# 2017 South Carolina Profile on Substance-Related Indicators



# Prepared by

South Carolina Department of Alcohol and Other Drug Abuse Services

State Epidemiological Outcomes Workgroup

#### **About SEOWs**

State Epidemiological Outcomes Workgroups (SEOWs), found throughout the United States, are groups of data experts responsible for bringing data on substance misuse and related behavioral problems to the forefront of strategic planning.

SEOWs are charged with the following four core tasks:

- Identifying, analyzing, profiling, and sharing data from existing state and local sources
- Creating data-guided products that inform prevention planning and policies
- Training communities in understanding, using, and presenting data in an effective manner
- Building state- and local-level monitoring and surveillance systems

#### **South Carolina SEOW Mission**

The mission of the South Carolina State Epidemiological Outcomes Workgroup is to create a highly effective statewide comprehensive substance use prevention data system that will support and enhance efforts to reduce drug misuse across the lifespan of people living in South Carolina.

#### **South Carolina SEOW Overview**

The South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS) is charged with reducing the impact of substance misuse on South Carolina's communities. Since 2006, South Carolina has convened a State Epidemiological Outcomes Workgroup (SEOW) to review population-health data related to substance use and to help prioritize issues that DAODAS should address in future years. This updated South Carolina Profile on Substance-Related Indicators is the most recent edition in a series of state- and county-level profiles designed to provide user-friendly data to help the SEOW, DAODAS, and other stakeholders gauge recent trends in substance use in South Carolina. It is a snapshot of substance use in South Carolina, presenting a set of substance use indicators as measured through national and state data collection efforts. This array of indicators provides a unique overview of substance use, consequences, and risk factors.

# **Epidemiological Profile Format**

The profile covers a large selection of substance use and misuse data for South Carolina. The substances and subsequent consequences covered are grouped into the following categories:

- Alcohol Use
- Tobacco Use
- Marijuana Use
- Prescription Drug Overview
- Substance Use Outcomes
- Infectious Diseases
- Intervention and Treatment Statistics

Data sources for each category are provided on each page and summarized in the Appendix.



# Acknowledgements

The 2017 epidemiological profile is a collective effort of the South Carolina SEOW and individuals from state agencies and organizations. The member organizations of the SEOW are:

S.C. Department of Alcohol and Other Drug Abuse Services

S.C. Department of Health and Environmental Control

S.C. Department of Public Safety

S.C. Department of Juvenile Justice

S.C. Department of Social Services

S.C. Department of Health and Human Services

S.C. Department of Mental Health

S.C. Department of Corrections

S.C. Revenue and Fiscal Affairs Office

S.C. Campaign to Prevent Teen Pregnancy

S.C. Hospital Association

S.C. Law Enforcement Division

Mothers Against Drunk Driving South Carolina

S.C. Pharmacy Association

Children's Trust of South Carolina

Pacific Institute for Research and Evaluation

S.C. Tobacco-Free Collaborative



# **TABLE OF CONTENTS**

POPULATION SNAPSHOT	6
SUMMARY DATA TABLES	8
Youth Data Summary	8
Adult Data Summary	9
ALCOHOL USE	10
Alcohol Use Among High School Students	10
Binge Drinking Among High School Students	11
Drinking and Driving Among High School Students	12
Binge Drinking Among Adults	13
Heavy Use of Alcohol Among Adults	14
Drinking and Driving Among Adults	15
TOBACCO USE	16
Cigarette Use Among High School Students	16
Cigar Use Among High School Students	17
Smokeless Tobacco Use Among High School Students	18
Cigarette, Cigar, or Smokeless Tobacco Use Among High School Students	19
Electronic Vapor Product Use Among High School Students	20
Cigarette Use Among Adults	21
E-cigarette Use Among Adults	22
MARIJUANA USE	23
Marijuana Use Among High School Students	
Marijuana Use Among Adults	24
USE AND MISUSE OF PRESCRIPTION DRUGS	25
Prescription Drugs Dispensed Rate	25
Prescription Drug Use Without a Doctor's Prescription Among High School Students	26
Misuse of Pain Relievers Among Adolescents	27
Misuse of Pain Relievers Among Adults	28
OUTCOMES OF ALCOHOL AND DRUG USE	29
Alcohol-Involved Fatal Traffic Crashes	29
Drug-Related Overdose Deaths	30
Total Drug- and Cocaine-Related Overdose Deaths	31
Teen Births	32
Neonatal Abstinence Syndrome (NAS) Rates Among Inpatient Newborns	33



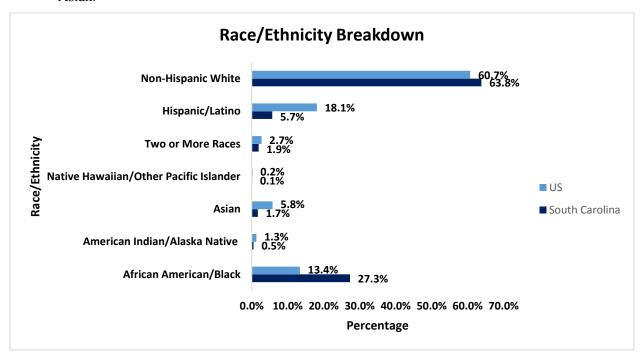
INFECTIOUS DISEASES	34
HIV Incidence Rate	34
Hepatitis C (Acute and Chronic) Incidence Rates	35
INTERVENTION AND TREATMENT	36
Naloxone Administration Rate	36
Hospitalizations in South Carolina Due to Primary and Secondary Alcohol Dependence	37
Hospitalizations in South Carolina Due to Primary and Secondary Opioid Dependence	38
Hospitalizations in South Carolina Due to Drug- and Opioid-Related Overdose	39
Admissions Into State-Funded Treatment Facilities in South Carolina	40
Needing but Not Receiving Treatment for Alcohol Use Disorder	41
Needing but Not Receiving Treatment for Illicit Drug Use	42
APPENDICES	43



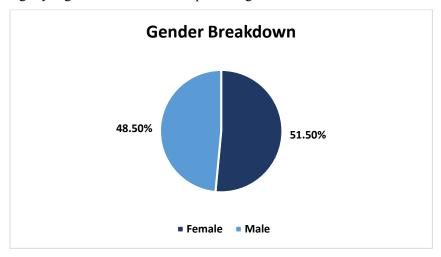
#### **POPULATION SNAPSHOT**

As of 2017, South Carolina is the 24<sup>th</sup> largest state in the nation, with an estimated population of 5,024,369 spread across 46 counties.

• As per the U.S. Census, approximately 63.8% of the state's population is non-Hispanic white, while 27.3% of the population is African American/Black, 5.7% is Hispanic/Latino, and 1.7% is Asian.

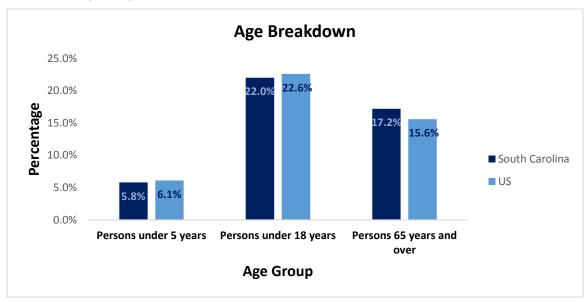


• According to the U.S. Census, approximately 51.5% of the population in South Carolina is female, slightly higher than the national percentage of 50.8%.

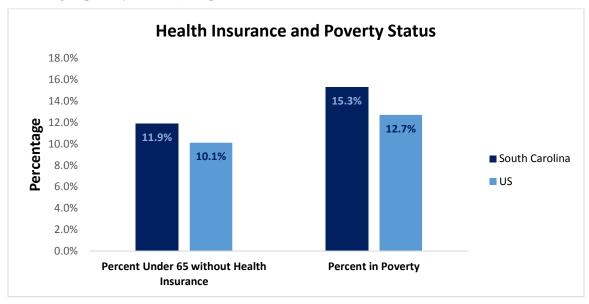




• Compared to the national rates, South Carolina has a slightly older population, with a higher rate of persons 65 and over (17.2%) and slightly lower percentages of persons under 5 (5.8%) and under 18 (22.0%).



• Approximately 11.9% of South Carolinians under the age of 65 are without health insurance, higher than the national rate of 10.1%. South Carolina also has a higher percentage of individuals living in poverty (15.3%) compared to the U.S. rate (12.7%).





#### **SUMMARY DATA TABLES**

The tables below summarize the data in this report, identifying rates in 2016 and 2017, as well as the percent change between the years. **Table 1a** summarizes the youth data, and **Table 1b** shows data regarding adults or any data that include adults.

There are 15 youth indicators and 26 adult indicators (24 with data for 2016 and 2017) in the report. Among the youth indicators, seven showed a positive change from 2016 to 2017 (highlighted in green). Among the adult indicators, 10 showed a positive change from 2016 to 2017.

Table 1a. Youth Data Summary*	Percent		
Indicator	2016	2017	Percent Change
ALCOHOL USE			
Alcohol Use Among High School Students	24.6	25.4	3.15
Binge Drinking Among High School Students	11.5	10.4	-10.58
Drinking and Driving Among High School Students	4.5	7.5	40.00
TOBACCO USE			
Cigarette Use Among High School Students	9.6	10.0	4.00
Cigar Use Among High School Students	11.2	10.8	-3.70
Smokeless Tobacco Use Among High School Students	7.2	8.4	14.29
Cigarette, Cigar, or Smokeless Tobacco Use Among High School Students	19.7	18.8	-4.79
Electronic Vapor Product Use Among High School Students	19.7	11.9	-65.55
MARIJUANA USE			
Marijuana Use Among High School Students	17.8	18.6	4.30
USE AND MISUSE OF PRESCRIPTION DRUGS			
Prescription Drug Use Without a Doctor's Prescription Among High School Students	16.4	15.2	-7.89
Misuse of Pain Relievers Among Adolescents	5.3	4.1	-29.27
OUTCOMES			
Teen Births	43	40	-7.50
Neonatal Abstinence Syndrome (NAS) Rates Among Inpatient Newborns	44	47	6.38
GAPS IN TREATMENT SERVICES			
Needing but Not Receiving Treatment for Alcohol Use (12-17 years old)	3.0	3.1	3.23
Needing but Not Receiving Treatment for Illicit Drug Use (12-17 years old)	3.0	3.1	3.23

<sup>\*</sup>green highlight denotes change in positive direction



Table 1b. Adult Data Summary*	Percent		
Indicator	2016	2017	Percent Change
ALCOHOL USE			Ü
Binge Drinking Among Adults	16.8	15.5	-7.74
Heavy Use Alcohol Among Adults	6.8	6.0	-11.76
TOBACCO USE			
Cigarette Use Among Adults	20.0	18.8	-6.0
USE AND MISUSE OF PRESCRIPTION DRUGS			
Misuse of Pain Relievers Among Adults	3.7	4.6	19.57
OUTCOMES OF ALCOHOL AND DRUG USE			
Alcohol-Involved Fatal Traffic Crashes	31	32	3.13
Drug-Related Overdose Deaths-Total Drugs (counts)	876	1001	12.49
Drug-Related Overdose Deaths-Prescription Drugs (counts)	684	782	12.53
Drug-Related Overdose Deaths-Total Opioids (counts)	616	748	17.65
Drug-Related Overdose Deaths-Heroin (counts)	108	144	25.00
Drug-Related Overdose Deaths-Fentanyl (counts)	190	362	47.51
Drug-Related Overdose Deaths-Cocaine (counts)	139	235	40.85
INFECTIOUS DISEASES			
HIV Incidence Rate	26	26	0.00
Hepatitis C (Acute and Chronic) Incidence Rates	117.54	133.95	13.97
INTERVENTION AND TREATMENT			
Naloxone Administration Rate	13.53	15.43	12.31
Hospitalizations in South Carolina Due to Primary and Secondary Alcohol Dependence (counts)	52,132	49,748	-4.79
Hospitalizations in South Carolina Due to Primary and Secondary Opioid Dependence (counts)	11,335	10,717	-5.77
Hospitalizations in South Carolina Due to Drug Overdose (counts)	44,197	43,385	-1.84
Hospitalizations in South Carolina Due to Opioid Overdose (counts)	7,052	6.961	-1.29
Overall Admissions Into State-Funded Treatment Facilities in South Carolina	36,057	34,979	-3.08
Opioid Admissions Into State-Funded Treatment Facilities in South Carolina	5,689	6,305	9.77
GAPS IN TREATMENT SERVICES			
Needing but Not Receiving Treatment for Alcohol Use (18-25 years old)	10.2	9.9	-3.03
Needing but Not Receiving Treatment for Alcohol Use (26+ years old)	5.4	4.8	-12.50
Needing but Not Receiving Treatment for Illicit Drug Use (18-25 years old)	6.4	7.5	14.67
Needing but Not Receiving Treatment for Illicit Drug Use (26+ years old)	1.5	1.9	21.05

