | | X | | | X | | X | X | | |
| Allendale | Lowcountry Health Systems | | | X | | X | | | | | | | | | |
| Allendale | New Life Center | | | | | | | | | | | | | X | |
| Anderson | AID Upstate-Anderson | | | | | X | | | | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|----------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Anderson | Anderson County Health Department | X | | | | | X | | | X | | X | X | | |
| Anderson | Anderson/Oconee Behavioral Health Services | | | | | | | | | | | | | X | |
| Anderson | AnMed Health Gastroenterology Specialist | | | | | | | | X | | | | | | |
| Anderson | AnMed Health Infection Management | | | | | | | | X | | | | | | |
| Anderson | Southwest Carolina Treatment Center | | | | | | | | | | | | | X | X |
| Anderson | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Bamberg | Bamberg County Health Department | X | | | | | X | | | X | | X | X | | |
| Bamberg | Padgett Family Practice | | | X | | X | | | | | | | | | |
| Bamberg | Tri-County Commission on Alcohol and Drug Abuse | | | | | | | | | | | | | X | |
| Barnwell | Barnwell County Health Department | X | | | | | X | | | X | | X | X | | |
| Barnwell | Palmetto Gastro & Hepatology | | | | | | | | X | | | | | | |
| Barnwell | Axis I Center of Barnwell | | | | | | | | | | | | | X | |
| Beaufort | Leroy E. Browne Medical Center | X | X | X | | | | | | | | | | | |
| Beaufort | Elijah Washington Medical Center | X | X | X | | | | | | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|----------|--|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Beaufort | Port Royal Medical Center | X | X | X | | | | | | | | | | | |
| Beaufort | Beaufort County Health Department-Main Office | X | | | | | X | | | X | | X | X | | |
| Beaufort | Beaufort County Health Department-Bluffton | X | | | | | X | | | X | | X | X | | |
| Beaufort | Beaufort Memorial Lowcountry Medical Group | | | | | | | | X | | | | | | |
| Beaufort | HH Gastroenterology | | | | | | | | X | | | | | | |
| Beaufort | Coastal Gastroenterology-Bluffton | | | | | | | | X | | | | | | |
| Beaufort | Coastal Gastroenterology-Hilton Head | | | | | | | | X | | | | | | |
| Beaufort | Medical Associates of the Lowcountry Gastroenterology-Beaufort | | | | | | | | X | | | | | | |
| Beaufort | Good Neighbor Free Medical Clinic of Beaufort | | | | | | | | X | | | | | | |
| Beaufort | Beaufort County Alcohol and Drug Abuse Department | | | | | | | | | | | | | X | |
| Beaufort | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Beaufort | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Beaufort | Ruth P. Field Medical Center (Chelsea) | X | X | X | | | | | | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|----------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Berkeley | Fetter Health Care Network- Rose D. Gibbs Health Center | X | X | | X | X | X | X | | | | X | X | X | |
| Berkeley | Fetter Health Care Network- Elijah Wright Health Center | X | X | | X | X | X | X | | | | X | X | X | |
| Berkeley | Berkeley County Health Department- Moncks Corner | X | | | | | X | | | X | | X | X | | |
| Berkeley | Berkeley County Health Department | X | | | | | X | | | X | | X | X | | |
| Berkeley | Palmetto Digestive Health Specialists- Moncks Corner | | | | | | | | X | | | | | | |
| Berkeley | Palmetto Digestive Health Specialists- Moncks Corner | | | | | | | | X | | | | | | |
| Berkeley | Palmetto Primary Care Physicians | | | | | | | | X | | | | | | |
| Berkeley | Palmetto Digestive Health Specialists- Summerville | | | | | | | | X | | | | | | |
| Berkeley | Ernest E. Kennedy Center | X | X | | | | X | X | | | | | | X | |
| Calhoun | Calhoun County Health Department | X | | | | | X | | | X | | X | X | | |
| Calhoun | Tri-County Commission on Alcohol and Drug Abuse | | | | | | | | | | | | | X | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|---|-------------|-------------------|------------------|-------------------------------|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Charleston | Medical University of South Carolina, Infectious Disease Clinic | X | X | | X | X | X | | X | | | X | X | | X |
| Charleston | Fetter Health Care Network | X | X | X | | X | X | X | | | | X | X | | |
| Charleston | Palmetto Community Care | X | | X | | | | | | | | | | | |
| Charleston | Charleston Center | X | X | | | | X | X | | | | | | X | X |
