



Vulnerability Assessment Report and Jurisdictional Plan: South Carolina

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Executive Summary

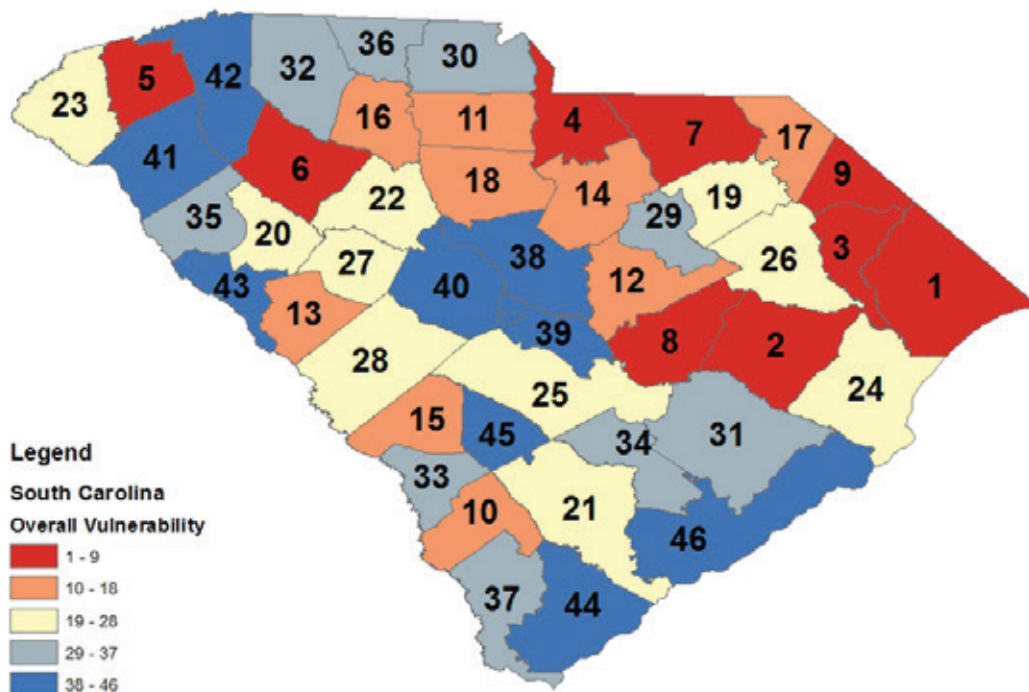
Background:

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 last, 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).**

South Carolina Overall Vulnerability 2019



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, Williamsburg, Marion, Lancaster, Pickens, Laurens, Chesterfield, Clarendon, and Dillon.
- **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 substance 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 person 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 2019. 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, Percent rural, Difference in HCV and HIV rates, State-funded treatment 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, Presence of major highway within 5 miles of county border (Y/N), Population density, Mental health providers per 100,000, PrEP users per 100,000.

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Part I: Vulnerability Assessment

1.a. Background & Rationale

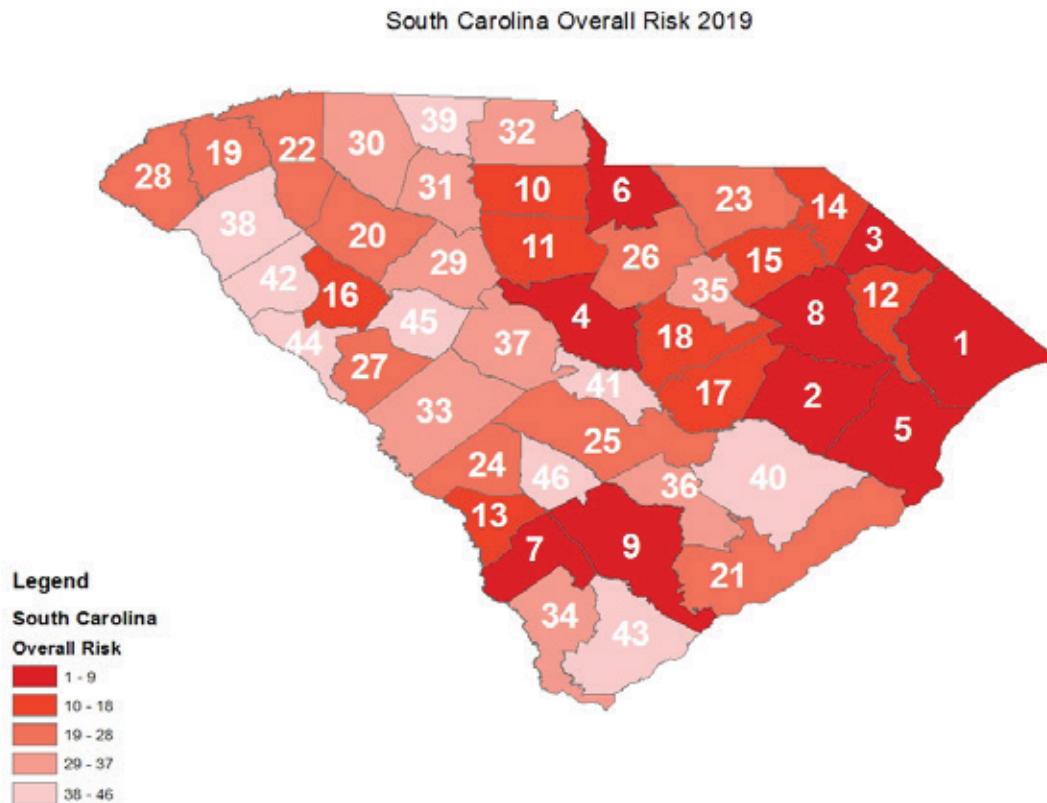
November 2014 saw the beginning of an outbreak of human immunodeficiency virus (HIV) among the residents of Scott County, IN. Within the following year, a total of 181 new HIV cases were diagnosed in the area, in stark contrast to the five cases diagnosed in the ten years prior. Most (87.7%) of those diagnosed with HIV between November 2014 and November 2015 reported having injected a prescription opioid; furthermore, 92.3% 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%-90% and 18%-38% 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 Centers for Disease Control and Prevention (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 their 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 3 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 relation to its mitigators; the Overall Vulnerability score for each county was calculated by subtracting its Mitigators score from its Risks score.

*Data presented is for the 2019 assessment



1.b. Overdose and Bloodborne Infection Risk Factors

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
- Cases of Endocarditis per 100,000
- Cases of Acute HCV per 100,000
- Percentage Rural
- Difference of HCV and HIV rates
- State-funded treatment opioid diagnoses per 1,000
- Prevalence of Injection Drug Use among HIV+ 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.

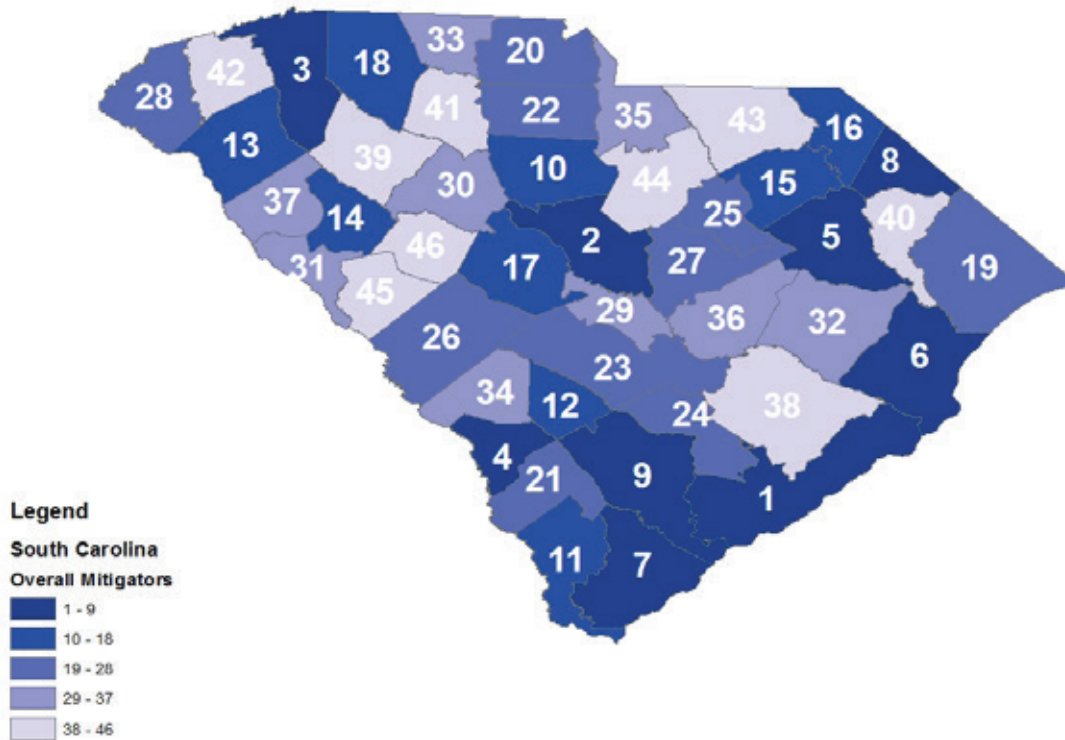
Comments

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 2019 data, are (in order, highest first): Horry, Williamsburg, Dillon, Richland, Georgetown, Lancaster, Hampton, Florence, and Colleton. The counties with the least risk, according to 2019 data, are (in order, lowest first): Bamberg, Saluda, McCormick, Beaufort, Abbeville, Calhoun, Berkeley, Cherokee, and Anderson.