<sup>\*</sup>yellow highlight denotes change in positive direction

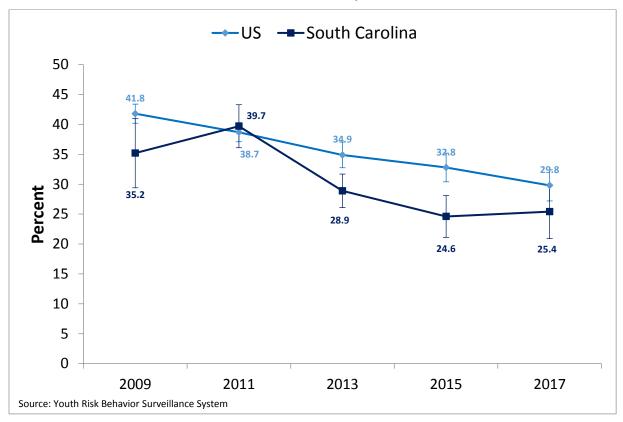


# **ALCOHOL USE**

#### **Alcohol Use Among High School Students**

Self-reported past-30-day alcohol use among high school students in the U.S. has been on the decline since 2009. Use among high school students in South Carolina declined from 2009 to 2015, reaching 24.6% before slightly increasing in 2017 to 25.4%.

Past-30-Day Alcohol Use Among High School Students, South Carolina and U.S., 2009 to 2017

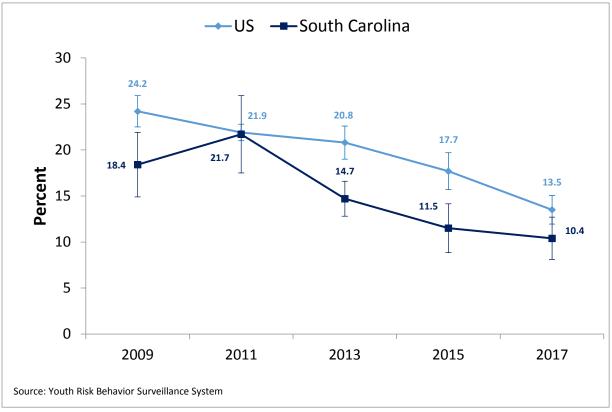




# **Binge Drinking Among High School Students**

Self-reported binge drinking in the past 30 days among high school students has declined in South Carolina and the U.S. since 2009, with South Carolina having consistently lower rates than the overall national rate. In 2017, 10.4% of South Carolina high school students reported binge drinking in the past 30 days, down from 11.5% in 2015. During this time, national rates declined from 17.7% in 2015 to 13.5% in 2017.





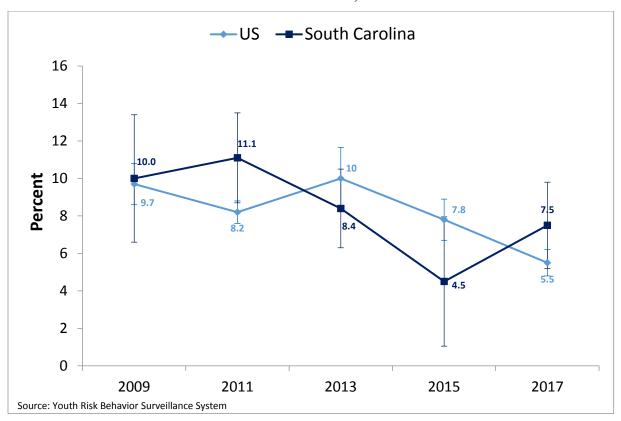
<sup>\*</sup>Defined as five or more drinks in a row within a couple of hours on at least one day.



# **Drinking and Driving Among High School Students**

Self-reported rates of drinking and driving during the past 30 days among high school students in South Carolina and the U.S. have fluctuated from 2009 to 2017. Rates in the U.S. have been on the decline from 2013 to 2017, from 10% to 5.5%. Rates in South Carolina had been on the decline from 11.1% in 2011 to 4.5% in 2015 before increasing to 7.5% in 2017.

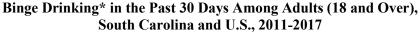
# Drinking and Driving in the Past 30 Days Among High School Students, South Carolina and U.S., 2009 to 2017

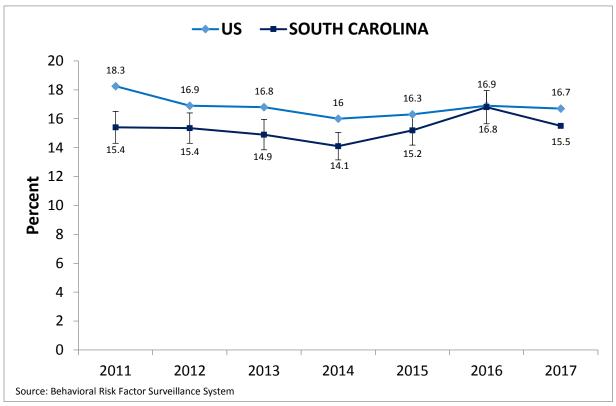




#### **Binge Drinking Among Adults**

Self-reported binge drinking in the past 30 days among adults was on the decline from 2011 to 2014 in both South Carolina and the U.S. before an uptick in rates in 2015. The rates in South Carolina have been consistently lower than the U.S. rates, although rates were nearly identical in 2016 and before differentiating again in 2017. 15.5% of adults in the state engaged in binge drinking in the past 30 days in 2016, down from 16.8% in 2015, and approaching the consistent rate level prior to 2016.





<sup>\*</sup>Defined as five or more drinks on a single occasion for men and four or more drinks on a single occasion for women.

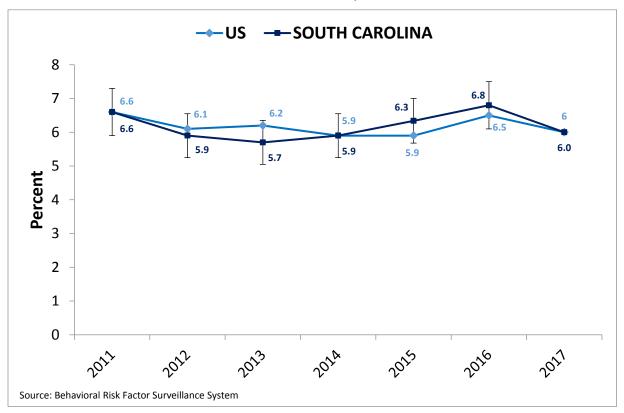
Notes: All U.S. data are median values for all the states and the District of Columbia combined and, therefore, do not include confidence intervals. We only present data since 2011 because data prior to 2011 are not comparable to data from 2011 to 2016.



# **Heavy Use of Alcohol Among Adults**

Self-reported heavy alcohol use among adults in South Carolina dipped slightly from 2011 to 2013, then rose from 2014 to 2016 before a decline in 2017. Rates in South Carolina and the U.S. have been nearly identical during this period, with South Carolina surpassing the U.S. average in this category in 2015 before returning to mirroring levels in 2017. In 2017, 6.0% of adults in the state engaged in heavy drinking in the past 30 days in both South Carolina and nationally, down from 6.8% locally and 6.5% nationally.

# Heavy Alcohol Use\* Among Adults (18 and Over), South Carolina and U.S., 2011 to 2017



<sup>\*</sup>Defined as having more than two drinks per day for adult men and more than one drink per day for adult women.

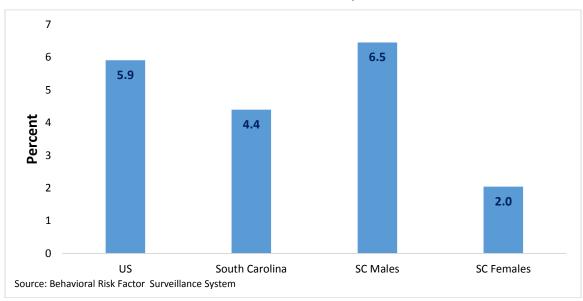
Notes: All U.S. data are median values for all the states and the District of Columbia combined and, therefore, do not include confidence intervals. We only present data since 2011 because data prior to 2011 are not comparable to data from 2011 to 2016.



# **Drinking and Driving Among Adults**

Drinking and driving among those who self-reported drinking any alcohol in the past 30 days is slightly higher in South Carolina than in the U.S. as a whole. 4.4% of adults self-reported drinking while driving any alcohol over the past 30 days in 2016 in the U.S. as a whole, while 5.9% of adults in South Carolina reported doing so. In South Carolina, adult males had over three times the rate of drinking and driving over the past 30 days at 6.5%, compared to adult females where only 2.0% reported drinking and driving in 2016.

# Drinking and Driving in the Past 30 Days Among Adults, South Carolina and U.S., 2016



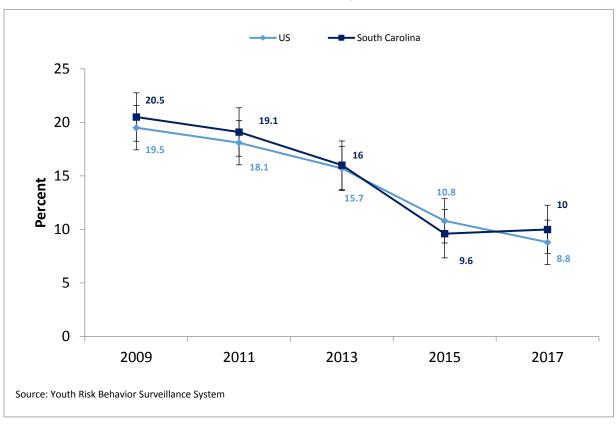


#### **TOBACCO USE**

#### **Cigarette Use Among High School Students**

Cigarette use during the past 30 days among high school students from 2009 to 2017 has been on the decline in the U.S. and was on the decline in South Carolina until 2015. In 2017, self-reported rates in South Carolina (10.0%) were above the U.S. rates (8.8%) for the first time since 2013. The U.S. overall rate in 2017 was 8.8%, down from 10.8% in 2015, while the South Carolina rates increased slightly from 9.6% to 10.0%.