| Charleston | Medical University of South Carolina | | | X | | | | | | | | | | | |
| Charleston | Fetter Health Care Network- Hollywood Health Center | X | X | X | X | X | X | X | | | | X | X | X | X |
| Charleston | Fetter Health Care Network- Enterprise | X | X | | X | | X | X | | | | X | X | X | X |
| Charleston | Roper St. Francis Healthcare, The Wellness Center | X | | X | X | X | | | | | | | | X | |
| Charleston | Charleston County Health Department- Johns Island | X | | | | | X | | | X | | | | | |
| Charleston | Charleston County Health Department- Mt. Pleasant | X | | | | | X | | | X | | | | | |
| Charleston | Charleston County Health Department- North Area | | | | | | | | | | | X | X | | |
| Charleston | Charleston County Health Department- Northwoods | X | | | | | X | | | X | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|--|-------------|-------------------|------------------|-------------------------------|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Charleston | Johns Island Family Health Center | | | | | X | | | | | | | | | |
| Charleston | Palmetto Community Care, Truesdale Medical Center | | | X | | X | | | | | | | | | |
| Charleston | Medical University of South Carolina Women's Health | | | | | X | | | X | | | | | | |
| Charleston | Medical University of South Carolina Family Medicine | | | | | X | | | | | | | | | |
| Charleston | Newton Family Practice | | | | | X | | | | | | | | | |
| Charleston | Roper St. Francis | | | | | X | | | | | | | | | |
| Charleston | Roper St. Francis, Ryan White Wellness Center | | | | | X | | | | | | | | | |
| Charleston | Charleston Gastroenterology Specialists | | | | | | | | X | | | | | | |
| Charleston | Barrier Islands Free Medical Clinic | | | | | | | | X | | | | | | |
| Charleston | Medical University of South Carolina, Digestive Disease Center | | | | | | | | X | | | | | | |
| Charleston | Digestive and Liver Disease Care | | | | | | | | X | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|---|-------------|-------------------|------------------|-------------------------------|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Charleston | Lowcountry Gastroenterology Associates | | | | | | | | X | | | | | | |
| Charleston | Lowcountry Infectious Diseases & Infusion Center-Charleston | | | | | | | | X | | | | | | |
| Charleston | Palmetto Digestive Health Specialists-Mt. Pleasant | | | | | | | | X | | | | | | |
| Charleston | Palmetto Digestive Health Specialists-West Ashley | | | | | | | | X | | | | | | |
| Charleston | Ralph H Johnson VA Medical Center | | | | | | | | X | | | | | | |
| Charleston | Crossroads Treatment Center of Charleston | | | | | | | | | | | | | X | X |
| Charleston | Center for Behavioral Health South Carolina | | | | | | | | | | | | | X | X |
| Charleston | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Charleston | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Charleston | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Charleston | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Charleston | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Cherokee | Cherokee County Health Department | X | | | | | X | | | X | | X | X | | |
| Cherokee | Cherokee County Commission on Alcohol and Drug Abuse | | | | | | | | | | | | | X | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|--------------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Cherokee | Clear Skye Treatment Centers | | | | | | | | | | | | | X | X |
| Chester | Chester County Health Department | X | | | | | X | | | X | | X | X | | |
| Chester | Hazel Pittman Center | | | | | | | | | | | | | X | |
| Chesterfield | Chesterfield County Health Department | X | | | | | X | | | X | | X | X | | |
| Chesterfield | The ALPHA Behavioral Health Center | | | | | | | | | | | | | X | |
| Clarendon | Clarendon Behavioral Health Services | X | X | | | | | | | | | | | X | X |
| Clarendon | Clarendon County Health Department | X | | | | | X | | | X | | X | X | | |
| Colleton | Fetter Health Care Network-Walterboro | X | X | | X | X | X | X | | | | X | X | X | |
| Colleton | Colleton County Health Department | X | | | | | X | | | X | | X | X | | |
| Colleton | Colleton County Commission on Alcohol and Drug Abuse | | | | | | | | | | | | | X | |