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 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 because of 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 PeeDee region (Richland, Lancaster, Hampton, and Colleton) 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

South Carolina Overall Mitigators 2019



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
- Highway (Y/N)
- Population Density
- Mental Health Providers per 100,000
- PrEP Users per 100,000

Methodology

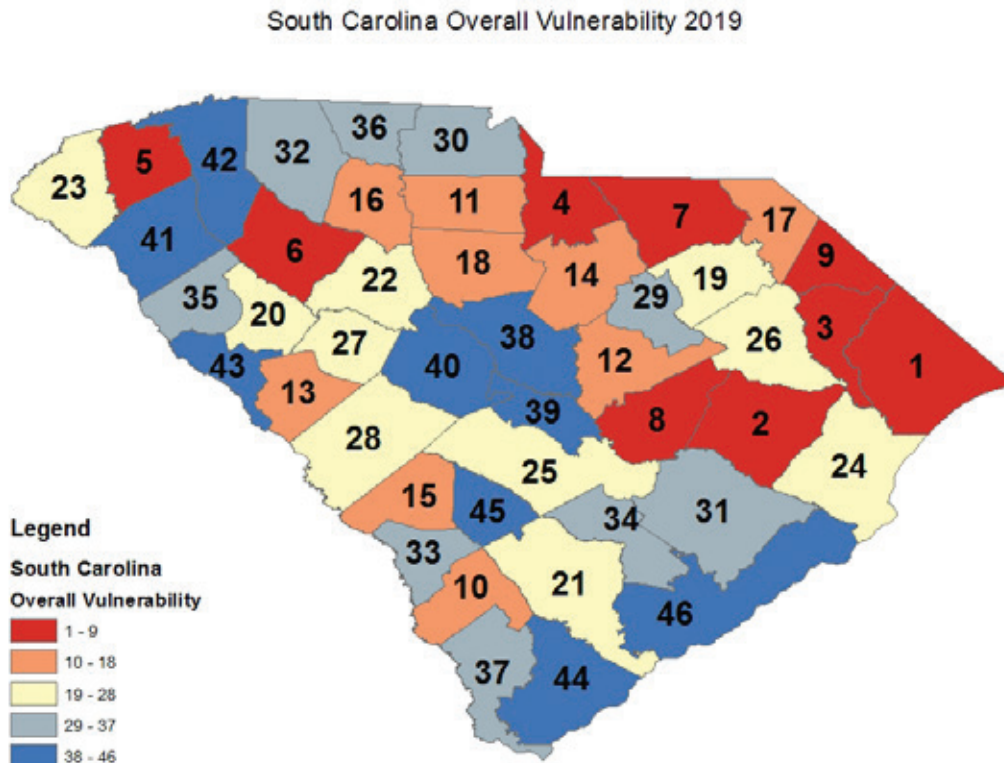
For details on where data for each variable was obtained, the raw data for each variable by county, the z-scores for each variable by county, and how z-scores are calculated, please refer to Part III: Technical Notes – Methods. For county rank maps of each mitigating variable, please refer to Part III: 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 2019 data, in order, are: Charleston, Richland, Greenville, Allendale, Florence, Georgetown, Beaufort, Dillon and Colleton. The counties with the least mitigating factors according to 2019 data (in order, lowest first) are: Saluda, Edgefield, Kershaw, Chesterfield, Pickens, Union, Marion, Laurens, and Berkeley

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.

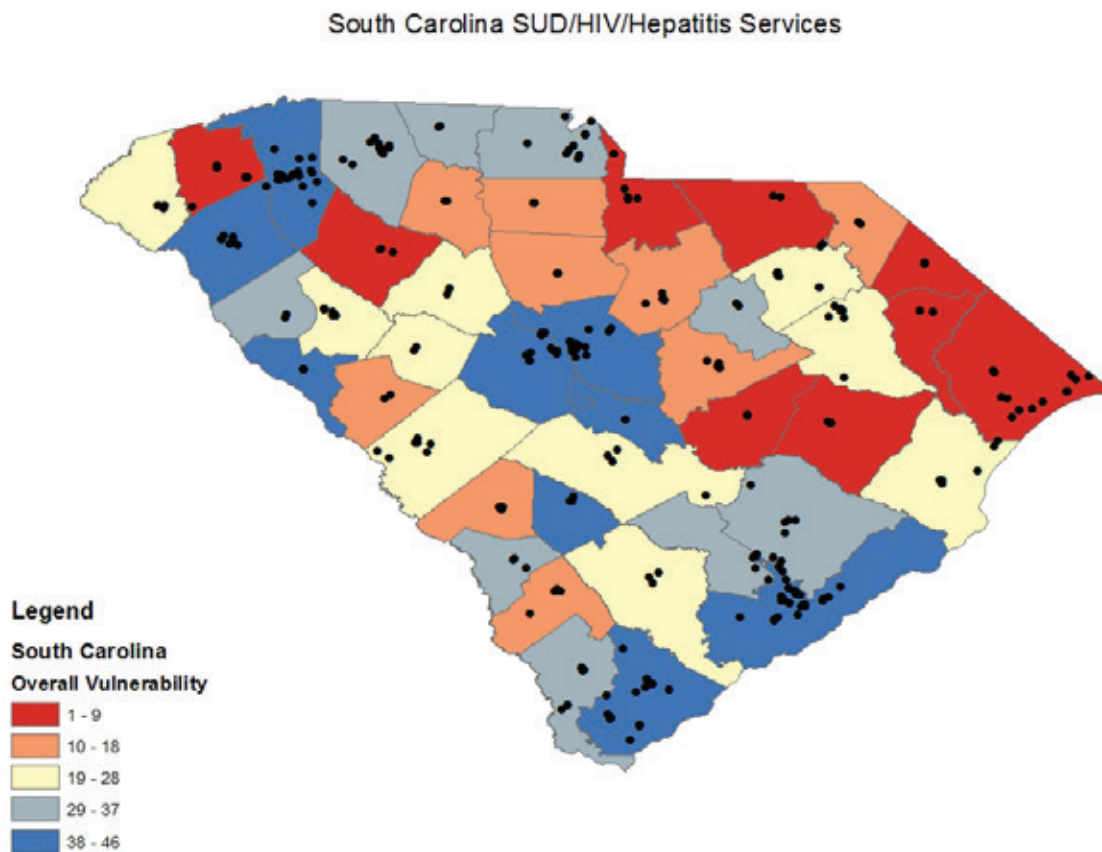
Comments

The above map displays the overall Vulnerability Rank for each county in the state of 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, Williamsburg, Marion, Lancaster, Pickens, Laurens, Chesterfield, Clarendon, and Dillon. The least vulnerable counties according to 2019 data, in order, are: Charleston, Bamberg, Beaufort, McCormick, Greenville, Anderson, Lexington, Calhoun, and Richland. It is most likely assumed that all the counties that are most vulnerable or least vulnerable have many factors in common. However, when considering a county like Horry, the most vulnerable county, its coastal geography, high in population, and tourism economy contrasts starkly with Laurens county, a land-locked rural county. Counties adjacent to Horry such as Williamsburg, Marion, 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 2021 analysis York county (which has the 2nd highest per capita income) dropped from 38th most vulnerable to 30th most vulnerable. Other significant changes were seen, such as Richland

County's rate of HCV in persons under 40 years of age increasing by 130% from 2018 to 2019. Although Richland County is still in the top 20% least vulnerable, this variable is a significant indicator of risk for rapid HIV spread should HIV be introduced to the PWID community in this area. 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 and 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 try 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

As 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 counties identified as having the greatest vulnerability have an average rural percentage of 61.34 and seven of the nine counties are classified as being 50% or more rural. The counties identified as having the least vulnerability have an average rural percentage of 41.1. Further, the median household income among the most vulnerable counties is on average \$42,244 compared to an average median income of \$53,439 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 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% successful rate of opioid overdose reversal. 2020 Narcan administrations currently tally at 544 (as of September 17, 2020), which is a 30% 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 S.C.'s Department of Alcohol and Other Drug Abuse Services (DAODAS) is designated as a Community Distributor of Narcan and they have 32 counties AOD sites that are community distributors of Narcan. DHEC regional pharmacies serve as the pharmacy hubs to receive the Narcan and to 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 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 7-10 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 which 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% of new HIV/AIDS diagnoses. **Both the U.S. Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (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** (USDHHS 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, 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, South Carolina 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

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
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% of acute HCV cases were diagnosed in PWID
 - ALL EQUIPMENT USED TO PREPARE AND INJECT DRUGS CAN SPREAD HCV
 - Unsafe injection practices is #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
- Dissimination 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 2019 South Carolina Vulnerability Assessment (SC VA) is the third 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 may 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-six 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 2021 analyses made minor edits to the previously used variables. Income was changed from individual income to median household income. 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, PrEP, and to maintain balance opioid treatment clinics were removed from the mitigation list.

Table 1: Indicator Source, Format & Year

Indicator	Source	Type & Year
Percent Unemployed	ACS	%, 2019
MME per capita	SCRIPTS	Rate, 2019
Overdose Deaths per 100,000	SC DHEC - Vital Statistics	Rate, 2019
HIV Incidence per 100,000	SC DHEC - STD/HIV/AIDS	Rate, 2019
Percent Overdose Attributable to Opioids	RFA	%, 2019
Naloxone per 100,000	RFA	Rate, 2019
Drug Crime per 100,000	SLED	Rate, 2019
Endocarditis per 100,000	RFA	Rate, 2019
Acute HCV under 40 per 100,000	SC DHEC - STD/HIV/AIDS	Rate, 2019
Percent Rural	CHR	%, 2019
HCV HIV Difference per 1,000	Derived from SC DHEC - STD/HIV/AIDS	Rate difference, 2019
Opioid Medicaid per 100,000	RFA	Rate, 2019
IDU HIV prevalence per 100,000	SC DHEC - STD/HIV/AIDS	Rate, 2019
Per Capita Income	ACS	Household Median, 2019
Substance Abuse Clinics per 100,000	SAMHSA	Rate, 2021
EMS personnel per 100,000	SC DHEC - EMS	Rate, 2019
Population Density	ACS	Raw count, 2019
Mental Health Providers per 100,000	SCDHHS	Rate, 2021
Buprenorphine-waivered Drs per 100,000	SAMHSA	Rate, 2021
Law Enforcement Officers per 100,000	SLED	Rate, 2019
Hospitals/ED per 100,000	SCHA	Rate, 2019
Medicaid-registered Primary Care Providers per 100,000	SCDHHS	Rate, 2021
Highway	SC DOT	Dichotomous (Y/N), 2019
Urgent Care per 100,000	SolvHealth urgent care registry	Rate, 2018
Mental Health Clinics per 100,000	SAMHSA	Rate, 2021
PrEP users per 100,000	AIDSVu.org	Rate, 2019

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), and logistic considerations (i.e., reciprocal variables). 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 13 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
Endocarditis per 100,000	Hospitals and EDs per 100,000
Acute HCV per 100,000	Primary Care Providers per 100,000
% Rural	Highway (Y/N)
HCV HIV Difference	Urgent Care Facilities per 100,000
State-funded treatment opioid diagnoses per 100,000	Population Density
IDU HIV prevalence 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:

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

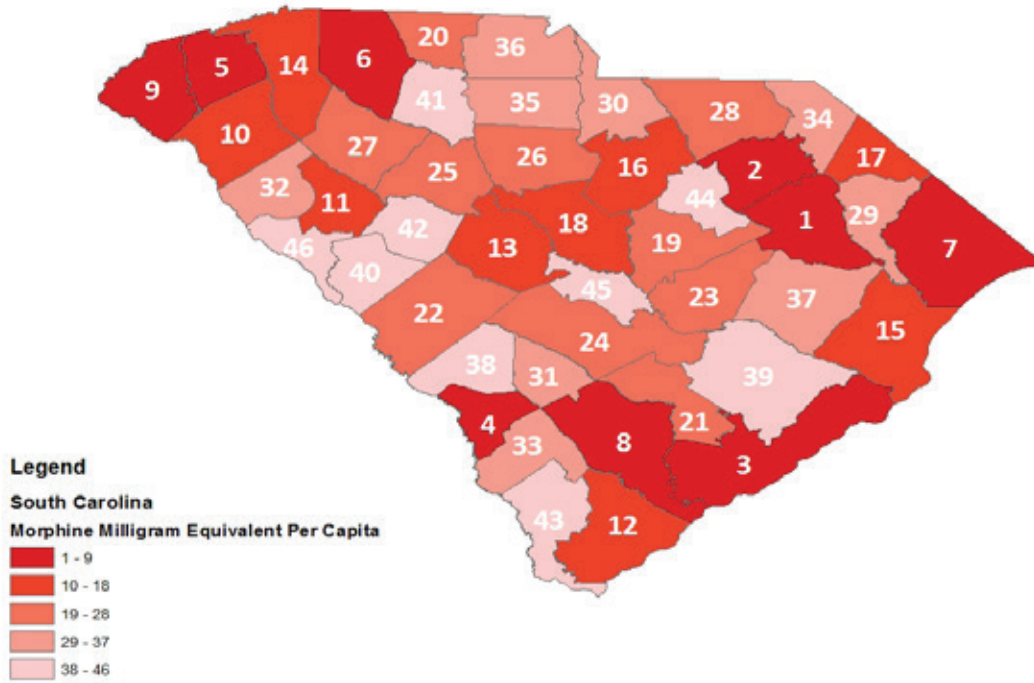
Where x equals the county's indicator value, x bar equals the mean indicator value for all counties, and s equals the standard deviation of the indicator's distribution. Standardizing each indicator allows for intradomain addition and interdomain subtraction by scaling each variable into a unitless value 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).