Past-30-Day Cigarette Use Among High School Students, South Carolina and U.S., 2009 to 2017

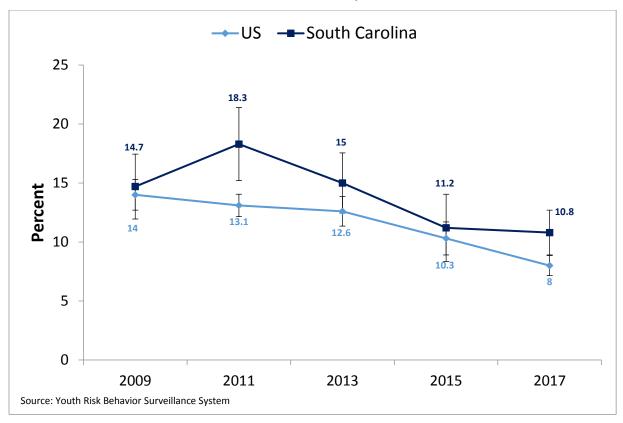




# **Cigar Use Among High School Students**

Cigar use during the past 30 days among high school students has declined since 2009 in South Carolina and the U.S. as a whole, with self-reported South Carolina rates consistently being slightly higher than the U.S. rates. In 2017, 10.8% of South Carolina high school students used cigars during the past 30 days, dipping from 11.2% in 2015.

Past-30-Day Cigar Use Among High School Students, South Carolina and U.S., 2009 to 2017

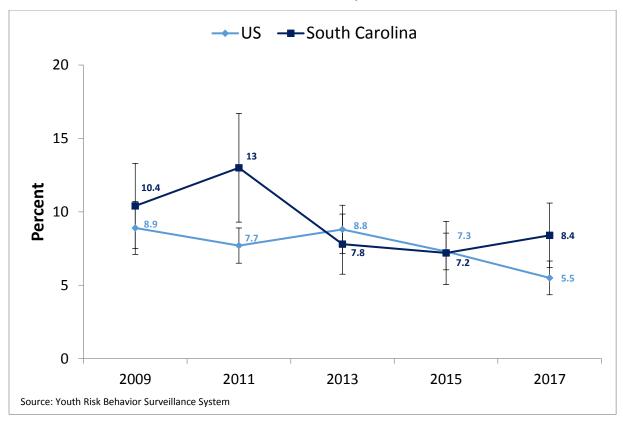




# **Smokeless Tobacco Use Among High School Students**

Self-reported use of smokeless tobacco during the past 30 days among high school students has fluctuated since 2009 in South Carolina and gradually decreased in the U.S. as a whole. In 2017, 8.4% of South Carolina high school students used smokeless tobacco during the past 30 days, up from 7.2% in 2015. By contrast, overall U.S. rates declined from 7.3% to 5.5% during the same time period.

Past-30-Day Smokeless Tobacco Use Among High School Students, South Carolina and U.S., 2009 to 2017

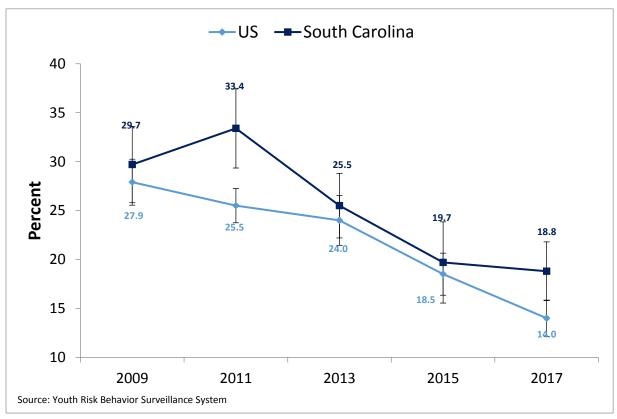




# Cigarette, Cigar, or Smokeless Tobacco Use Among High School Students

Self-reported use of cigarettes, cigars, or smokeless tobacco during the past 30 days among high school students has declined since 2009 in the nation as a whole and since 2011 in South Carolina. Rates in South Carolina tend to be slightly higher than U.S. overall rates, with the peak in South Carolina coming in 2011 (33.4%). In 2017, 18.8% of South Carolina high school students used cigarettes, cigars, or smokeless tobacco during the past 30 days, down from 19.7% in 2015. U.S. overall rates during that time declined from 18.5% to 14.0%.

Past-30-Day Cigarette, Cigar, or Smokeless Tobacco Use Among High School Students, South Carolina and U.S., 2009 to 2017

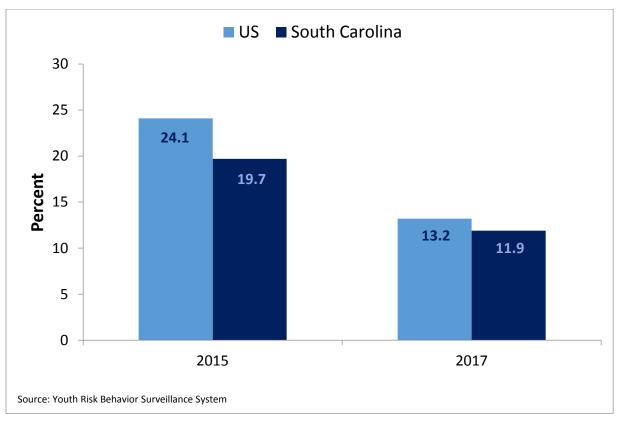




# **Electronic Vapor Product Use Among High School Students**

Self-reported use of electronic vapor products (e.g., e-cigarettes, e-cigars, e-pipes, vape pipes, e-hookahs) during the past 30 days among high school students dipped significantly in both South Carolina and the U.S. as a whole from 2015 to 2017. In 2017, overall U.S. rates saw a 45% decrease (from 24.1% to 13.2%), while South Carolina saw a 40% decrease (from 19.7% to 11.9%).

# Electronic Vapor Product Use Among High School Students, South Carolina and U.S., 2015 to 2017





# **Cigarette Use Among Adults**

Self-reported cigarette use during the past 30 days among adults has decreased since 2011 in South Carolina and the U.S. as a whole. South Carolina rates were consistently higher than U.S. rates. In 2017, 18.8% of South Carolina adults smoked cigarettes during the past 30 days, slightly down from 20.0% in 2016.

US SOUTH CAROLINA 30 23.1 25 22.5 21.5 19.7 20 18.8 21.05 19.6 Percent 19 18.1 17.5 15 17.1 16.3 10 5 0 2011 2012 2013 2014 2015 2016 2017 Source: Behavioral Risk Factor Surveillance System

Past-30-Day Cigarette Use Among Adults (18 and Over), South Carolina and U.S., 2011-2017

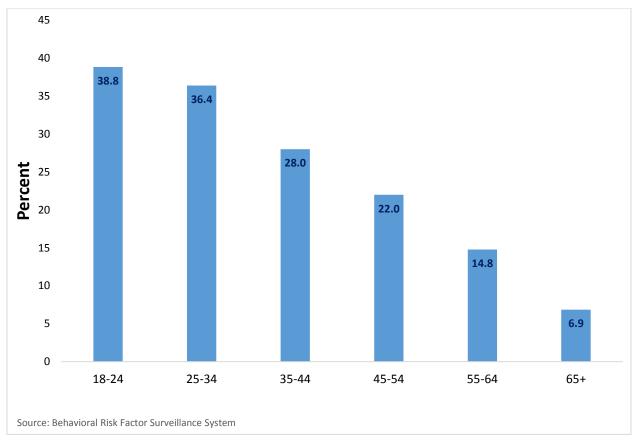
Notes: All U.S. data are median values for all the states and the District of Columbia combined and, therefore, do not include confidence intervals. We only present data since 2011 because data prior to 2011 are not comparable to data from 2011 to 2016.



# **E-cigarette Use Among Adults**

Self-reported use of e-cigarettes among adults in South Carolina is most common among persons ages 18-24, with 38.8% reporting in 2016 that they had ever used an e-cigarette. Use consistently decreases with age, as the lowest reported use is among persons ages 65+ with only 6.9% having ever used an e-cigarette.

# Ever Having Used an E-cigarette Among Adults (18 and Over), South Carolina by Age Groups, 2016



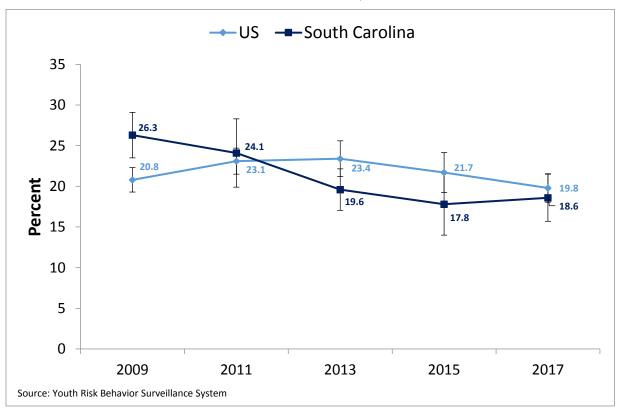


#### **MARIJUANA USE**

# Marijuana Use Among High School Students

Self-reported marijuana use during the past 30 days among high school students had been on the decline in South Carolina from 2009 to 2015 before slightly increasing in 2017. Rates in the U.S. overall have been on the decline since 2013, although rates typically are higher than those of South Carolina. In 2017, 18.6% of South Carolina high school students reported use of marijuana during the past 30 days, up from 17.8% in 2015.

Past-30-Day Marijuana Use Among High School Students, South Carolina and U.S., 2009-2017

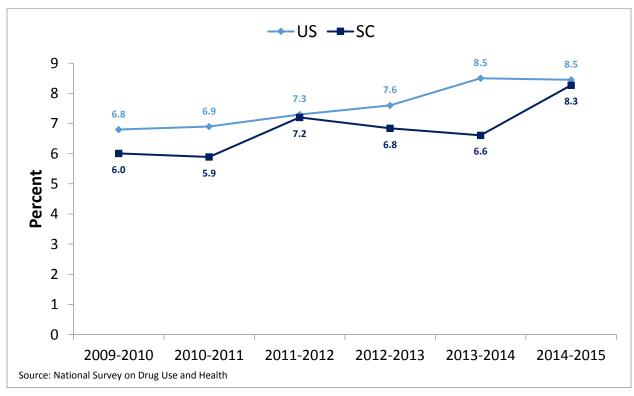




# Marijuana Use Among Adults

Marijuana use during the past 30 days among adults has fluctuated since 2009-2010 in South Carolina, while it has steadily risen in the U.S. as a whole. In 2014-2015, 8.3% of South Carolina adults used marijuana during the past 30 days, nearing the national average of 8.5% and up from 6.6% in 2013-2014.

Past-30-Day Marijuana Use Among Adults (18 and Over), South Carolina and U.S., 2009-2010 to 2014-2015



Note: Confidence intervals were not available.



# **USE AND MISUSE OF PRESCRIPTION DRUGS**

#### **Prescription Drugs Dispensed Rate**

The rate of prescription drugs dispensed across South Carolina fluctuated between 2014 and 2017 based on the class of drug. The rate of opioid prescriptions being dispensed in 2017 was 862.6 per 1,000 persons, a significant decrease from the peak of opioids dispensed in 2015. Depressants (benzodiazepines) dispensed across South Carolina have slowly decreased between 2014 and 2017. Depressants were dispensed at a rate of 500.4 per 1,000 persons in 2017, down from 530.2 per 1,000 in 2016. The rate of stimulants dispensed across the state has been slowly increasing over the four-year period as shown below. The rate of prescription drugs dispensed by county from 2014 to 2017 can be found in Appendix B.