| Darlington | Darlington County Health Department | X | | | | | X | | | X | | X | X | | |
| Darlington | Darlington County Health Department-Hartsville Clinic | X | | | | | X | | | X | | X | X | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|--|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Darlington | Rubicon Family Counseling Services | X | | | | | | | | | | | | X | |
| Darlington | Pee Dee Health Care | | | | | | | | X | | | | | | |
| Darlington | Starting Point of Darlington | | | | | | | | | | | | | X | X |
| Darlington | CareSouth Carolina, Care Innovations - Hartsville | X | X | X | X | X | X | X | X | X | | X | X | X | X |
| Darlington | CareSouth Carolina-Rose Lee Gerald Center | | | | | X | | | | | | | | | |
| Darlington | CareSouth Carolina, Care Innovations - Society Hill | X | X | X | X | X | X | X | X | | | | | | |
| Dillon | Dillon County Health Department | X | | | | | X | | | X | | X | X | | |
| Dillon | Trinity Behavioral Care | | | | | | | | | | | | | X | |
| Dorchester | Fetter Health Care Network- TJ Bell Family Health Center | X | X | | X | X | X | X | | | | X | X | X | |
| Dorchester | Dorchester County Health Department | X | | | | | X | | | X | | X | X | | |
| Dorchester | Dorchester Alcohol and Drug Commission | X | | | | | | | | | | | | X | |
| Dorchester | Lowcountry Infectious Diseases & Infusion Center-Summerville | | | | | | | | X | | | | | | |
| Dorchester | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Dorchester | CVS MinuteClinic | | | | | X | | | | | | X | X | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Edgefield | Edgefield County Health Department | X | | | | | X | | | X | | X | X | | |
| Edgefield | Cornerstone | | | | | | | | | | | | | X | |
| Fairfield | Fairfield County Health Department | X | | | | | X | | | X | | X | X | | |
| Fairfield | Fairfield Behavioral Health Services | | | | | | | | | | | | | X | |
| Florence | HopeHealth Medical Plaza | X | X | X | X | X | X | X | X | | | X | X | | |
| Florence | Florence County Health Department | X | | | | | X | | | X | | X | X | | |
| Florence | Florence County Health Department-Lake City Clinic | X | | | | | X | | | X | | X | X | | |
| Florence | Carolinas Infectious Disease | | | | | | | | X | | | | | | |
| Florence | HopeHealth Palmetto | | | | | | | | X | | | | | | |
| Florence | Circle Park Behavioral Health Services | | | | | | | | | | | | | X | |
| Florence | Starting Point of Florence | | | | | | | | | | | | | X | X |
| Georgetown | Georgetown County Health Department | X | | | | | X | | | X | | X | X | | |
| Georgetown | Georgetown County Alcohol and Drug Abuse Commission | X | | | | | | | | | | | | X | |
| Georgetown | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Georgetown | CVS MinuteClinic | | | | | X | | | | | | X | X | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Georgetown | Tidelands Waccamaw Gastroenterology at Georgetown | | | | | | X | | X | X | | | | | |
| Greenville | Gastroenterology Associates | | | | | | | | X | | | X | X | | |
| Greenville | AID Upstate | X | X | X | X | X | X | X | X | | | X | X | | |
| Greenville | AID UPSTATE - Greenville | | | | | X | | | | | | | | | |
| Greenville | Center for Family Medicine, LGBT Specialist | | | | | X | | | | | | | | | |
| Greenville | The Phoenix Center | X | X | | | | | | | | | | | X | X |
| Greenville | Greenville County Health Department | X | | | | | X | | | X | | X | X | | |
| Greenville | Gastroenterology Consultants of IMA | | | | | | | | X | | | | | | |
| Greenville | Gastroenterology Consultants of IMA | | | | | | | | X | | | | | | |
| Greenville | GHS Gastroenterology & Liver Center | | | | | | | | X | | | | | | |
| Greenville | Greenville Health System- Infectious Disease | | | | | | | | X | | | | | | |
| Greenville | Greenville VA Outpatient Clinic | | | | | | | | X | | | | | | |
| Greenville | Greenville Free Medical Clinic | | | | | | | | X | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Greenville | Crossroads Treatment Center of Greenville | | | | | | | | | | | | | X | X |
| Greenville | Greenville Metro Treatment Center | | | | | | | | | | | | | X | X |