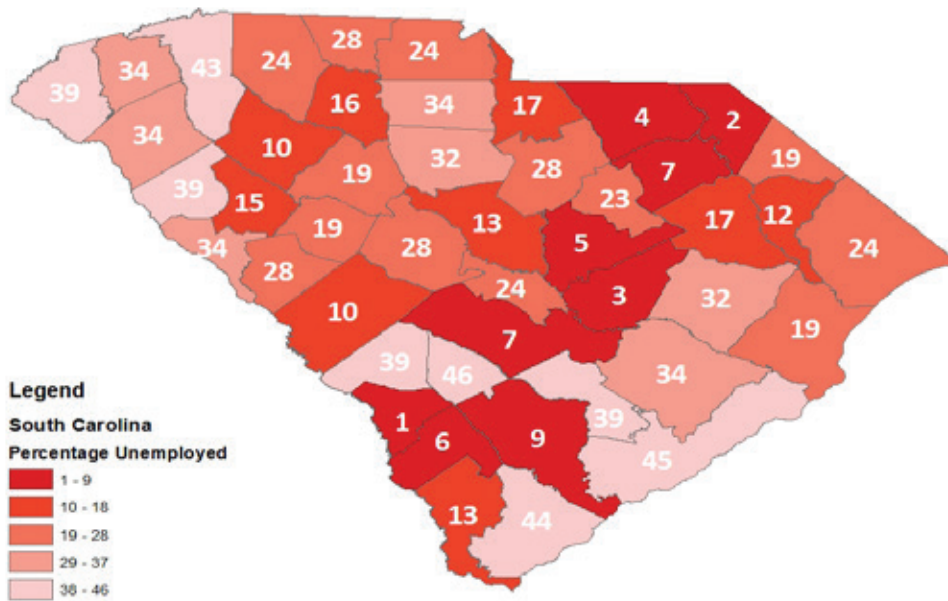
3.c. Indicator Maps

Risk Indicators

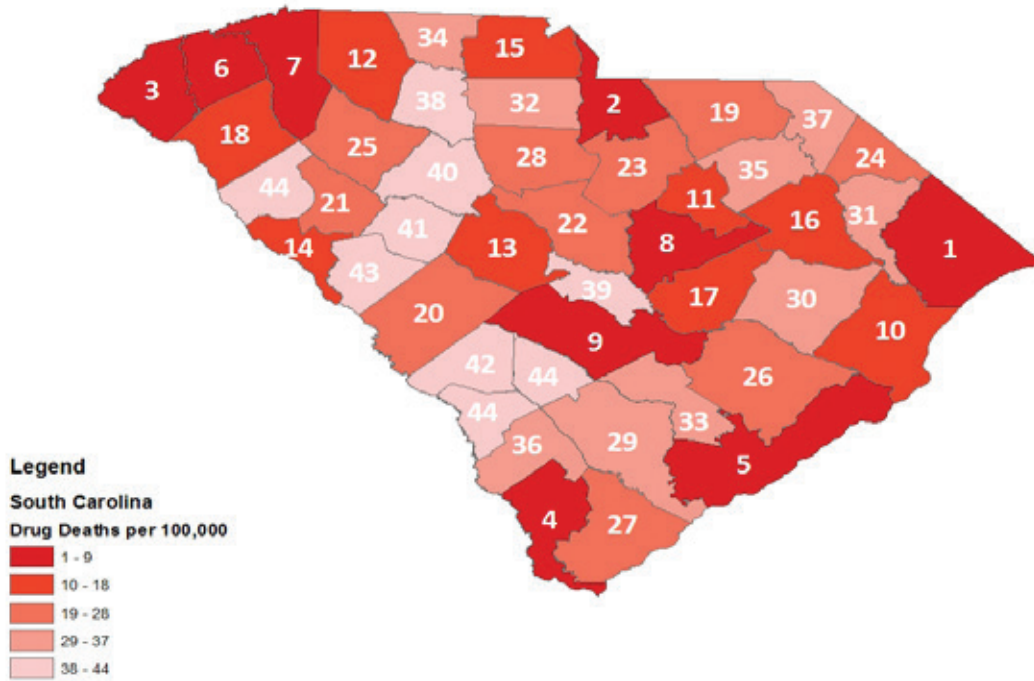
South Carolina County Ranks by Rate of Morphine Milligram Equivalent 2019



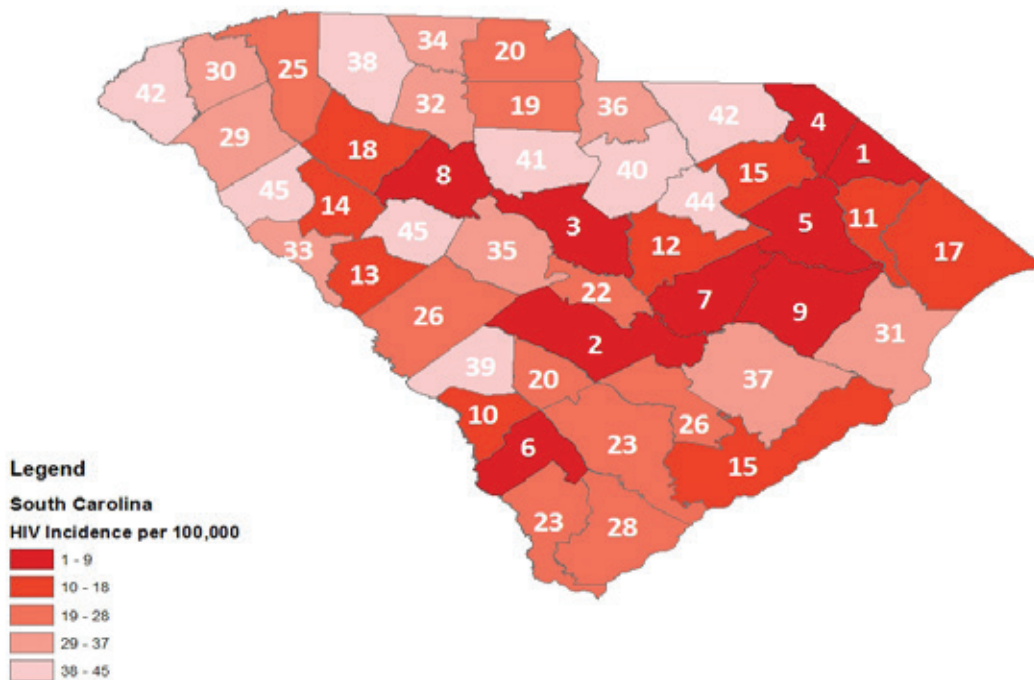
South Carolina County Ranks by Percentage Unemployed 2019



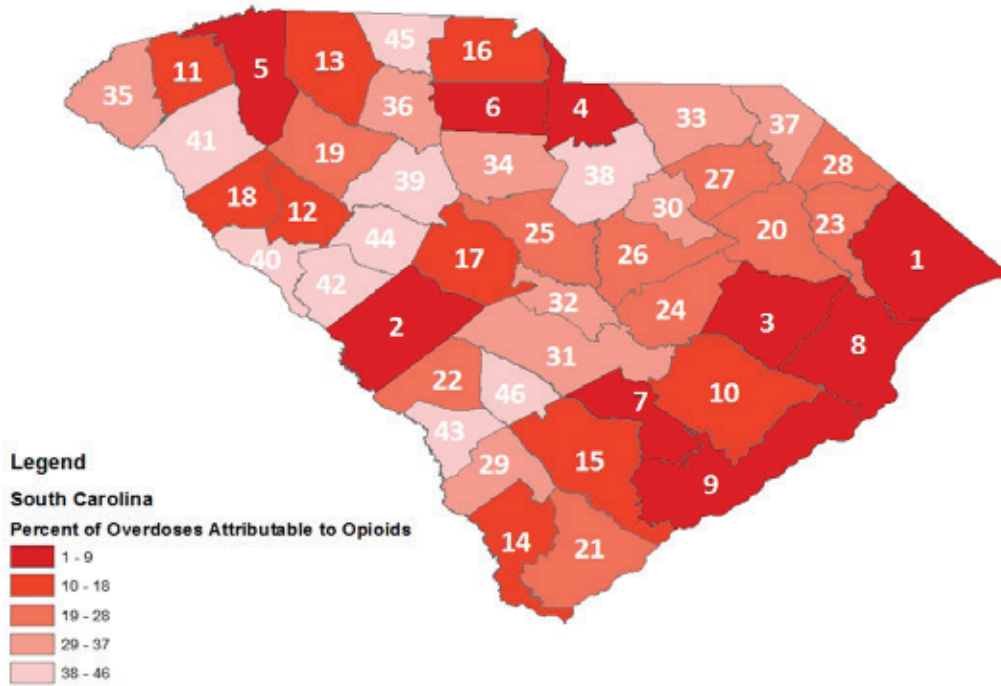
South Carolina County Ranks by Rate of Drug Deaths 2019



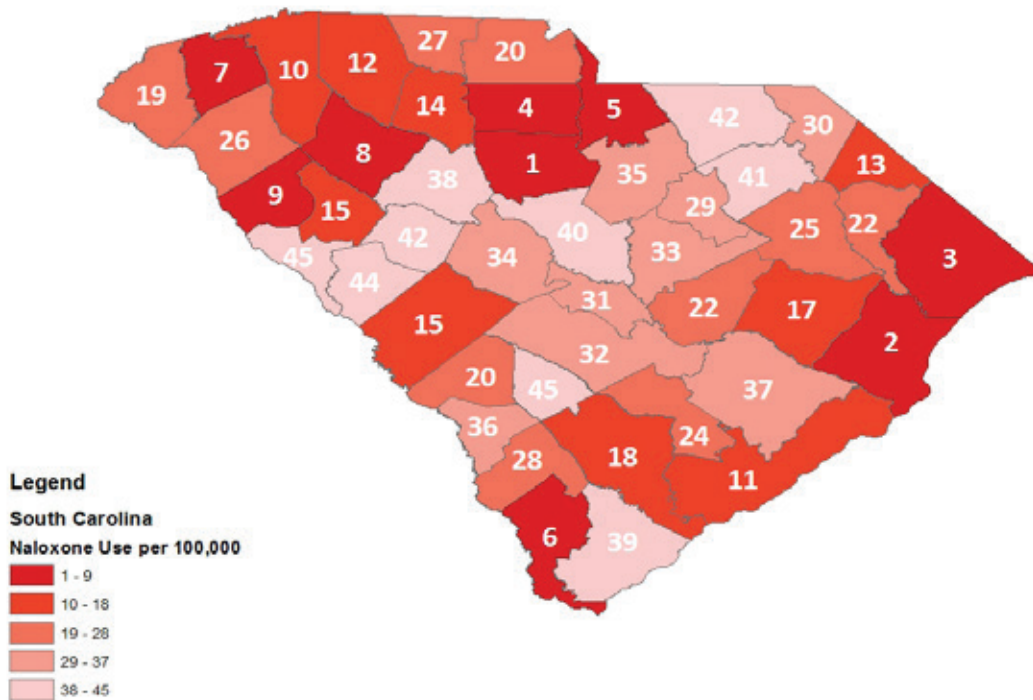
South Carolina County Ranks by Rate of HIV Incidence 2019