# Prescription Drugs Dispensed Rates, South Carolina, 2014-2017

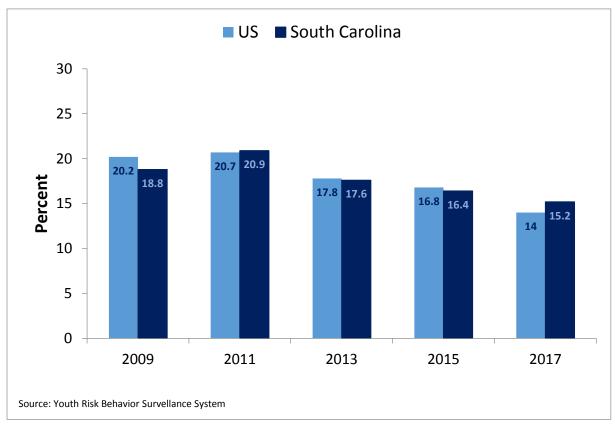




# Prescription Drug Use Without a Doctor's Prescription Among High School Students

High school students who have reported ever using prescription drugs without a doctor's prescription have declined in South Carolina and the U.S. since 2011, with rates being very similar during that time frame. In 2017, 15.2% of South Carolina high school students reported ever using prescription drugs without a doctor's prescription, down from 16.4% in 2015. During this same time, overall U.S. rates also declined, from 16.8% to 14%.

Lifetime Use of Prescription Drugs Without a Doctor's Prescription, High School Students, South Carolina and U.S., 2009 to 2017

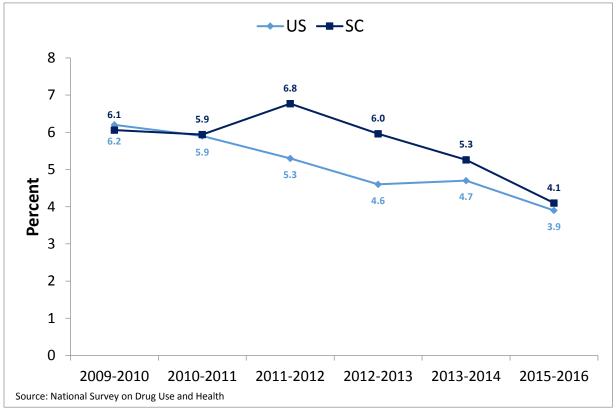




# Misuse of Pain Relievers Among Adolescents

Misuse of pain relievers during the past year among adolescents has decreased in South Carolina after peaking in 2011-2012 and in the U.S. since 2009-2010. In 2015-2016, 4.1% of South Carolina adolescents reported misuse of pain relievers, down from 5.3% in 2013-2014 and significantly down since 2011-2012 when rates were at 6.8%. U.S. rates as a whole in 2015-2016 were at 3.9%, down from 4.7% in 2013-2014.

Past-Year Misuse of Pain Relievers Among Adolescents (Ages 12-17), South Carolina and U.S., 2009-2010 to 2015-2016\*



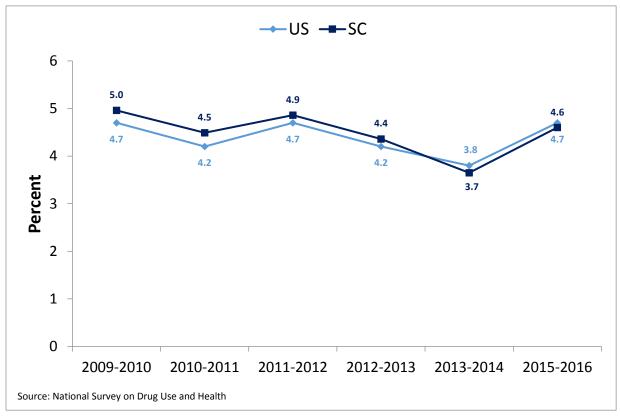
\*Note: No data reported for 2014-2015



# Misuse of Pain Relievers Among Adults

Misuse of pain relievers during the past year among adults was on the decline starting in 2011-2012, before an increase in 2015-2016 in both South Carolina and the U.S. as a whole, with rates for each mirroring one another closely during that time period. In 2015-2016, 4.7% of South Carolina adults reported misuse of pain relievers, up from 3.7% in 2013-2014. Among U.S. adults as a whole, 4.6% reported misuse in 2015-2016, up from 3.8% in 2013-2014.

Past-Year Misuse of Pain Relievers Among Adults (ages 18 and over), South Carolina and U.S., 2009-2010 to 2015-2016\*



\*Note: No data reported for 2014-2015

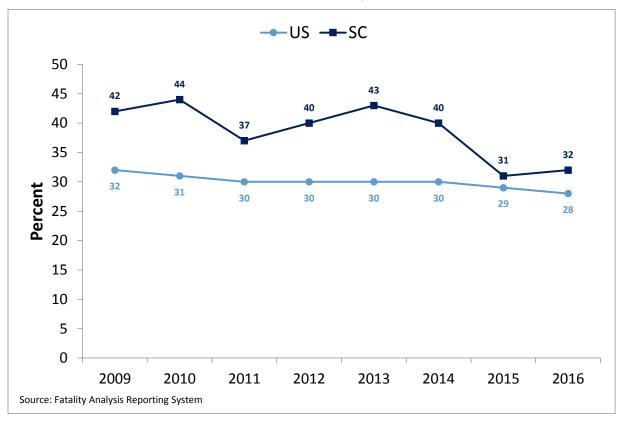


# **OUTCOMES OF ALCOHOL AND DRUG USE**

#### **Alcohol-Involved Fatal Traffic Crashes**

The percent of fatal traffic crashes that were alcohol-involved has fluctuated but generally declined in South Carolina since 2009. In contrast, the U.S. rate has remained quite steady and has been lower than the South Carolina rate, although the difference in rates has decreased significantly in recent years. In 2016, 32% of fatal crashes in the state were alcohol-involved, slightly up from 31% in 2015. Alcohol-involved fatal traffic crashes by county from 2014 to 2016 can be found in Appendix B.

# Alcohol-Involved Fatal Traffic Crashes, South Carolina and U.S., 2009-2016

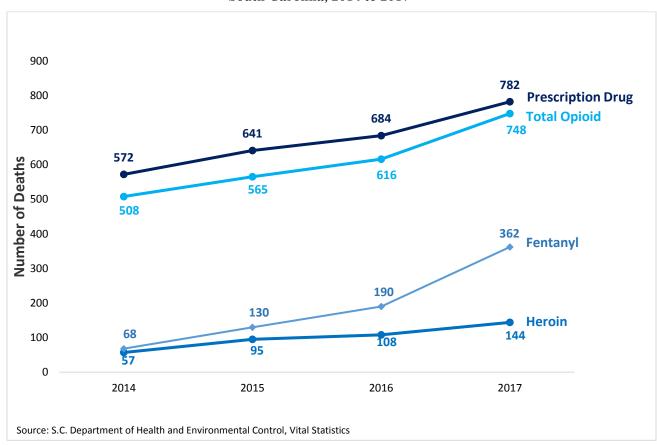




# **Drug-Related Overdose Deaths**

Deaths due to overdose of heroin along with fentanyl, any opioids, and all drugs in general in South Carolina has increased since 2014. In 2017, there were 748 deaths in South Carolina due to an opioid overdose, up from 616 in 2016 (21% increase) and 565 in 2015. During that same time period, deaths due to overdose of fentanyl increased from 130 to 362 in South Carolina. From 2014 to 2017, deaths due to overdose of any drug increased by 39%, while deaths due to heroin have tripled and opioids in general have increased by 47%. Drug-related overdose deaths by county during this four-year period can be found in Appendix C.

Deaths Due to Overdose of Fentanyl, Heroin, Prescription Drug, and Any Opioids, South Carolina, 2014 to 2017

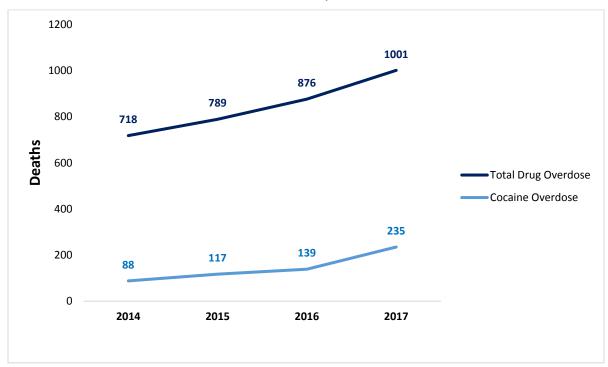




# **Total Drug- and Cocaine-Related Overdose Deaths**

Total deaths due to a drug overdose of any kind as well as deaths due to cocaine overdose across South Carolina have been on the rise since 2014. In 2017, there were 1,001 total deaths and 235 deaths in South Carolina due to cocaine overdose, up significantly from 876 and 139 in 2016, respectively. Total deaths due to a drug overdose of any kind have increased by 39% and cocaine-related overdoses by 167% from 2014 to 2017. Total drug-related deaths and cocaine-related overdose deaths by county during this four-year period can be found in Appendix D.

Total Deaths Due to Drug Overdose and Cocaine, South Carolina, 2014 to 2017

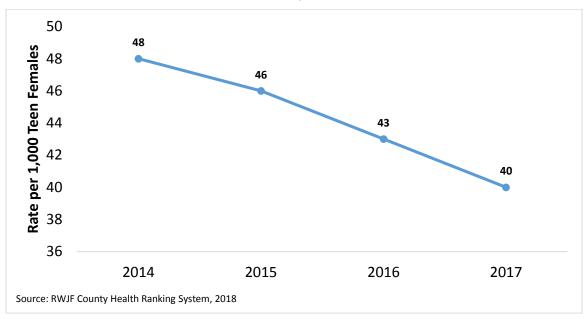




#### **Teen Births**

Birth rates among females between the ages of 15 and 19 have continued on a downward trend from 2014 to 2017. Rates are currently at 40 births per 1,000 teenage females, a 17% decline from rates in 2014. Teen birth rates by county during this four-year period can be found in Appendix E.

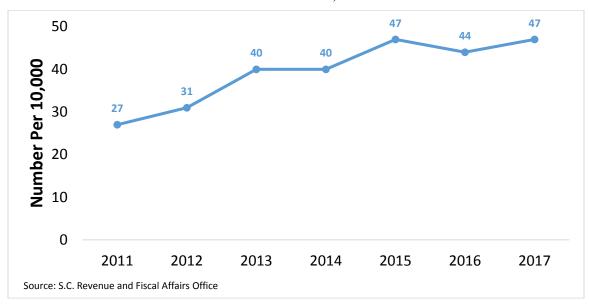
Teen Birth Rates, South Carolina, 2014 to 2017



# Neonatal Abstinence Syndrome (NAS) Rates Among Inpatient Newborns

Diagnoses of Neonatal Abstinence Syndrome (NAS) have gradually increased in South Carolina since 2011. In 2017, the rate of NAS was 47 per 10,000 newborns, which is on par with rates in 2015 and slightly up from 2016, when 44 per 10,000 newborns were diagnosed with NAS.

# Neonatal Abstinence Syndrome Diagnoses, South Carolina, 2011-2017



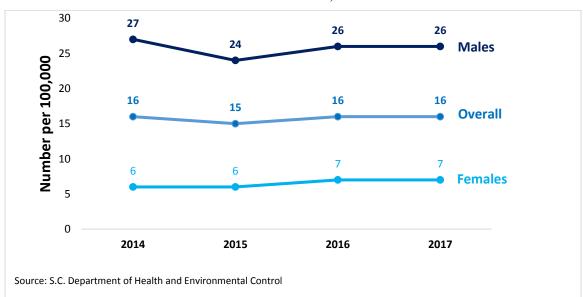


#### **INFECTIOUS DISEASES**

#### **HIV Incidence Rates**

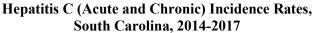
HIV incidence rates have remained stagnant among males and females in South Carolina from 2014 to 2017, with males seeing a slight dip in rates in 2015 before the rates rose again in 2016. Males have nearly four times the rate of HIV incidence as females over the four-year span and over 1.6 times the rate of HIV incidence as the state overall. Rates in 2017 remained consistent with the rate of HIV incidence in 2016 among all categories displayed. HIV incidence rates by county during this four-year period can be found in Appendix F.