| Greenville | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Greenville | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Greenville | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Greenville | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Greenville | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Greenville | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Greenville | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Greenwood | Upper Savannah Care Services | | | X | X | | | | | | | | | | |
| Greenwood | Greenwood County Health Department | X | | | | | X | | | X | | X | X | | |
| Greenwood | Digestive Disease Group PA | | | | | | | | X | | | | | | |
| Greenwood | Greenwood Treatment Specialists | | | | | | | | | | | | | X | X |
| Greenwood | Cornerstone | | | | | | | | | | | | | X | |
| Hampton | New Life Center | X | | | | | | | | | | | | X | |
| Hampton | Hampton Medical Center | X | X | X | | | | | | | | | | | |
| Hampton | Estill Medical Center | X | X | X | | | | | | | | | | | |
| Hampton | Hampton County Health Department | X | | | | | X | | | X | | X | X | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|--------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Horry | CARETEAM+ Family Health and Specialty Care | X | X | X | X | X | | X | X | | | | | | X |
| Horry | Shoreline Behavioral Health Services | X | X | | | | X | X | | | | | | X | X |
| Horry | Horry County Health Department-Conway Clinic | X | | | | | X | | | X | | X | X | | |
| Horry | Horry County Health Department-Stephen's Crossroad Clinic | X | | | | | X | | | X | | | | | |
| Horry | Horry County Health Department- Myrtle Beach Clinic | X | | | | | X | | | X | | X | X | | |
| Horry | Lowcountry Infectious Diseases & Infusion Center | | | X | | | | | X | | | | | | |
| Horry | McLeod Digestive Health Center Seacoast | | | | | | | | X | | | | | | |
| Horry | Strand GI Associates | | | | | | | | X | | | | | | |
| Horry | Tidelands Waccamaw Gastroenterology at Murrells Inlet | | | | | | | | X | | | | | | |
| Horry | Center of Hope of Myrtle Beach | | | | | | | | | | | | | X | X |
| Horry | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Horry | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Horry | CVS MinuteClinic | | | | | X | | | | | | X | X | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|-----------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Horry | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Horry | Little River Medical Center | X | X | X | | X | X | | X | | | X | X | X | X |
| Jasper | New Life Center | | | | | | | | | | | | | X | |
| Jasper | Donald E. Gatch Medical Center | X | X | X | | | | | | | | | | | |
| Jasper | Ridgeland Family Medical Center | X | X | X | | | | | | | | | | | |
| Jasper | Jasper County Health Department | X | | | | | X | | | X | | X | X | | |
| Jasper | Medical Associates of the Lowcountry Gastroenterology | | | | | | | | X | | | | | | |
| Jasper | Recovery Concepts, LLC | | | | | | | | | | | | | X | X |
| Kershaw | The ALPHA Behavioral Health Center | X | | | | | | | | | | | | X | |
| Kershaw | Kershaw County Health Department | X | | | | | X | | | X | | X | X | | |
| Kershaw | Sandhills Medical Foundation- Camden | | | | | X | | | | | | | | | |
| Kershaw | Sandhills Medical Foundation- Lugoff | X | X | X | X | | X | | X | | | X | X | | |
| Lancaster | Lancaster County Health Department | X | | | | | X | | | X | | X | X | | |
| Lancaster | Catawba Gastroenterology | | | | | | | | X | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|-----------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Lancaster | Counseling Services of Lancaster | | | | | | | | | | | | | X | |
| Lancaster | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Lancaster | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Laurens | Laurens County Health Department | X | | | | | X | | | X | | X | X | | |
| Laurens | GateWay Counseling Center | | | | | | | | | | | | | X | |
| Laurens | Clear Skye Treatment Centers | | | | | | | | | | | | | X | X |
| Lee | Lee County Health Department | X | | | | | X | | | X | | X | X | | |
| Lee | The Lee Center | | | | | | | | | | | | | X | |
| Lexington | Lexington County Health Department | X | | | | | X | | | X | | X | X | | |
| Lexington | Lexington Medical Specialists | | | X | | | | | X | | | | | | |
| Lexington | Consultants in Gastroenterology-Lexington | | | | | | | | X | | | | | | |
| Lexington | Consultants in Gastroenterology & the South Carolina Endoscopy Center | | | | | | | | X | | | | | | |