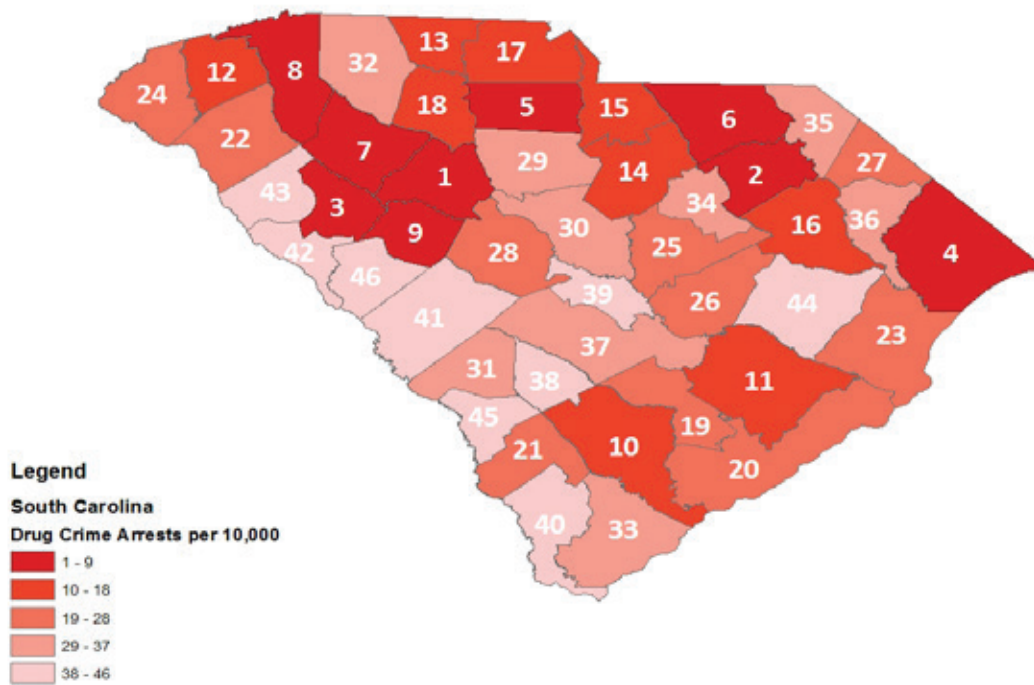
South Carolina County Ranks by Percent of Opioid Overdoses 2019



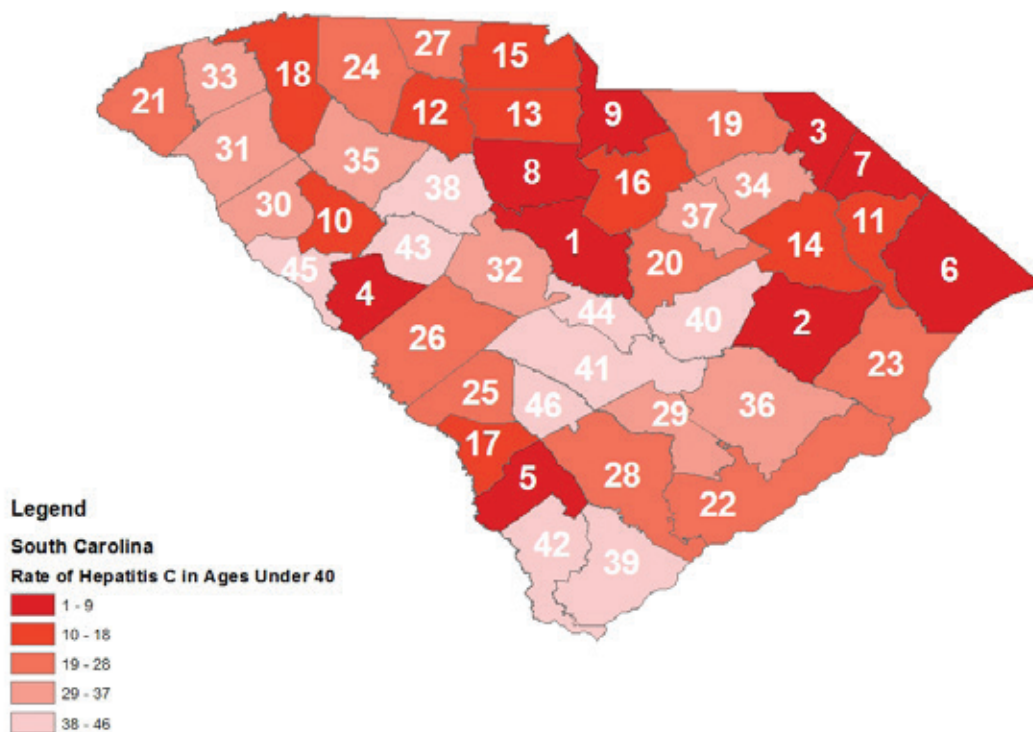
South Carolina County Ranks by Rate of Naloxone Use 2019



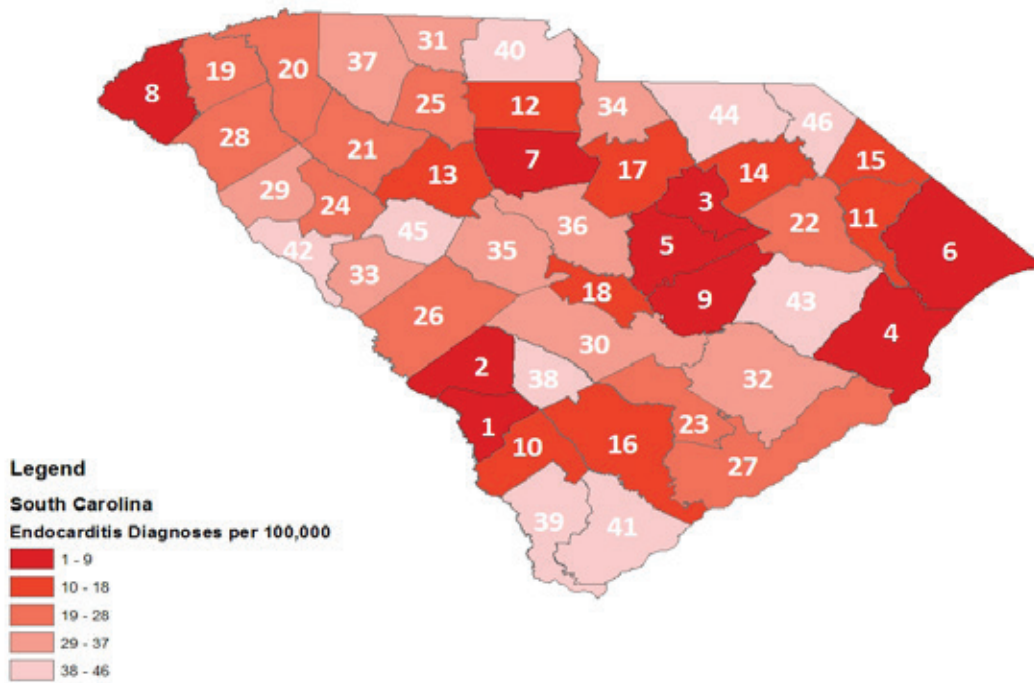
South Carolina County Ranks by Rate of Drug Crime 2019



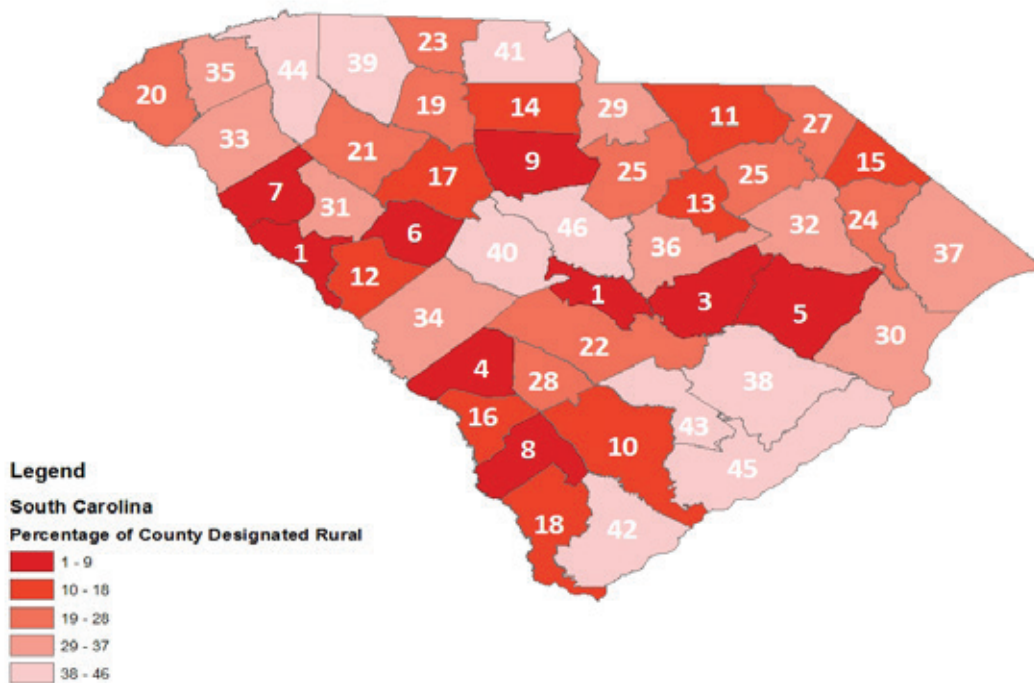
South Carolina County Ranks by Rate of HCV Diagnosis in Ages Under 40 2019