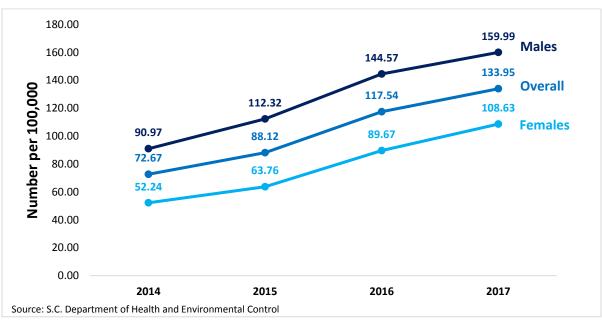
# HIV Incidence Rates, South Carolina, 2014-2017



# **Hepatitis C (Acute and Chronic) Incidence Rates**

Incidence rates of Hepatitis C have increased at a significant rate from 2014 to 2017 in South Carolina among both males and females. Males have seen a 75% increase in Hepatitis C incidence over the four-year period and have consistently higher rates than females and the South Carolina rates as a whole. There has been an even larger surge in Hepatitis C incidence among females, with rates increasing by 108% since 2014, which is in line with overall rates that have increased by 84% across the state. Hepatitis C incidence rates by county during this four-year period can be found in Appendix G.





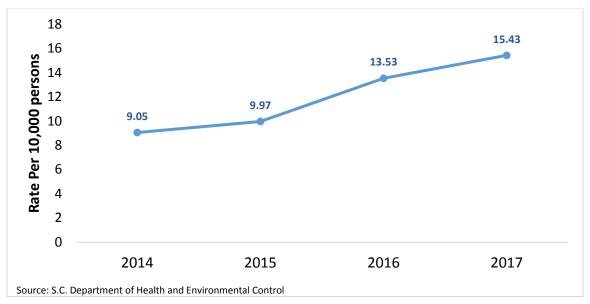


#### INTERVENTION AND TREATMENT

#### **Naloxone Administration Rate**

The rate of naloxone administrations across South Carolina has continually increased from 2014 to 2017. Rates of reported administrations by Emergency Medical Services in South Carolina have increased by 70% during this time period. Rates of naloxone administrations by county during this four-year period can be found in Appendix H.

# Rate of Naloxone Administrations, South Carolina, 2014-2017

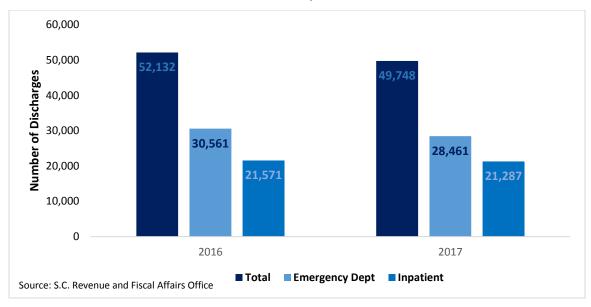




### Hospitalizations in South Carolina Due to Primary and Secondary Alcohol Dependence

Hospitalization discharges across the state due to a reported primary or secondary alcohol dependence dropped overall from 2016 to 2017, particularly the number of discharges recorded from emergency departments (6.9% decrease). Discharges from inpatient departments across the state dipped slightly, while the total number of alcohol-related hospitalizations decreased by 4.6%.

Inpatient, Emergency Department, and Total Hospitalizations Due to Alcohol Dependence, South Carolina, 2016-2017

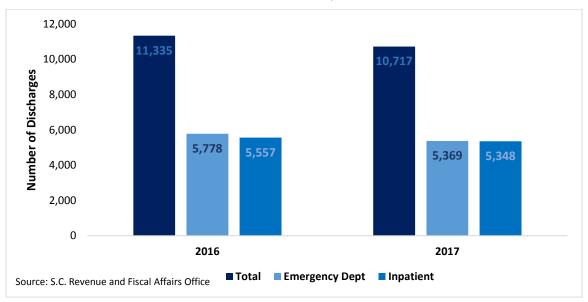




### Hospitalizations in South Carolina Due to Primary and Secondary Opioid Dependence

Hospitalizations in South Carolina due to a primary or secondary opioid dependence decreased from 2016 to 2017. Total, emergency department, and inpatient discharges all saw slight decreases of 5.5%, 7.1%, and 3.8%.

Inpatient, Emergency Department, and Total Hospitalizations Due to Opioid Dependence, South Carolina, 2016-2017

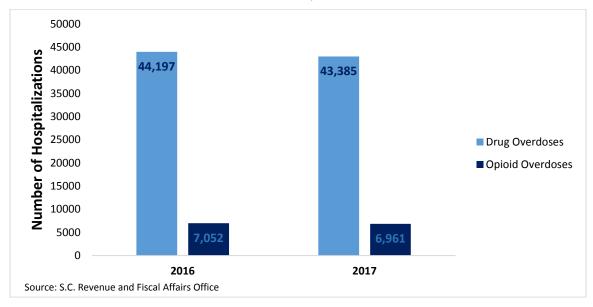




### Hospitalizations in South Carolina Due to Drug- and Opioid-Related Overdose

Hospitalizations across the state due to a drug-related overdose decreased by 1.8% from 2016 to 2017 (44,197 to 43,385). The number of hospitalization discharges due to an opioid-related overdose also decreased from 7,052 in 2016 to 6,961 in 2017 (-1.3%).

Inpatient, Emergency Department, and Total Hospitalizations Due to Drug and Opioid Overdose, South Carolina, 2016-2017

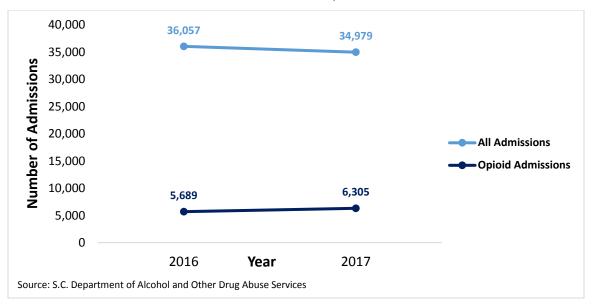




#### **Admissions Into State-Funded Treatment Facilities in South Carolina**

The overall number of admissions for substance use disorder treatment across South Carolina's state-funded providers decreased by 3% from 2016 to 2017. However, admissions for treatment related to opioid use increased by 11%. Admissions into treatment by facility during this two-year period can be found in Appendix I.

#### Admissions for Substance Use Treatment, South Carolina, 2016-2017

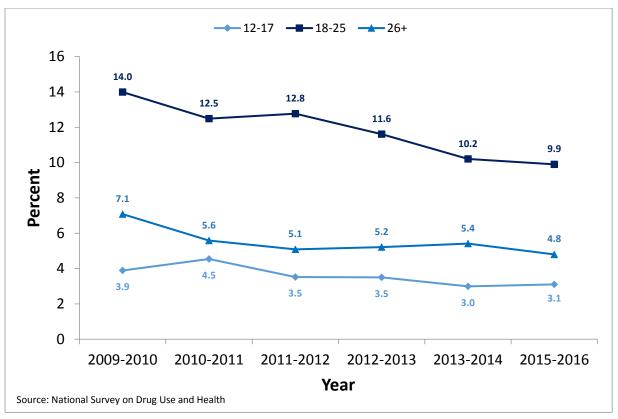




### Needing but Not Receiving Treatment for Alcohol Use Disorder

The percentage of persons who reported needing but not receiving treatment for alcohol use disorder has decreased for various age groups in South Carolina since 2009-2010. The largest gap in treatment continues to be among persons ages 18-25, where in 2015-2016, 9.9% reported needing but not receiving treatment for alcohol use disorder, although rates are down from 10.2% in 2013-2014.

### Needing but Not Receiving Treatment for Alcohol Use Disorder, South Carolina by Age Groups, 2009-2010 to 2015-2016\*



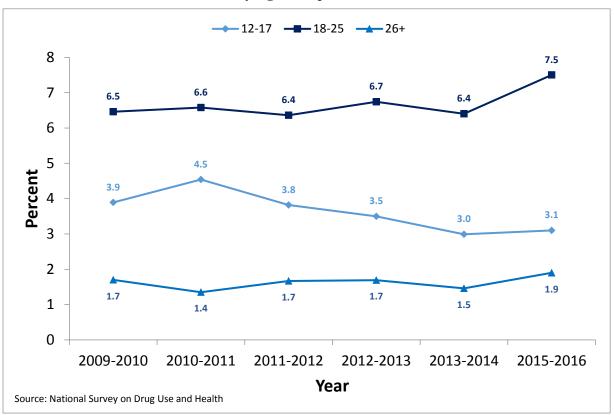
\*Note: No data reported for 2014-2015



#### Needing but Not Receiving Treatment for Illicit Drug Use

The percentage of persons who reported needing but not receiving treatment for illicit drug use has increased among persons ages 18-25 and ages 26 and older. Rates have decreased among persons ages 12-17. As is the case with treatment for alcohol use, the largest gap in treatment is clearly among persons ages 18-25, with 7.5% reporting needing but not receiving treatment in 2015-2016, up from 6.4% in 2013-2014. After a peak of 4.5% of persons ages 12-17 needing treatment but not receiving it in 2010-2011, rates have declined annually to a rate of 3.1% in 2015-2016.