| Lexington | Midlands Gastroenterology | | | | | | | | X | | | | | | |
| Lexington | Columbia Metro Treatment Center | | | | | | | | | | | | | X | X |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|-----------|--|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Lexington | Lexington Treatment Specialists | | | | | | | | | | | | | X | X |
| Lexington | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Lexington | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Lexington | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Lexington | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Lexington | LRADAC | X | | | | | | | | | | | | X | |
| Marion | Marion County Health Department | X | | | | | X | | | X | | X | X | | |
| Marion | Trinity Behavioral Care | X | | | | | | | | | | | | X | |
| Marlboro | Trinity Behavioral Care | | | | | | | | | | | | | X | |
| Marlboro | Marlboro County Health Department | X | | | | | X | | | X | | X | X | | |
| McCormick | Cornerstone | | | | | | | | | | | | | X | |
| McCormick | McCormick County Health Department | X | | | | | X | | | X | | X | X | | |
| Newberry | Newberry County Health Department | X | | | | | X | | | X | | X | X | | |
| Newberry | Westview Behavioral Health Services | | | | | | | | | | | | | X | |
| Oconee | Anderson/Oconee Behavioral Health Services | X | | | | | | | | | | | | X | |
| Oconee | Oconee County Health Department | X | | | | | X | | | X | | X | X | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|------------|--|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Oconee | Crossroads Treatment Center of Seneca | | | | | | | | | | | | | X | X |
| Oconee | Rosa Clark Medical Center | | | | | | | | | | | | | X | X |
| Orangeburg | HopeHealth-Orangeburg | | X | X | | X | | X | X | | | X | X | | |
| Orangeburg | Orangeburg County Health Department | X | | | | | X | | | X | | X | X | | |
| Orangeburg | Orangeburg County Health Department-Holly Hill | X | | | | | X | | | X | | X | X | | |
| Orangeburg | Tri-County Commission on Alcohol and Drug Abuse (TCCADA) | X | X | | | | | | | | | X | X | X | X |
| Pickens | Pickens County Health Department | X | | | | | X | | | X | | X | X | | |
| Pickens | Behavioral Health Services of Pickens County | | | | | | | | | | | | | X | |
| Pickens | Recovery Concepts of the Carolina Upstate | | | | | | | | | | | | | X | X |
| Pickens | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Pickens | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Richland | AIDS Healthcare Foundation/ Grace Medical Group | X | X | X | X | X | | | X | | X | X | X | | |
| Richland | Acercamiento Hispano/Hispanic Outreach | X | | | X | | X | | | | | | | | |
| Richland | Celia Saxon Health Center | | | | | X | | | | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|----------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Richland | Colonial Healthcare | | | | | X | | | | | | | | | |
| Richland | University of South Carolina Student Health Services | | | | | X | | | | | | | | | |
| Richland | University of South Carolina, School of Medicine, Immunology Center | | | X | | X | | | X | | | | | | |
| Richland | Richland County Health Department | X | | | | | X | | | X | | X | X | | |
| Richland | Eau Claire Cooperative Health - Waverly Family Practice | | | X | X | X | | | | | | | | | |
| Richland | Associates in Gastroenterology, P.A. | | | | | | | | X | | | | | | |
| Richland | Carolina Digestive Disease | | | | | | | | X | | | | | | |
| Richland | Columbia Gastroenterology Associates | | | | | | | | X | | | | | | |
| Richland | Columbia Gastroenterology Associates | | | | | | | | X | | | | | | |
| Richland | Consultants in Gastroenterology & the South Carolina Endoscopy Center Northeast | | | | | | | | X | | | | | | |
| Richland | Consultants in Gastroenterology-St. Andrews | | | | | | | | X | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|-------------|--|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Richland | Eau Claire Internal Medicine | | | | | | | | X | | | | | | |
| Richland | Palmetto Gastroenterology, P.A. | | | | | | | | X | | | | | | |
| Richland | Wm. Jennings Bryan Dorn VA Medical Center | | | | | | | | X | | | | | | |
| Richland | Crossroads Treatment Center of Columbia | | | | | | | | | | | | | X | X |