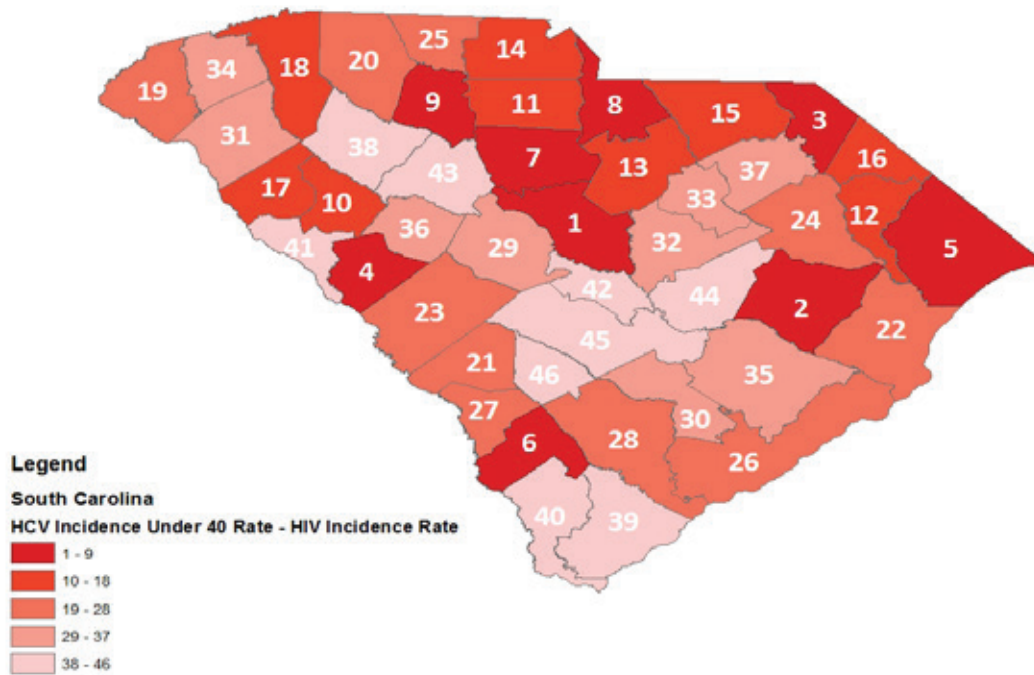
South Carolina County Ranks by Rate of Endocarditis 2019



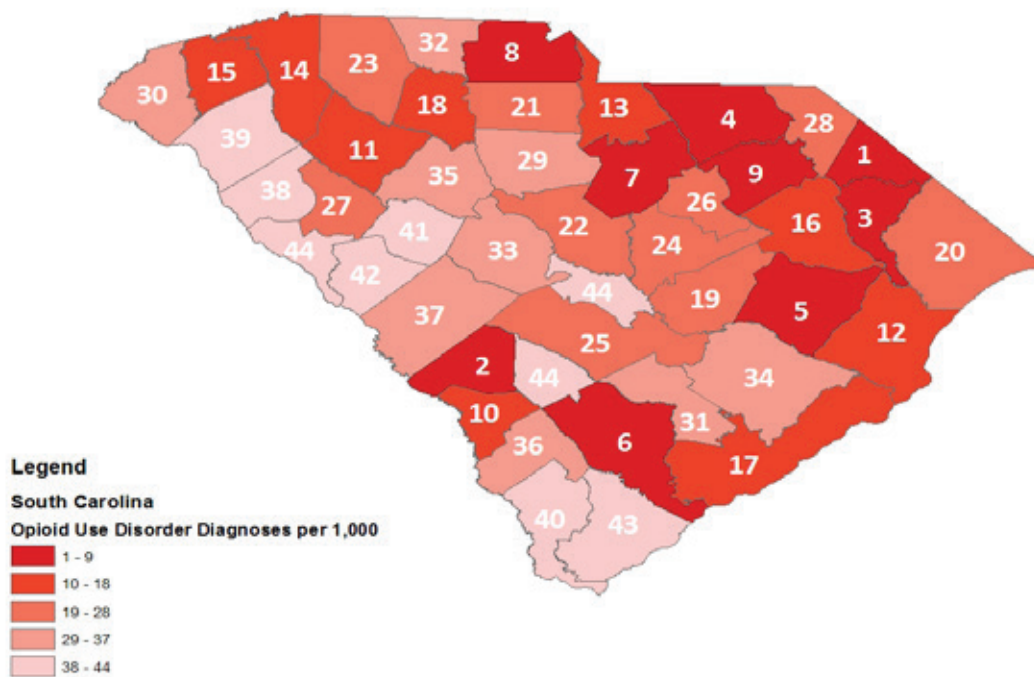
South Carolina County Ranks by Rurality Percentage 2019



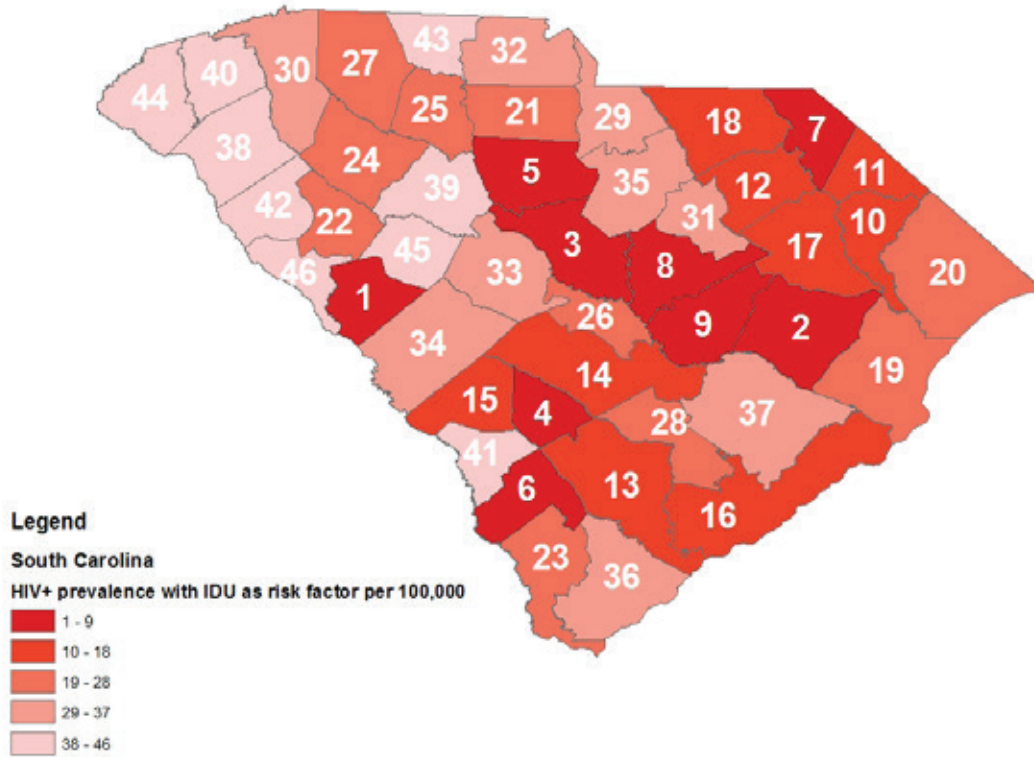
South Carolina County Ranks by Difference in HCV and HIV Rates 2019



South Carolina County Ranks by Rate of Opioid Use Disorder Diagnoses in 2019

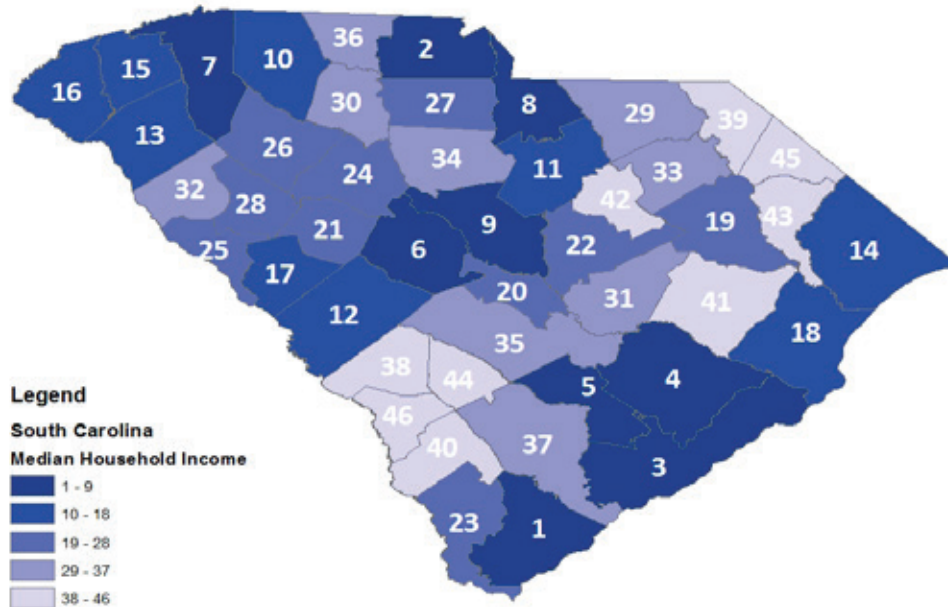


South Carolina County Ranks by Rate of HIV with Injection Drug Use as a Reported Risk Factor 2019