#### Needing but Not Receiving Treatment for Illicit Drug Use, South Carolina by Age Groups, 2009-2010 to 2015-2016\*



\*Note: No data reported for 2014-2015



### **APPENDICES**

## Appendix A. Prescription Drugs Dispensed Rate (per 1,000) by County, 2014-2017

		2014			2015			2016			2017	
County	Benzodiazepines	Opioid	Stimulant									
Abbeville	618.91	1068.02	276.23	600.83	1109.94	332.75	617.08	1133.08	306.17	569.29	1027.99	309.64
Aiken	567.46	829.95	244.07	506.13	931.28	285.00	552.20	880.35	269.48	537.36	818.11	272.25
Allendale	296.75	882.21	130.38	377.82	710.17	211.39	301.38	940.30	146.38	299.04	836.70	138.19
Anderson	698.76	1074.53	254.24	624.10	1139.23	348.87	700.81	1113.28	286.65	670.66	1026.39	297.62
Bamberg	449.15	874.79	261.89	494.62	907.93	271.30	480.95	977.28	285.85	440.65	918.36	294.28
Barnwell	575.71	1033.65	296.87	588.49	1068.08	322.16	568.40	1097.98	303.54	523.68	1029.00	296.74
Beaufort	372.15	625.59	182.18	377.83	693.32	212.02	376.33	667.37	205.46	366.24	621.60	200.05
Berkeley	453.74	921.77	327.06	525.28	960.46	294.04	449.82	916.13	357.74	418.20	828.68	356.97
Calhoun	467.80	871.08	292.31	509.64	933.50	276.37	494.73	922.28	346.58	473.27	862.55	353.99
Charleston	486.55	706.81	413.41	492.98	908.87	275.56	467.91	694.29	448.69	449.11	637.59	456.17
Cherokee	728.06	1339.07	241.75	638.34	1179.86	353.90	711.05	1405.61	242.45	673.83	1304.28	242.80
Chester	690.51	1302.01	269.81	670.53	1237.18	374.07	660.82	1306.17	278.02	630.26	1191.60	283.15
Chesterfield	712.07	1209.30	217.41	569.53	1056.61	323.92	662.14	1164.00	211.94	620.77	1136.18	227.58
Clarendon	453.70	1014.51	227.54	475.50	871.80	264.07	452.18	1050.16	247.53	430.51	977.39	251.58
Colleton	603.29	1334.97	254.45	678.22	1236.49	379.58	606.78	1435.20	304.49	557.90	1332.35	310.28
Darlington	848.80	1516.98	299.58	784.58	1436.00	442.12	821.92	1541.56	319.62	770.52	1450.61	322.71
Dillon	510.87	1261.96	202.30	556.09	1043.61	320.84	532.67	1294.45	231.58	469.28	1227.61	253.31
Dorchester	503.63	914.32	372.43	548.90	1003.50	307.85	503.83	944.47	406.68	466.28	854.30	396.66
Edgefield	427.33	691.11	191.32	393.34	724.67	225.28	433.00	795.93	206.54	388.75	692.32	200.43
Fairfield	480.46	1010.05	173.96	515.06	957.01	287.11	480.11	1017.35	183.91	444.95	923.56	177.11
Florence	584.46	1132.33	272.58	610.27	1123.99	342.35	586.40	1188.26	304.84	558.17	1105.91	308.81
Georgetown	567.16	1152.49	342.98	568.93	1039.46	313.89	533.97	1114.19	361.70	507.52	1048.63	374.49
Greenville	525.08	848.74	313.27	512.26	937.30	285.91	512.12	848.78	345.10	488.83	758.21	348.48
Greenwood	528.78	1024.91	296.35	556.97	1017.63	309.90	516.46	1015.34	308.61	495.47	928.25	299.13
Hampton	375.79	1014.90	164.96	477.98	868.12	265.60	373.61	1065.91	183.92	362.41	1005.92	182.23
Horry	632.13	1062.57	273.99	588.09	1077.13	328.01	606.82	1046.15	284.20	550.06	966.79	282.50
Jasper	294.63	730.55	137.47	339.89	622.56	194.76	288.18	771.83	140.59	288.00	743.27	145.79
Kershaw	670.26	1051.11	351.67	612.46	1132.01	346.98	644.66	1086.29	369.80	604.85	1000.31	373.53
Lancaster	497.99	863.47	258.44	428.18	780.38	241.46	435.46	811.67	254.69	401.00	727.30	244.44
Laurens	713.77	1324.05	317.39	634.27	1170.00	360.60	677.01	1345.55	340.22	677.42	1249.45	339.01
Lee	391.65	852.86	156.90	436.63	831.53	247.15	431.76	974.77	166.09	400.46	894.64	176.71
Lexington	638.50	935.86	371.00	604.59	1104.84	336.57	637.30	936.82	403.80	593.73	858.01	410.46
Marion	576.90	1136.69	284.03	578.42	1077.83	327.53	586.93	1209.70	280.09	565.24	1188.06	273.61
Marlboro	475.18	1120.04	135.22	479.30	880.05	267.11	486.58	1221.01	166.45	426.10	1163.28	171.41
McCormick	321.55	687.39	108.47	340.41	632.29	186.07	341.39	725.09	122.68	299.95	663.91	130.64
Newberry	484.48	1001.03	241.11	509.47	922.10	278.54	490.87	1053.44	274.19	469.39	973.55	278.79
Oconee	754.60	1297.01	333.64	684.04	1239.88	381.00	700.05	1302.29	345.50	674.83	1221.61	361.03
Orangeburg	410.71	839.74	271.41	459.31	834.21	256.01	421.04	931.20	297.10	396.15	856.37	296.13
Pickens	672.34	1083.98	289.60	585.39	1071.95	327.21	670.29	1129.00	324.62	634.51	1017.77	318.31
Richland	363.89	586.34	230.71	378.78	695.33	211.11	360.75	620.20	248.50	344.97	569.47	252.16
Saluda	419.35	742.78	147.76	402.68	744.58	216.48	446.85	818.49	176.86	409.69	726.53	173.53
Spartanburg	736.05	1163.75	281.89	607.38	1111.72	338.82	694.66	1130.33	298.45	648.69	1023.45	295.52
Sumter	326.94	703.88	226.30	402.37	735.05	225.20	330.33	783.91	245.47	316.50	726.85	249.78
Union	808.33	1453.51	396.43	777.23	1427.58	440.54	808.26	1590.79	418.42	733.05	1465.56	394.92
Williamsburg	406.82	1017.68	202.42	410.85	743.41	226.83	419.93	1050.66	230.61	418.08	1043.43	241.45
York	434.33	703.26	237.42	425.37	782.78	239.38	418.25	708.03	257.56	390.71	636.54	264.47
SC Total	542.41	924.22	286.35	525.55	963.60	293.89	530.25	939.99	310.45	500.40	862.55	312.81



Appendix B. Alcohol-Involved Fatal Traffic Crashes by County, 2012-2016

COUNTY	2012	2013	2014	2015	2016
Abbeville	3	3	2	2	1
Aiken	8	14	9	10	14
Allendale	1	2	1	0	0
Anderson	13	13	19	9	14
Bamberg	1	1	2	1	1
Barnwell	1	0	1	4	3
Beaufort	8	7	10	3	9
Berkeley	14	13	14	10	12
Calhoun	1	2	4	1	3
Charleston	24	19	24	15	19
Cherokee	2	3	6	4	1
Chester	1	6	3	2	7
Chesterfield	5	4	2	8	3
Clarendon	3	5	3	6	5
Colleton	8	3	7	10	9
Darlington	7	10	3	10	8
Dillon	4	2	6	2	5
Dorchester	8	8	5	10	7
Edgefield	2	0	2	0	1
Fairfield	4	5	7	1	5
Florence	8	9 5	11	9	9
Georgetown	7	35	4	3	1
Greenville Greenwood	25 5	2	22	25 6	23
Hampton	4	2	2	2	0
Horry	21	23	27	24	19
Jasper	5	3	2	4	6
Kershaw	7	12	5	5	9
Lancaster	5	2	5	4	5
Laurens	7	6	6	5	9
Lee	1	3	1	6	2
Lexington	28	21	16	21	20
McCormick	2	0	4	0	2
Marion	4	3	3	3	3
Marlboro	1	1	4	2	1
Newberry	6	3	2	1	3
Oconee	8	1	4	3	4
Orangeburg	7	18	10	10	10
Pickens	5	5	8	6	2
Richland	28	28	18	16	23
Saluda	5	1	3	0	1
Spartanburg	25	11	19	25	17
Sumter	5	10	12	4	9
Union	1	0	1	4	2
Williamsburg	5	7	3	2	11
York	11	11	8	7	12



### Appendix C. Drug Overdose-Related Deaths by County, 2014-2017

Abbreviations:

P.D. = Prescription Drug

T.O. = Total Opioids

Ft = Fentanyl

He = Heroin

	Deaths Due to Drug Overdose														
		2014*			201			2016				201	17		
County of Occurrence	P.D.	T.O.	Не	P.D.	T.O.	Ft	He	P.D.	T.O.	Ft.	Не	P.D.	T.O.	Ft	Не
SOUTH CAROLINA	572	508	57	641	565	130	95	684	616	190	108	782	748	362	144
ABBEVILLE	0	0	0	2	2	0	0	4	2	0	0	7	6	0	0
AIKEN	21	20	0	28	27	4	6	26	23	6	2	31	31	19	7
ALLENDALE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ANDERSON	30	25	0	37	30	1	0	25	20	2	0	22	22	4	0
BAMBERG	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
BARNWELL	2	1	0	1	1	0	0	1	1	0	0	4	3	3	0
BEAUFORT	10	9	2	9	4	1	0	8	8	4	0	23	18	12	1
BERKELEY	18	15	1	10	7	1	2	31	26	4	0	25	23	7	3
CALHOUN	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CHARLESTON	38	41	18	52	58	14	26	54	65	18	36	99	94	59	33
CHEROKEE	3	3	0	6	4	1	0	2	2	1	0	0	1	0	1
CHESTER	3	3	0	1	1	0	0	0	0	0	0	5	5	1	1
CHESTERFIELD	8	7	0	4	1	0	0	7	6	3	0	2	3	2	2
CLARENDON	1	0	0	0	1	0	1	3	3	1	0	2	2	1	0
COLLETON	6	6	0	4	4	2	0	10	8	4	2	4	5	1	1
DARLINGTON	8	7	0	7	6	0	0	3	2	0	0	9	8	4	0
DILLON	1	1	0	0	0	0	0	3	3	1	0	4	4	1	0
DORCHESTER	13	10	1	26	25	5	1	16	14	4	2	22	20	7	2
EDGEFIELD	1	1	0	1	1	0	0	0	0	0	0	1	1	0	1
FAIRFIELD	1	1	0	3	3	2	0	0	0	0	0	1	2	1	1
FLORENCE	21	17	0	17	16	2	0	17	15	3	1	25	26	9	3
GEORGETOWN	15	15	1	13	11	2	1	30	27	9	4	14	14	6	3
GREENVILLE	70	67	14	87	75	35	16	64	53	13	12	79	73	39	21
GREENWOOD	13	10	0	4	1	0	0	6	7	1	2	14	14	9	1



	2014*				201	5			201	16			201	17	
County of Occurrence	P.D.	T.O.	He	P.D.	T.O.	Ft	He	P.D.	T.O.	Ft.	Не	P.D.	T.O.	Ft	He
HAMPTON	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
HORRY	53	49	2	87	78	21	8	107	101	34	11	84	77	36	5
JASPER	2	1	0	3	3	0	1	3	3	1	1	4	3	3	0
KERSHAW	3	3	1	4	4	0	0	1	0	0	0	2	4	2	2
LANCASTER	9	7	0	5	4	0	1	4	5	1	2	20	23	16	9
LAURENS	6	4	0	8	7	1	1	11	10	1	0	10	7	3	0
LEE	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0
LEXINGTON	47	38	3	44	38	13	6	40	33	14	2	43	36	14	3
MCCORMICK	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARION	1	2	1	4	4	2	0	3	4	1	1	2	2	1	0
MARLBORO	0	0	0	2	1	0	0	1	1	0	0	0	0	0	0
NEWBERRY	3	4	1	1	1	0	0	2	2	0	0	1	0	0	0
OCONEE	21	19	2	17	14	4	0	14	10	4	0	18	18	5	1
ORANGEBURG	7	6	0	6	6	1	0	7	4	2	0	6	5	3	0
PICKENS	24	21	0	25	22	3	1	28	25	3	1	23	19	5	2
RICHLAND	47	36	1	30	33	1	10	49	42	16	11	69	71	38	17
SALUDA	2	2	0	0	0	0	0	1	2	0	1	1	1	1	0
SPARTANBURG	34	30	3	47	35	9	2	47	36	18	7	45	47	23	11
SUMTER	5	2	0	4	2	0	0	8	6	3	0	3	6	1	4
UNION	2	1	0	4	3	0	0	2	2	1	0	3	3	1	0
WILLIAMSBURG	0	0	0	3	3	1	3	2	3	0	1	2	5	0	2
YORK	23	24	6	34	28	4	8	44	42	17	9	52	45	24	7