| Richland | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Richland | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Richland | Palmetto AIDS Life Support Services (PALSS) | X | X | X | | X | X | | X | X | | | | | |
| Richland | LRADAC | | X | | | | | | | | | | X | X | |
| Saluda | Westview Behavioral Health Services | | | | | | | | | | | | | X | |
| Saluda | Saluda County Health Department | X | | | | | X | | | X | | X | X | | |
| Spartanburg | Piedmont Care | X | | | X | | | | | | | | | | |
| Spartanburg | Spartanburg County Health Department | X | | | | | X | | | X | | X | X | | |
| Spartanburg | Spartanburg County Health Department-Point Teen Clinic at Tobias | X | | | | | X | | | X | | | | | |
| Spartanburg | MGC Medical Affiliates- North Grove | | | X | | | | | X | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|-------------|---|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Spartanburg | Mary Black Gastroenterology | | | | | | | | X | | | | | | |
| Spartanburg | Medical Group of the Carolinas | | | | | X | | | | | | | | | |
| Spartanburg | Medical Group of the Carolinas Gastroenterology – Spartanburg | | | | | | | | X | | | | | | |
| Spartanburg | MGC Infectious Disease – Spartanburg | | | | | | | | X | | | | | | |
| Spartanburg | The Forrester Center for Behavioral Health | | | | | | | | | | | | | X | |
| Spartanburg | Palmetto Carolina Treatment Center | | | | | | | | | | | | | X | X |
| Spartanburg | BHG Spartanburg Treatment Center | | | | | | | | | | | | | X | X |
| Spartanburg | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Spartanburg | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Spartanburg | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| Sumter | Sandhills Medical Foundation | X | | X | X | | | | | | | | | | |
| Sumter | Tandem Health | X | | X | X | | | | | | | | | | |
| Sumter | Sumter County Health Department | X | | | | | X | | | X | | X | X | | |
| Sumter | Sumter Behavioral Health Services | X | | | | | | | | | | | | X | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|--------------|--|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| Sumter | Palmetto Health-USC Infectious Disease-Sumter | | | | | | | | X | | | | | | |
| Sumter | Sumter Gastroenterology | | | | | | | | X | | | | | | |
| Union | Union County Health Department | X | | | | | X | | | X | | X | X | | |
| Union | Healthy U Behavioral Health | | | | | | | | | | | | | X | |
| Williamsburg | Williamsburg County Health Department | X | | | | | X | | | X | | X | X | | |
| Williamsburg | Williamsburg County Department on Alcohol and Drug Abuse | X | | | | | | | | | | | | X | |
| Williamsburg | HopeHealth Kingstree | | | | | | | | X | | | | | | |
| York | Affinity Health Center | X | X | X | X | X | X | X | X | X | X | X | X | X | X |
| York | Keystone Substance Abuse Services | X | | | | | | | | | | | | X | X |
| York | York County Health Department- Rock Hill Clinic | X | | | | | X | | | X | | X | X | | |
| York | York County Health Department- York Health Center | X | | | | | X | | | X | | X | X | | |
| York | Digestive Disease Associates of York County | | | | | | | | X | | | | | | |
| York | Digestive Disease Associates of York County | | | | | | | | X | | | | | | |

| County | Agency | HIV Testing | HIV Rapid Testing | HIV Medical Care | HIV Linkage and Re-engagement Services | PrEP for HIV Prev. | Hepatitis C Testing | Hepatitis C Rapid Testing | Hepatitis C Treatment | Hepatitis B Testing | Hepatitis B Treatment | Hepatitis B Vaccination | Hepatitis A Vaccination | Substance Use Disorder Treatment | Medication-Assisted Treatment |
|--------|---------------------------------|-------------|-------------------|------------------|--|--------------------|---------------------|---------------------------|-----------------------|---------------------|-----------------------|-------------------------|-------------------------|----------------------------------|-------------------------------|
| York | York County Treatment Center | | | | | | | | | | | | | X | X |
| York | Rock Hill Treatment Specialists | | | | | | | | | | | | | X | X |
| York | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| York | CVS MinuteClinic | | | | | X | | | | | | X | X | | |
| York | CVS MinuteClinic | | | | | X | | | | | | X | X | | |

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