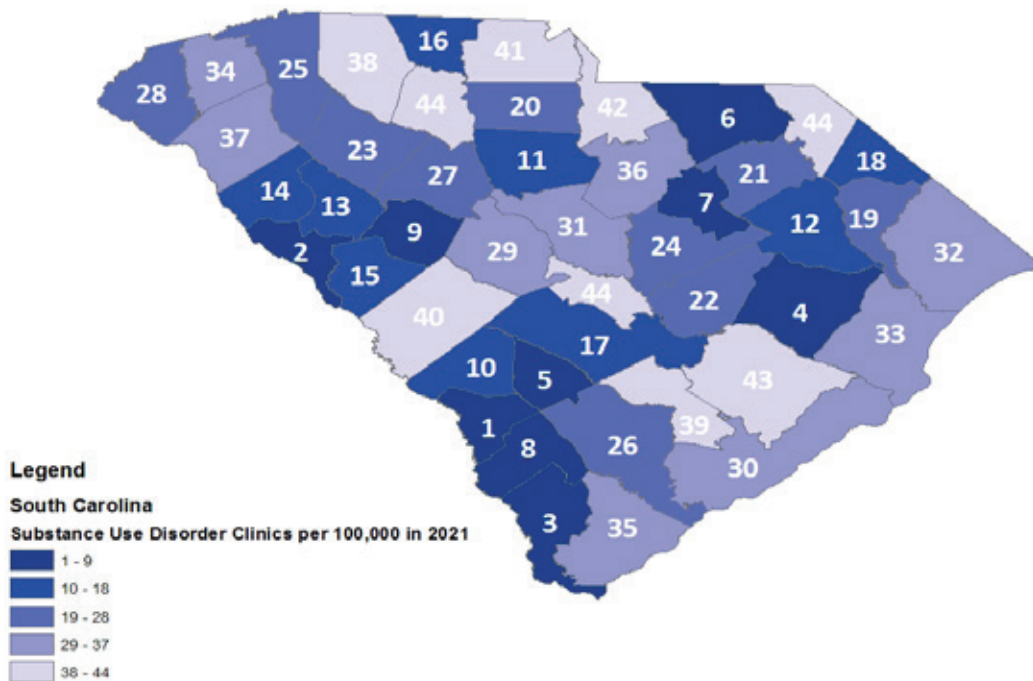


Mitigation Indicators

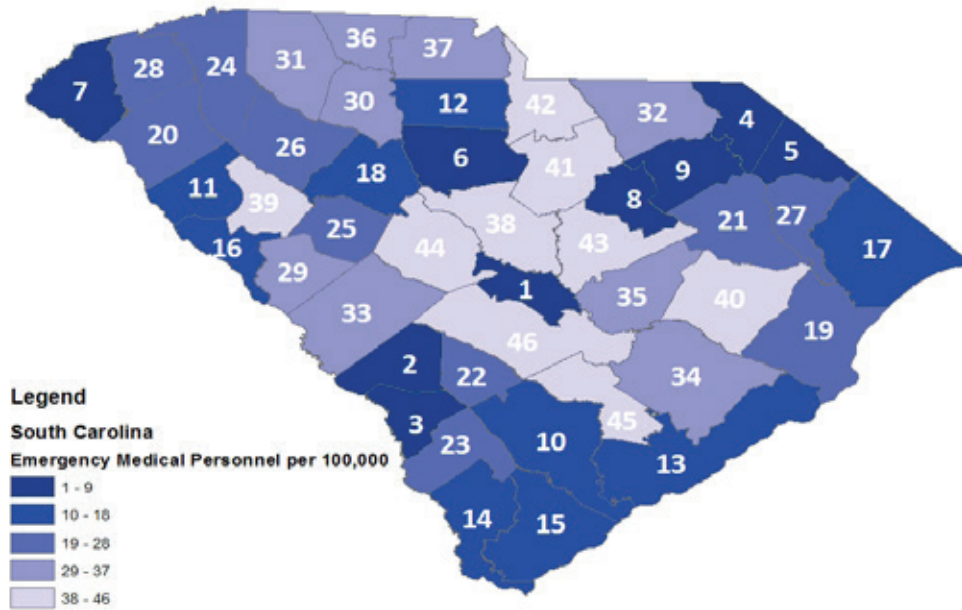
South Carolina County Ranks by Median Household Income 2019



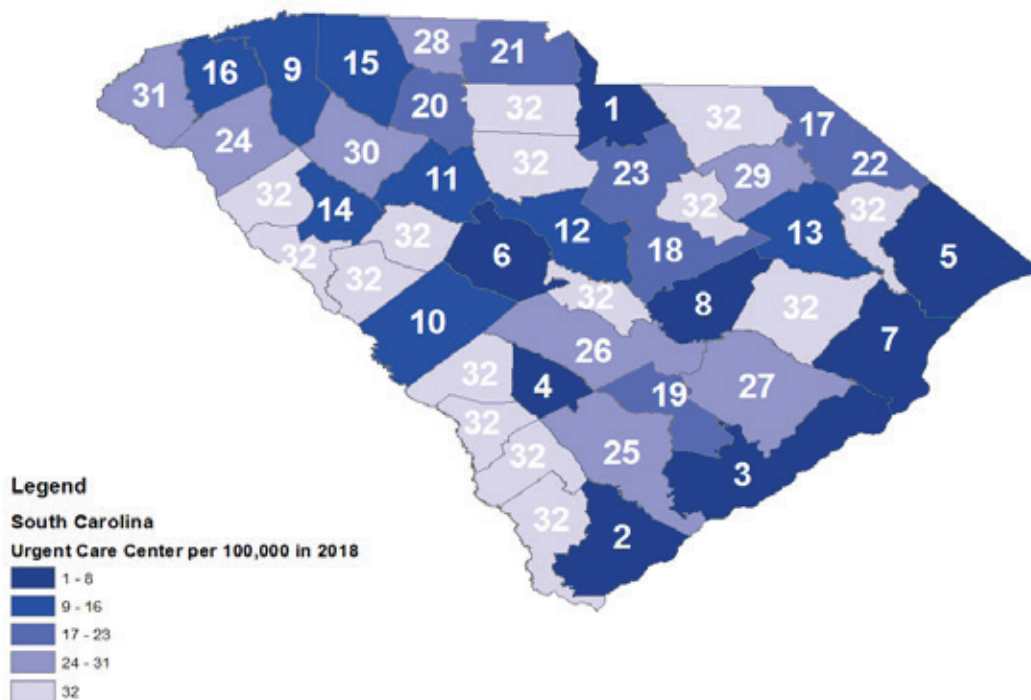
South Carolina County Ranks by Rate of Substance Use Disorder Clinics 2019



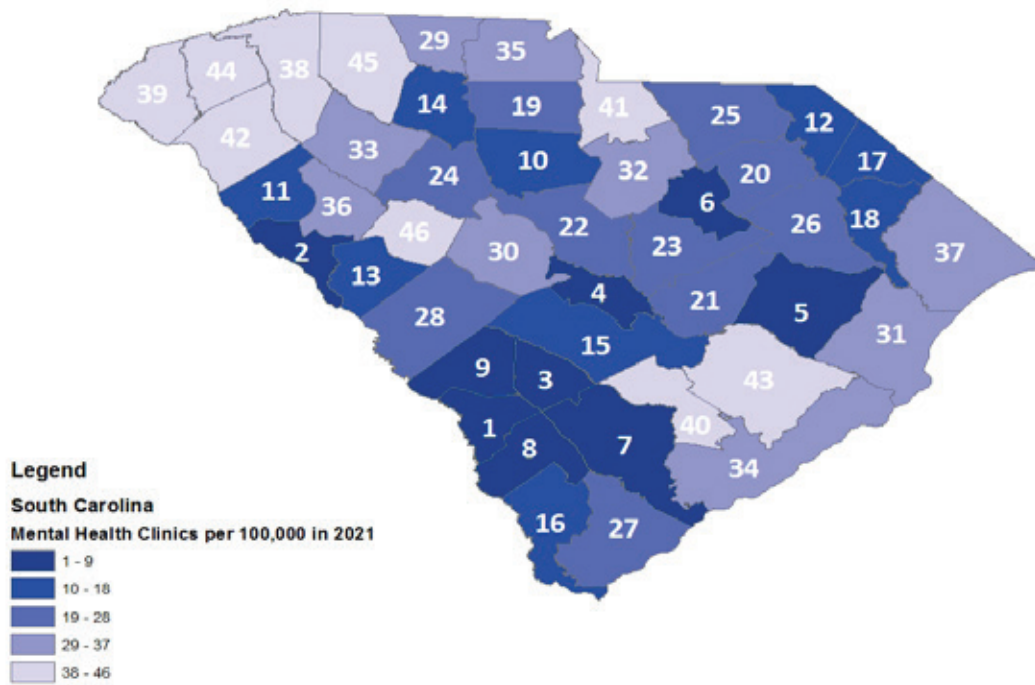
South Carolina County Ranks by Rate of Emergency Medical Personnel 2019



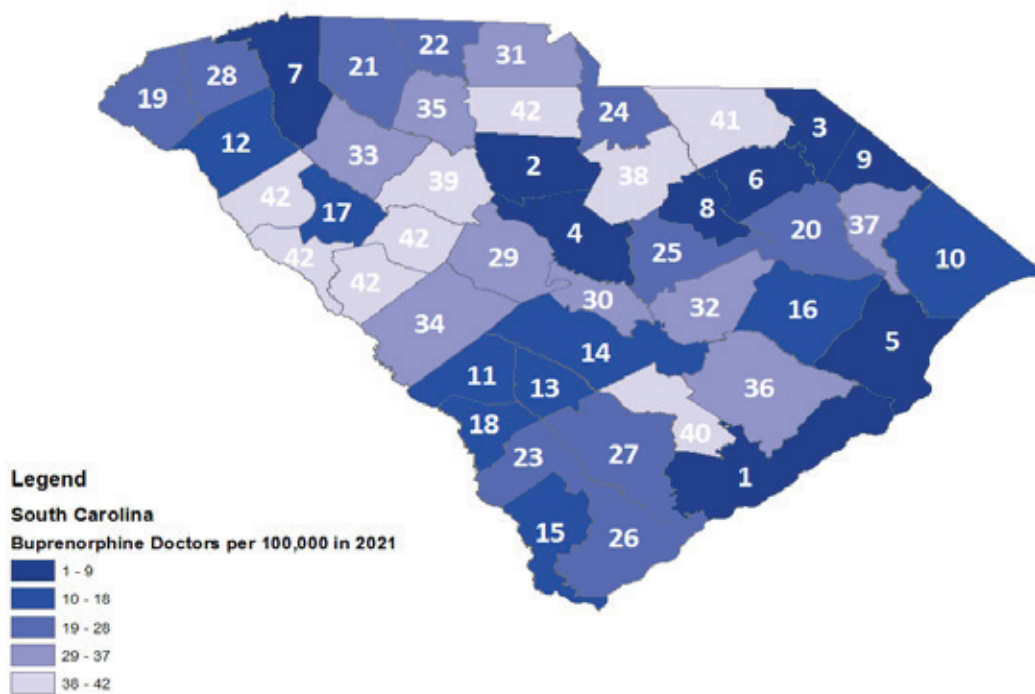
South Carolina County Ranks by Rate of Urgent Care 2019



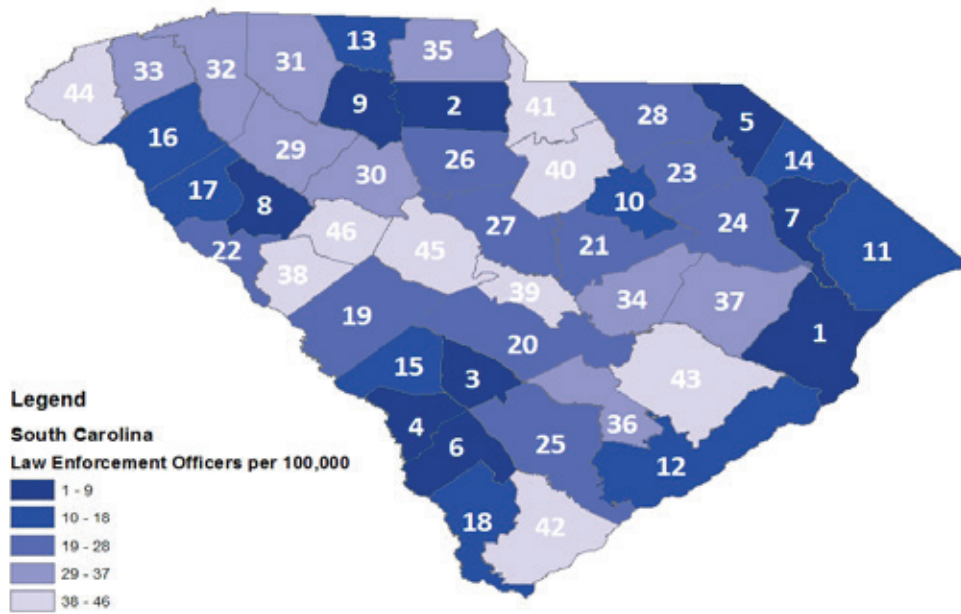
South Carolina County Ranks by Rate of Mental Health Clinics 2019