<sup>\*</sup>No county level data available for fentanyl-related overdose deaths



Appendix D. Total Drug and Cocaine Overdose-Related Deaths by County, 2014-2017

Deaths Due to Drug Overdose									
~	2014		2015		2016			2017	
County of Occurrence	Total Drug	Cocaine							
SOUTH CAROLINA	718	88	789	117	876	139	1001	235	
ABBEVILLE	0	0	2	0	4	1	8	1	
AIKEN	24	5	31	3	28	2	40	6	
ALLENDALE	0	0	0	0	0	0	0	0	
ANDERSON	32	3	40	2	33	4	32	6	
BAMBERG	0	0	1	0	0	0	0	0	
BARNWELL	2	0	1	0	1	0	4	4	
BEAUFORT	11	2	9	1	10	2	25	6	
BERKELEY	22	3	11	1	34	5	27	4	
CALHOUN	0	0	0	0	0	0	0	0	
CHARLESTON	71	11	90	21	87	16	118	36	
CHEROKEE	4	0	6	0	2	0	1	0	
CHESTER	3	0	1	0	0	0	5	0	
CHESTERFIELD	8	1	4	0	8	0	4	2	
CLARENDON	2	1	2	1	4	1	4	2	
COLLETON	6	0	5	0	11	0	6	2	
DARLINGTON	8	1	7	1	3	0	9	2	
DILLON	3	0	1	0	4	1	6	3	
DORCHESTER	14	0	30	8	16	2	28	5	
<b>EDGEFIELD</b>	2	0	1	0	0	0	2	0	
FAIRFIELD	1	0	3	0	0	0	3	1	
FLORENCE	22	3	18	1	20	4	31	8	
GEORGETOWN	20	3	14	2	33	5	18	5	
GREENVILLE	95	20	112	22	91	14	107	16	
GREENWOOD	13	2	5	1	8	3	16	3	
HAMPTON	0	0	1	0	0	0	1	1	
HORRY	74	11	99	22	146	36	103	37	
JASPER	2	0	5	1	5	1	6	2	
KERSHAW	4	0	4	1	1	0	7	4	
LANCASTER	9	0	7	0	8	1	24	9	
LAURENS	7	1	10	1	12	1	12	0	
LEE	0	0	0	0	3	0	1	0	
LEXINGTON	54	3	52	7	44	4	49	5	
MCCORMICK	0	0	0	0	0	0	0	0	
MARION	3	0	4	0	4	0	2	1	
MARLBORO	0	0	2	0	2	1	0	0	
NEWBERRY	5	1	2	0	3	0	2	1	
OCONEE	22	3	19	0	16	2	22	1	
ORANGEBURG	8	3	7	2	9	1	9	2	
PICKENS	30	2	30	3	31	3	27	3	
RICHLAND	53	2	42	7	68	17	93	31	
SALUDA	2	0	0	0	2	0	2	1	
SPARTANBURG	45	5	55	4	63	6	69	12	
SUMTER	6	0	5	0	8	1	7	2	
UNION	2	0	4	0	2	0	4	1	
WILLIAMSBURG	0	0	5	3	4	1	7	3	
YORK	29	2	42	2	48	4	60	7	



Appendix E. Teen Births by County, 2014-2017

			2014			2015			2016		2017		
FIPS	County	Number	Population	Rate									
45000	South Carolina	52837	1111901	48	50896	1109714	46	47484	1103018	43	43452	1093464	40
45001	Abbeville	286	6809	42	270	6638	41	254	6427	40	245	6248	39
45003	Aiken	1735	37855	46	1660	37649	44	1534	37164	41	1440	36569	39
45005	Allendale	221	2552	87	204	2472	83	188	2334	81	166	2190	76
45007	Anderson	2254	42339	53	2193	42546	52	2109	42689	49	2003	42659	47
45009	Bamberg	192	5572	34	171	5473	31	154	5319	29	154	5129	30
45011	Barnwell	333	5801	57	323	5615	58	300	5458	55	278	5290	53
45013	Beaufort	1496	30858	48	1389	30832	45	1311	30814	43	1158	30857	38
45015	Berkeley	1961	40410	49	1888	40426	47	1738	40411	43	1593	40337	39
45017	Calhoun	141	3381	42	135	3314	41	121	3257	37	113	3140	36
45019	Charleston	3387	81160	42	3116	79863	39	2785	78398	36	2466	77103	32
45021	Cherokee	952	13766	69	942	13724	69	893	13560	66	828	13316	62
45023	Chester	580	8306	70	568	8052	71	521	7755	67	471	7388	64
45025	Chesterfield	701	11767	60	690	11658	59	624	11483	54	575	11256	51
45027	Clarendon	451	8595	52	423	8377	50	397	8067	49	349	7712	45
45029	Colleton	628	9201	68	598	9052	66	546	8861	62	490	8692	56
45031	Darlington	1000	17147	58	1000	17133	58	946	16987	56	896	16702	54
45033	Dillon	631	8247	77	622	8114	77	587	7889	74	526	7698	68
45035	Dorchester	1325	32409	41	1281	33049	39	1179	33555	35	1076	33887	32
45037	Edgefield	195	5682	34	198	5650	35	182	5590	33	170	5490	31
45039	Fairfield	306	5939	52	291	5840	50	276	5655	49	230	5461	42
45041	Florence	1759	33896	52	1711	33424	51	1593	32815	49	1445	32220	45
45043	Georgetown	718	13159	55	676	12853	53	631	12474	51	549	12112	45
45045	Greenville	4637	103849	45	4574	105020	44	4280	105773	40	3904	106184	37
45047	Greenwood	1033	19233	54	996	19196	52	955	19008	50	877	18814	47
45049	Hampton	306	5480	56	306	5339	57	285	5147	55	255	4951	52
45051	Horry	2462	53656	46	2389	54448	44	2284	54858	42	2103	55114	38
45053	Jasper	390	5548	70	376	5547	68	364	5490	66	314	5388	58
45055	Kershaw	753	13516	56	695	13491	52	629	13422	47	581	13336	44
45057	Lancaster	911	15514	59	881	15519	57	796	15474	51	706	15468	46
45059	Laurens	1100	17420	63	1069	17084	63	979	16683	59	877	16201	54
45061	Lee	278	4420	63	264	4250	62	243	4070	60	205	3925	52
45063	Lexington	2501	57866	43	2409	58332	41	2314	58553	40	2157	58611	37
45065	McCormick	84	1522	55	81	1472	55	74	1423	52	65	1371	47
45067	Marion	616	8557	72	603	8313	73	556	8005	69	497	7718	64
45069	Marlboro	441	6581	67	433	6423	67	406	6244	65	367	6018	61
45071	Newberry	508	8777	58	485	8696	56	438	8605	51	405	8510	48
45073	Oconee	784	15099	52	777	15017	52	728	14814	49	711	14585	49
45075	Orangeburg	1434	27682	52	1386	26902	52	1287	26111	49	1115	25075	44
45077	Pickens	1185	38408	31	1139	38259	30	1075	38054	28	1018	37667	27
45079	Richland	3467	110461	31	3333	110831	30	3140	111190	28	2910	110902	26
45081	Saluda	214	4222	51	207	4155	50	197	4084	48	180	3941	46
45083	Spartanburg	3771	70995	53	3641	71360	51	3399	71147	48	3151	70820	44
45085	Sumter	1560	27803	56	1480	27263	54	1346	26668	50	1217	26054	47
45087	Union	464	6495	71	435	6412	68	416	6238	67	379	6076	62
45089	Williamsburg	437	8830	49	407	8542	48	364	8168	45	318	7811	41
45091	York	2249	55116	41	2181	56089	39	2060	56827	36	1919	57468	33



Appendix F. HIV Incidence by County, 2014-2017\*

		20	14		20	15		20	16		20	17
FIPS	County	Number	rate		number	rate		number	rate		number	rate
45001	Abbeville	6	24	Abbeville	< 5	4	Abbeville	< 5	8	Abbeville	< 5	
45003	Aiken	21	13	Aiken	22	13	Aiken	19	11	Aiken	18	11
45005	Allendale	< 5	31	Allendale	< 5	11	Allendale	< 5	33	Allendale	< 5	
45007	Anderson	21	11	Anderson	12	6	Anderson	17	9	Anderson	16	8
45009	Bamberg	8	53	Bamberg	5	34	Bamberg	8	55	Bamberg	< 5	14
45011	Barnwell	9	41	Barnwell	< 5	9	Barnwell	5	23	Barnwell	< 5	19
45013	Beaufort	15	9	Beaufort	22	12	Beaufort	21	11	Beaufort	14	8
45015	Berkeley	21	11	Berkeley	27	13	Berkeley	22	10	Berkeley	16	8
45017	Calhoun	5	34	Calhoun	< 5	20	Calhoun	< 5	14	Calhoun	< 5	7
45019	Charleston	105	28	Charleston	90	23	Charleston	71	18	Charleston	88	22
45021	Cherokee	< 5	4	Cherokee	< 5	7	Cherokee	6	11	Cherokee	< 5	5
45023	Chester	< 5	9	Chester	6	19	Chester	10	31	Chester	6	19
45025	Chesterfield	< 5	9	Chesterfield	5	11	Chesterfield	6	13	Chesterfield	< 5	7
45027	Clarendon	7	21	Clarendon	9	27	Clarendon	< 5	9	Clarendon	5	15
45029	Colleton	5	13	Colleton	7	19	Colleton	10	26	Colleton	< 5	11
45031	Darlington	9	13	Darlington	15	22	Darlington	6	9	Darlington	14	21
45033	Dillon	5	16	Dillon	5	16	Dillon	7	23	Dillon	7	23
45035	Dorchester	10	7	Dorchester	8	5	Dorchester	24	16	Dorchester	20	13
45037	Edgefield	< 5	11	Edgefield	9	34	Edgefield	7	27	Edgefield	< 5	8
45039	Fairfield	6	26	Fairfield	5	22	Fairfield	7	31	Fairfield	5	22
45041	Florence	24	17	Florence	27	19	Florence	39	28	Florence	35	25
45043	Georgetown	6	10	Georgetown	7	11	Georgetown	11	18	Georgetown	6	10
45045	Greenville	73	15	Greenville	61	12	Greenville	67	13	Greenville	67	13
45047	Greenwood	14	20	Greenwood	10	14	Greenwood	11	16	Greenwood	6	9
45049	Hampton	6	29	Hampton	10	50	Hampton	6	30	Hampton	5	25
45051	Horry	32	11	Horry	41	13	Horry	55	17	Horry	81	25
45053	Jasper	< 5	4	Jasper	5	18	Jasper	< 5	4	Jasper	6	21
45055	Kershaw	10	16	Kershaw	9	14	Kershaw	7	11	Kershaw	10	16
45057	Lancaster	7	8	Lancaster	6	7	Lancaster	8	9	Lancaster	8	9
45059	Laurens	10	15	Laurens	7	11	Laurens	9	13	Laurens	9	13
45061	Lee	< 5	16	Lee	7	39	Lee	6	34	Lee	6	34
45063	Lexington	36	13	Lexington	28	10	Lexington	37	13	Lexington	52	18
45067	Marion	< 5	6	Marion	< 5	3	Marion	5	16	Marion	6	19
45069	Marlboro	< 5	7	Marlboro	5	18	Marlboro	7	26	Marlboro	5	19
45065	McCormick	< 5		McCormick	< 5		McCormick	< 5	21	McCormick	< 5	21
45071	Newberry	6	16	Newberry	< 5	8	Newberry	< 5	3	Newberry	< 5	11
45073	Oconee	8	11	Oconee	9	12	Oconee	8	10	Oconee	6	8
45075	Orangeburg	25	28	Orangeburg	12	13	Orangeburg	21	24	Orangeburg	29	33
45077	Pickens	< 5	3	Pickens	< 5	2	Pickens	9	7	Pickens	5	4
45079	Richland	130	32	Richland	122	30	Richland	125	31	Richland	124	30
45081	Saluda	< 5	20	Saluda	< 5		Saluda	< 5	10	Saluda	< 5	10
45083	Spartanburg	34	12	Spartanburg	16	5	Spartanburg	42	14	Spartanburg	20	7
45085	Sumter	33	31	Sumter	24	22	Sumter	18	17	Sumter	23	21
45087	Union	< 5	11	Union	5	18	Union	< 5	11	Union	< 5	14
45089	Williamsburg	13	40	Williamsburg	15	46	Williamsburg	10	31	Williamsburg	11	34
45091	York	29	12	York	22	9	York	23	9	York	33	13

<sup>\*</sup>Cell sizes of  $\leq 5$  are censored due to confidentiality restrictions.



Appendix G. Hepatitis C Incidence Rate by County, 2016-2017

FIPS	County	2016 Rate	2017 Rate
45001	Abbeville	40.46	68.76
45003	Aiken	67.70	68.97
45005	Allendale	55.19	44.43
45007	Anderson	113.28	110.18
45009	Bamberg	68.82	69.54
45011	Barnwell	74.10	74.96
45013	Beaufort	77.39	93.13
45015	Berkeley	59.94	73.87
45017	Calhoun	13.56	47.61
45019	Charleston	99.60	143.73
45021	Cherokee	105.77	138.34
45023	Chester	105.33	188.85
45025	Chesterfield	116.96	143.64
45027	Clarendon	78.86	111.58
45029	Colleton	127.66	111.67
45031	Darlington	151.40	170.97
45033	Dillon	90.86	130.44
45035	Dorchester	89.92	108.66
45037	Edgefield	161.78	221.03
45039	Fairfield	97.22	150.40
45041	Florence	153.13	173.92
45043	Georgetown	123.83	170.44
45045	Greenville	130.45	149.36
45047	Greenwood	163.88	217.47
45049	Hampton	55.35	71.42
45051	Horry	223.37	222.94
45053	Jasper	106.87	115.96
45055	Kershaw	130.70	161.45
45057	Lancaster	121.31	140.46
45059	Laurens	100.64	122.67
45061	Lee	85.19	74.93
45063	Lexington	101.61	108.38
45067	Marion	397.12	105.45
45069	Marlboro	176.36	272.13
45065	McCormick	25.89	52.38
45071	Newberry	94.63	77.95
45073	Oconee	86.38	104.83
45075	Orangeburg	73.58	85.74
45077	Pickens	91.92	114.19
45079	Richland	137.86	145.05
45081	Saluda	24.64	34.23
45083	Spartanburg	121.24	132.64
45085	Sumter	109.99	128.22
45087	Union	90.30	116.21
45089	Williamsburg	232.36	324.41
45091	York	110.85	114.47



Appendix H. Naloxone Administrations by County, 2014-2017

		2	014	2	015		2016	2017		
County	April 1, 2010 Census	Number	Rate Per 10,000	Number	Rate Per 10,000	Number	Rate Per 10,000	Number	Rate Per 10,000	
Abbeville	25417	39	15.34	61	24.00	63	24.79	44	17.31	
Aiken	160099	57	3.56	94	5.87	138	8.62	194	12.12	
Allendale	10419	11	10.56	10	9.60	8	7.68	11	10.56	
Anderson	187126	199	10.63	188	10.05	264	14.11	304	16.25	
Bamberg	15987	None reported	-	None reported		12	7.51	7	4.38	
Barnwell	22621	18	7.96	18	7.96	32	14.15	48	21.22	
Beaufort	162233	62	3.82	43	2.65	52	3.21	116	7.15	
Berkeley	177843	25	1.41	39	2.19	229	12.88	250	14.06	
Calhoun	15175	5	3.29	10	6.59	21	13.84	22	14.50	
Charleston	350209	209	5.97	262	7.48	414	11.82	498	14.22	
Cherokee	55342	40	7.23	62	11.20	88	15.90	103	18.61	
Chester	33140	30	9.05	38	11.47	33	9.96	56	16.90	
Chesterfield	46734	22	4.71	32	6.85	30	6.42	26	5.56	
Clarendon	34971	13	3.72	13	3.72	35	10.01	34	9.72	
Colleton	38892	50	12.86	30	7.71	46	11.83	60	15.43	
Darlington	68681	70	10.19	81	11.79	96	13.98	92	13.40	
Dillon	32062	29	9.04	35	10.92	41	12.79	47	14.66	
Dorchester	136555	90	6.59	117	8.57	184	13.47	239	17.50	
Edgefield	26985	10	3.71	4	1.48	4	1.48	32	11.86	
Fairfield	23956	49	20.45	49	20.45	45	18.78	79	32.98	
Florence	136885	194	14.17	117	8.55	161	11.76	198	14.46	
Georgetown	60158	80	13.30	109	18.12	155	25.77	139	23.11	
Greenville	451225	703	15.58	709	15.71	707	15.67	857	18.99	
Greenwood	69661	68	9.76	69	9.91	54	7.75	102	14.64	
Hampton	21090	16	7.59	27	12.80	13	6.16	30	14.22	
Horry	269291	376	13.96	509	18.90	1022	37.95	688	25.55	
Jasper	24777	21	8.48	22	8.88	56	22.60	62	25.02	
Kershaw	61697	75	12.16	76	12.32	79	12.80	44	7.13	
Lancaster	76652	89	11.61	103	13.44	146	19.05	204	26.61	
Laurens	66537	76	11.42	106	15.93	137	20.59	133	19.99	
Lee	19220	28	14.57	17	8.84	30	15.61	60	31.22	
Lexington	262391	123	4.69	167	6.36	254	9.68	314	11.97	
Marion	33062	52	15.73	39	11.80	57	17.24	60	18.15	
Marlboro	28933	24	8.30	35	12.10	31	10.71	63	21.77	
McCormick	10233	6	5.86	8	7.82	10	9.77	15	14.66	
Newberry	37508	18	4.80	15	4.00	27	7.20	21	5.60	
Oconee	74273	126	16.96	132	17.77	83	11.17	84	11.31	
Orangeburg	92501	9	0.97	39	4.22	80	8.65	49	5.30	
Pickens	119224	154	12.92	243	20.38	327	27.43	348	29.19	
Richland	384504	124	3.22	147	3.82	240	6.24	355	9.23	
Saluda	19875	28	14.09	26	13.08	30	15.09	33	16.60	
Spartanburg	284307	349	12.28	311	10.94	454	15.97	544	19.13	
Sumter	107456	49	4.56	78	7.26	117	10.89	100	9.31	
Union	28961	54	18.65	72	24.86	47	16.23	59	20.37	
Williamsburg	34423	11	3.20	25	7.26	25	7.26	37	10.75	
York	226073	243	10.75	168	7.43	207	9.16	218	9.64	



Appendix I. Admissions Into State-Funded Treatment Facilities by County, 2016-2017

		Substai		e (Primary or Se is/Problem)	condary	
		2016			2017	
Agency	All Admissions	Opioid Disorder	% Opioid Disorder	All Admissions	Opioid Disorder	% Opioid Disorder
Aiken	937	104	11%	879	102	12%
Anderson-Oconee	1,733	177	10%	1,552	179	12%
Barnwell	255	27	11%	273	44	16%
Beaufort	805	67	8%	823	66	8%
Berkeley	1,439	98	7%	1,148	106	9%
Charleston	2,904	789	27%	2,679	732	27%
Cherokee	506	60	12%	453	57	13%
Chester	211	17	8%	205	16	8%
Clarendon	438	28	6%	405	37	9%
Colleton	375	82	22%	366	88	24%
Darlington	541	65	12%	498	82	16%
Dorchester	1,437	152	11%	1,480	178	12%
Fairfield	196	14	7%	174	7	4%
Florence	1,226	244	20%	1,310	275	21%
Georgetown	405	83	20%	386	78	20%
Greenville	4,348	1,083	25%	4,217	983	23%
Allendale-Hampton-Jasper	210	7	3%	218	13	6%
Horry	2,021	385	19%	2,032	437	22%
Lancaster	467	75	16%	446	77	17%
Laurens	615	54	9%	600	85	14%
Newberry-Saluda	539	31	6%	452	24	5%
Orangeburg-Bamberg- Calhoun	890	107	12%	994	111	11%
Pickens	1,360	139	10%	1,227	146	12%
Lexington-Richland	4,368	727	17%	4,331	835	19%
Spartanburg	1,935	242	13%	1,764	350	20%
Sumter	734	49	7%	704	71	10%
Union	315	29	9%	268	38	14%
Williamsburg	255	36	14%	287	47	16%
York	1,902	453	24%	2,019	599	30%
Greenwood-Edgefield- McCormick-Abbeville	888	79	9%	900	102	11%
Kershaw-Chesterfield-Lee	1,037	96	9%	1,092	168	15%
Marion-Dillon-Marlboro	765	90	12%	797	172	22%
Total	36,057	5,689	16%	34,979	6,305	18%



# Appendix J. Data Sources

Category	Data Source
Population Snapshot	U.S. Census
Alcohol Use among High School Students	Youth Risk Behavior Surveillance System
Binge Drinking among High School Students	Youth Risk Behavior Surveillance System
Drinking and Driving among High School Students	Youth Risk Behavior Surveillance System
Binge Drinking among Adults	Behavioral Risk Factor Surveillance System
Heavy Use Alcohol among Adults	Behavioral Risk Factor Surveillance System
Drinking and Driving among Adults	Behavioral Risk Factor Surveillance System
Cigarette Use among High School Students	Youth Risk Behavior Surveillance System
Cigar Use among High School Students	Youth Risk Behavior Surveillance System
Smokeless Tobacco Use amonf High School Students	Youth Risk Behavior Surveillance System
Cigarette, Cigar, or Smokeless Tobacco Use amonf High School Students	Youth Risk Behavior Surveillance System
Electonic Vapor Product Use among High School Students	Youth Risk Behavior Surveillance System
Cigarette Use among Adults	Behavioral Risk Factor Surveillance System
E-Cigarette Use among South Carolina Adults	SC Department of Health and Environmental Control
Marijuana Use among High School Students	Youth Risk Behavior Surveillance System
Marijuana Use among Adults	National Survey on Drug Use and Health
Prescription Drugs Dispensed Rate	SC Department of Health and Environmental Control
Prescription Drug Use without A Doctor's Prescription among High School Students	Youth Risk Behavior Surveillance System
Misuse of Pain Relievers among Adolescents	National Survey on Drug Use and Health
Misuse of Pain Relievers among Adults	National Survey on Drug Use and Health
Alcohol-Involved Fatal Traffic Crashes	Fatality Analysis Reporting System
Drug-Related Overdose Deaths	SC Department of Health and Environmental Control
Total Drug and Cocaine-Related Overdose Deaths	SC Department of Health and Environmental Control
Teen Births	County Health Ranking System
Neonatal Abstinence Syndrome (NAS) Rates among Inpaitent Newborns	SC Revenue of Fiscal Affairs Office
HIV Incidence Rate	SC Department of Health and Environmental Control
Hepatitis C (Acute and Chronic) Incidence Rates	SC Department of Health and Environmental Control
Naloxone Administration Rate	SC Department of Health and Environmental Control
Hospitalizations in SC due to Primary and Secondary Alcohol Abuse/Dependence	SC Revenue of Fiscal Affairs Office
Hospitalizations in SC due to Primary and Secondary Opioid Abuse/Dependence	SC Revenue of Fiscal Affairs Office
Hospitalizations in SC due to Drug and Opioid Overdose	SC Revenue of Fiscal Affairs Office
Admissions into State-Funded Treatment Facilities in SC	SC Department of Alcohol and Other Drug Abuse Services
Needing but Not Receiving Treatment for Alcohol Use	National Survey on Drug Use and Health
Needing but Not Receiving Treatment for Illicit Drug Use	National Survey on Drug Use and Health