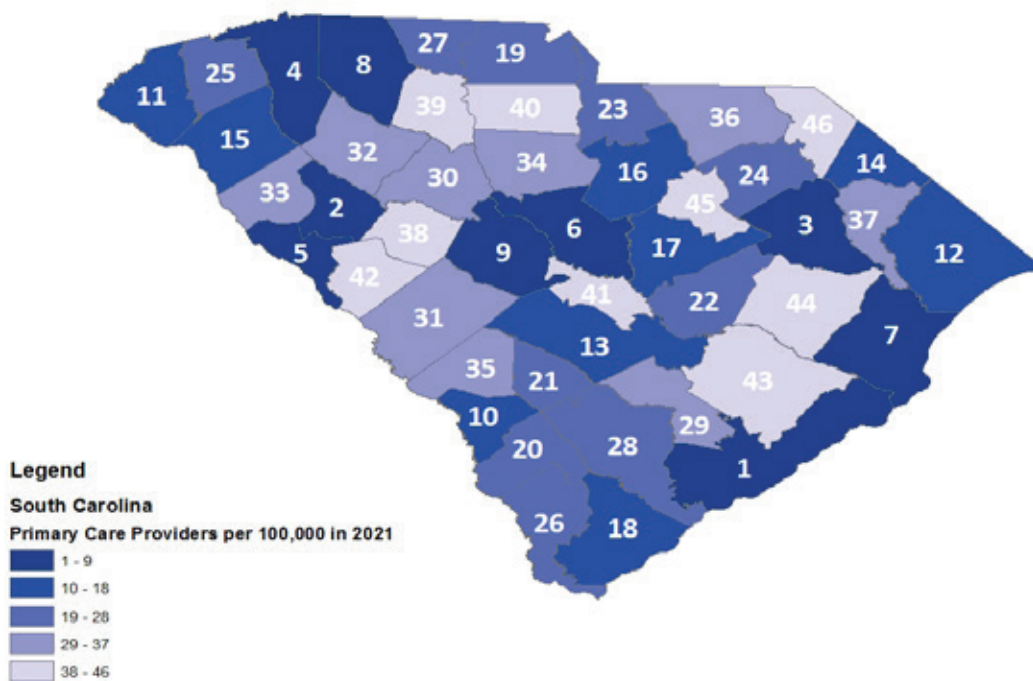
South Carolina County Ranks by Rate of Buprenorphine Doctors 2019



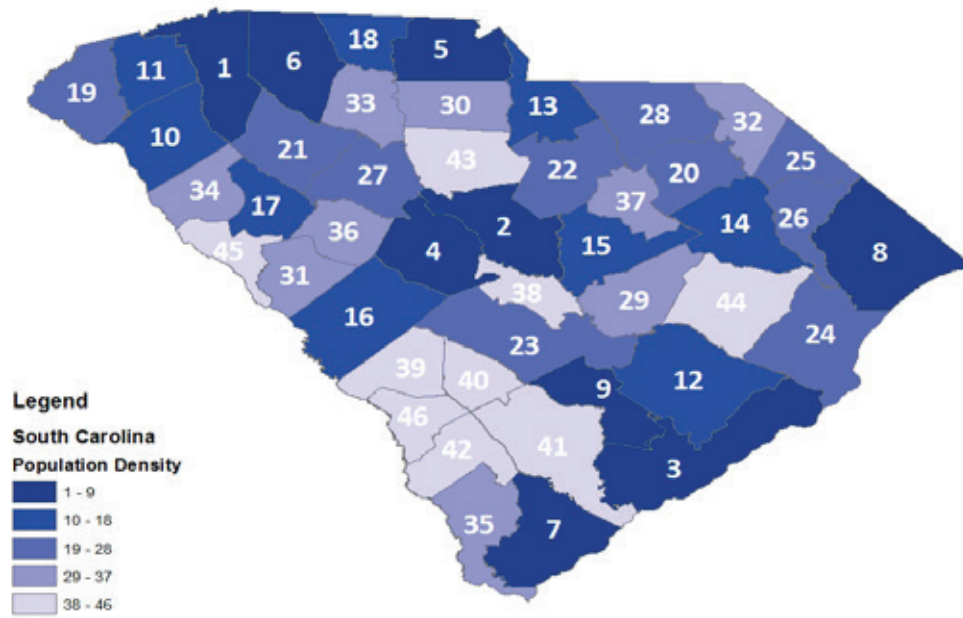
South Carolina County Ranks by Rate of Law Enforcement Officers 2019



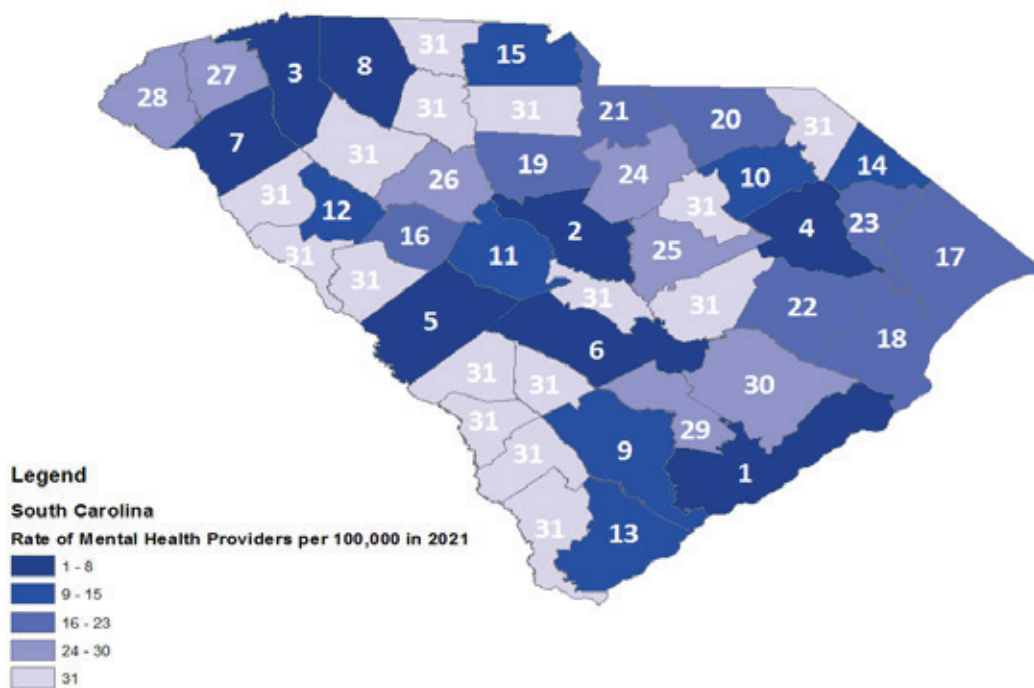
South Carolina County Ranks by Rate of Primary Care Providers 2019



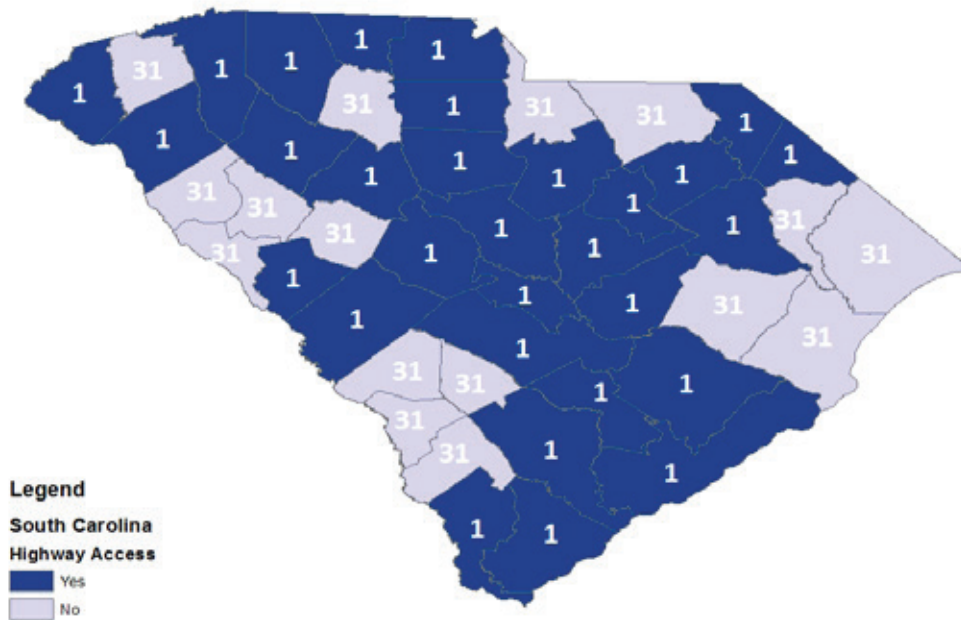
South Carolina County Ranks by Population Density 2019



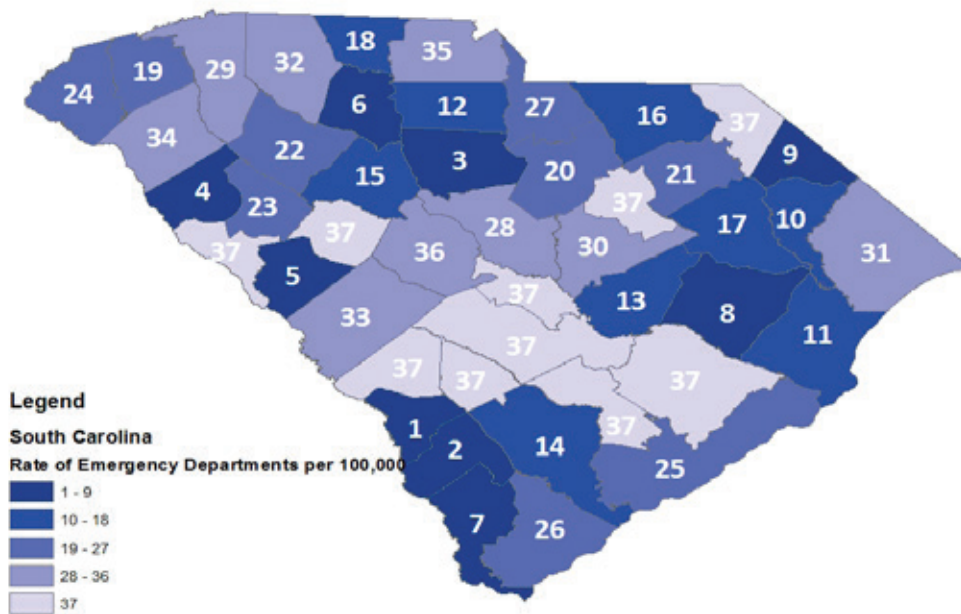
South Carolina County Ranks by Rate of Mental Health Providers 2019



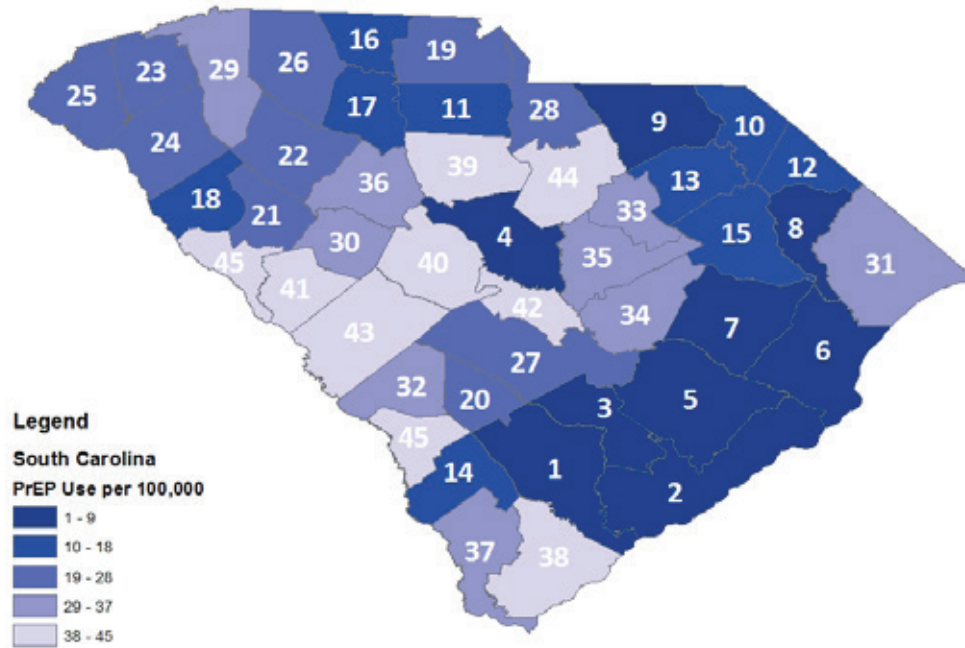
South Carolina County Ranks by Highway Access 2019



South Carolina County Ranks by Hospital Emergency Departments 2019



South Carolina County Ranks by Rate of PrEP Use 2019



3.d. Indicator Ranks

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

Name	% Unemployed	Rx MME	Drug Mortality	HIV Incidence	% Opioid Overdoses	Naloxone	Drug Crime	Acute HCV	Endocarditis Cases	% Rural	HCV - HIV	OD Medicaid Claims	Per Capita Income	SUD Treatment Clinic	Rate of EMS	Urgent Care	Mental Health Clinic	Buprenorphine Drs.	Police Officers	Primary Care Prov.	Population Density	Mental Health Prov.	Highway Access	Hospitals/EDs	PrEP	Risk*	Mitigators*	Vulnerability*
Abbeville	39	32	44	45	18	9	43	30	29	7	17	38	32	14	11	32	11	42	17	33	34	31	N	4	18	43	37	35
Aiken	10	22	20	26	2	15	41	26	26	34	23	37	12	40	33	10	28	34	19	31	16	5	Y	33	43	33	27	28
Allendale	1	4	44	10	43	36	45	17	1	16	27	10	46	1	3	32	1	18	4	10	46	31	N	1	45	12	4	33
Anderson	34	10	18	29	41	26	22	31	28	33	31	39	13	37	20	24	42	12	16	15	10	7	Y	34	24	39	13	42
Bamberg	46	31	44	20	46	45	38	46	38	28	46	44	44	5	22	4	3	13	3	21	40	31	N	37	20	46	12	45
Barnwell	39	38	42	39	22	20	31	25	2	4	21	2	38	10	2	32	9	11	15	35	39	31	N	37	32	23	34	15
Beaufort	44	12	27	28	21	39	33	39	41	42	39	43	1	35	15	2	27	26	42	18	7	13	Y	26	38	44	7	44
Berkeley	34	39	26	37	10	37	11	36	32	38	35	34	4	43	34	27	43	36	43	43	12	30	Y	37	5	41	38	31
Calhoun	24	45	39	22	32	31	39	44	18	1	42	44	20	44	1	32	4	30	39	41	38	31	Y	37	42	42	30	40
Charleston	45	3	5	15	9	11	20	22	27	45	26	17	3	30	13	3	34	1	12	1	3	1	Y	25	2	20	1	46
Cherokee	28	20	34	34	45	27	13	27	31	23	25	32	36	16	36	28	29	22	13	27	18	31	Y	18	16	40	33	37
Chester	34	35	32	19	6	4	5	13	12	14	11	21	27	20	12	32	19	42	2	40	30	31	Y	12	11	10	23	10
Chesterfield	4	28	19	42	33	42	6	19	44	11	15	4	29	6	32	32	25	41	28	36	28	20	N	16	9	22	43	6
Clarendon	3	23	17	7	24	22	26	40	9	3	44	19	31	22	35	8	21	32	34	22	29	31	Y	13	34	15	36	7
Colleton	9	8	29	23	15	18	10	28	16	10	28	6	37	26	10	25	7	27	25	28	41	9	Y	14	1	9	9	21
Darlington	7	2	35	15	27	41	2	34	14	25	37	9	33	21	9	29	20	6	23	24	20	10	Y	21	13	13	15	18
Dillon	19	17	24	1	28	13	27	7	15	15	16	1	45	18	5	22	17	9	14	14	25	14	Y	9	12	3	8	8
Dorchester	39	21	33	26	7	24	19	29	23	43	30	31	5	39	45	19	40	40	36	29	9	29	Y	37	3	37	25	34
Edgefield	28	40	43	13	42	44	46	4	33	12	4	42	17	15	29	32	13	42	38	42	31	31	Y	5	41	27	45	12
Fairfield	32	26	28	41	34	1	29	8	7	9	7	29	34	11	6	32	10	2	26	34	43	19	Y	3	39	11	10	17
Florence	17	1	16	5	20	25	16	14	22	32	24	16	19	12	21	13	26	20	24	3	14	4	Y	17	15	8	5	26
Georgetown	19	15	10	31	8	2	23	23	4	30	22	12	18	33	19	7	31	5	1	7	24	18	N	11	6	5	6	24
Greenville	43	14	7	25	5	10	8	18	20	44	18	14	7	25	24	9	38	7	32	4	1	3	Y	29	29	21	3	43
Greenwood	15	11	21	14	12	15	3	10	24	31	10	27	28	13	39	14	36	17	8	2	17	12	N	23	21	14	14	19
Hampton	6	33	36	6	29	28	21	5	10	8	6	36	40	8	23	32	8	23	6	20	42	31	N	2	14	7	21	9
Horry	24	7	1	17	1	3	4	6	6	37	5	20	14	32	17	5	37	10	11	12	8	17	N	31	31	1	18	1
Jasper	13	43	4	23	14	6	40	42	39	18	40	40	23	3	14	32	16	15	18	26	35	31	Y	7	37	34	11	38
Kershaw	28	16	23	40	38	35	14	16	17	25	13	7	11	36	41	23	32	38	40	16	22	24	Y	20	44	26	44	13
Lancaster	17	30	2	36	4	5	15	9	34	29	8	13	8	42	42	1	41	24	41	23	13	21	N	27	28	6	35	3
Laurens	10	27	25	18	19	8	7	35	21	21	38	11	26	23	26	30	33	33	29	32	21	31	Y	22	22	18	39	5
Lee	23	44	11	44	30	29	34	37	3	13	33	26	42	7	8	32	6	8	10	45	37	31	Y	37	33	35	26	29
Lexington	28	13	13	35	17	34	28	32	35	40	29	33	6	29	44	6	30	29	45	9	4	11	Y	36	40	38	16	41
Marion	12	29	31	11	23	22	36	45	11	24	12	3	43	19	27	32	18	37	7	37	26	23	N	10	8	24	40	14
Marlboro	2	34	37	4	37	30	35	11	46	27	3	28	39	44	4	32	12	3	5	46	32	31	Y	37	10	19	20	20
McCormick	34	46	14	33	40	45	42	3	42	1	41	44	25	2	16	17	2	42	22	5	45	31	N	37	45	36	22	36
Newberry	19	25	40	8	39	38	1	38	13	17	43	35	24	27	18	11	24	39	30	30	27	26	Y	15	36	29	31	22
Oconee	39	9	3	42	35	19	24	21	8	20	19	30	16	28	7	31	39	19	44	11	19	28	Y	24	25	28	29	23
Orangeburg	7	24	9	2	31	32	37	41	30	22	45	25	35	17	46	26	15	14	20	13	23	6	Y	37	27	25	24	25
Pickens	34	5	6	30	11	7	12	33	19	35	34	15	15	34	28	16	44	28	33	25	11	27	N	19	23	17	42	4
Richland	13	18	22	3	25	40	30	1	36	46	1	22	9	31	38	12	22	4	27	6	2	2	Y	28	4	4	2	39
Saluda	19	42	41	45	44	42	9	43	45	6	36	41	21	9	25	32	46	42	46	38	36	16	N	37	30	45	46	27
Spartanburg	24	6	12	38	13	12	32	24	37	39	20	23	10	38	31	15	45	21	31	8	6	8	Y	32	26	30	17	32

Name	% Unemployed	Rx MME	Drug Mortality	HIV Incidence	% Opioid Overdoses	Naloxone	Drug Crime	Acute HCV	Endocarditis Cases	% Rural	HCV - HIV	OD Medicaid Claims	Per Capita Income	SUD Treatment Clinic	Rate of EMS	Urgent Care	Mental Health Clinic	Buprenorphine Drs.	Police Officers	Primary Care Prov.	Population Density	Mental Health Prov.	Highway Access	Hospitals/EDs	PrEP	Risk*	Mitigators*	Vulnerability*
Sumter	5	19	8	12	26	33	25	20	5	36	32	24	22	24	43	18	23	25	21	17	15	25	Y	30	35	16	28	11
Union	16	41	38	32	36	14	18	12	25	19	9	18	30	44	30	20	14	35	9	39	33	31	N	6	17	31	41	16
Williamsburg	32	37	30	9	3	17	44	2	43	5	2	5	41	4	40	32	5	16	37	44	44	22	N	8	7	2	32	2
York	24	36	15	20	16	20	17	15	40	41	14	8	2	41	37	21	35	31	35	19	5	15	Y	35	19	32	19	30

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									
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		

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.
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											
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						

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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.
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											
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	
Charleston	Medical University of South Carolina, Infectious Disease Clinic	X	X		X	X	X		X			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 Trt.	Medication-Assisted Trt.
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					
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									

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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.
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							
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		

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.
Cherokee	Cherokee County Commission on Alcohol and Drug Abuse													X	
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		
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									

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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.
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		
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

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.
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		
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						
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		

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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.
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		
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						

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.
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		
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						
Lancaster	Counseling Services of Lancaster													X	

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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
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		

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.
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		
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		

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Richland	Acercamiento Hispano/Hispanic Outreach	X			X		X								
Richland	Celia Saxon Health Center					X									
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							
Richland	Eau Claire Internal Medicine							X							
Richland	Palmetto Gastroenterology, P.A.							X							
Richland	Wm. Jennings Bryan Dorn VA Medical Center							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 Trt.	Medication-Assisted Trt.
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						
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		

Vulnerability Assessment Report and Jurisdictional Plan

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.
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	
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						
York	York County Treatment Center													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 Trt.	Medication-Assisted Trt.
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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