

2015

**South Carolina Profile on Alcohol, Tobacco, and
Other Substance Related Indicators**



Prepared by

**South Carolina Department of Alcohol and
Other Drug Abuse Services (DAODAS)**

State Epidemiological Outcomes Workgroup (SEOW)

Pacific Institute for Research and Evaluation (PIRE)

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SEOW MISSION

The mission of the South Carolina State Epidemiological Outcomes Workgroup is to create a highly effective statewide comprehensive substance abuse prevention data system that will support and enhance efforts to reduce alcohol, tobacco and other drug use across the lifespan of people living in South Carolina communities through the development and implementation of a comprehensive statewide prevention strategy at the state and local levels.

SEOW OBJECTIVES

1. DAODAS will establish a State Epidemiological Outcomes Workgroup (SEOW) to examine alcohol-, tobacco-, and other drug-related archival data, including the National Outcome Measures (NOMs), in order to determine the scope and extent of substance abuse and its related problems within the state.
2. Through its data-collection efforts, the established South Carolina SEOW will support ongoing monitoring and evaluation.
3. To produce a Statewide Epidemiological Profile that will drive strategic and operational planning and budgeting processes.

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INTRODUCTION

Overview

The South Carolina Department of Alcohol and Other Drug Abuse Services (DAODAS) is charged with reducing the impact of substance abuse and on South Carolina's communities. Since 2006, South Carolina has convened a State Epidemiological Outcomes Workgroup (SEOW) to review population-level data related to substance abuse prevention and to help prioritize issues that DAODAS should address in future years.

This updated *South Carolina Profile on Alcohol, Tobacco, and Other 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.

To help stakeholders focus on recent trends and their implications for the near future, we have compiled data from 2009 through 2015, where available. A longer view, with data going as far back as 1999, is available in prior reports. As new data become available, indicators highlighted in these reports will be updated to reflect the current state of the science and incorporate new measures of interest.

Survey Sampling and Confidence Intervals

Much of the data in this report are drawn from national surveys. In survey research, samples are drawn from a larger population of individuals because we are rarely able to survey all members of the population. Measurements of the sample characteristics are used to estimate the same characteristics in the population. It is assumed that if the sample is large enough and obtained randomly, then what we find to be true for the sample will also be true for the population as a whole.

Despite the best efforts of the researchers, however, sample data are never completely accurate reflections of the population. The precision of estimates is based on a number of factors, including the measurement techniques, the size of the sample, and the proportion of the population that demonstrates the characteristic being measured. Thus, depending on these factors, some estimates of the population are more precise than others. We express this level of precision, or the confidence we have that our estimate is the true value in the population from which the sample was drawn, as a confidence interval (CI). Wider CIs indicate lesser precision, and narrower CIs indicate greater precision.

For the substance use graphs in this report, we include the 95% CIs. That is, there is a 95% likelihood that the true value of the population lies somewhere between the low and high confidence limits. We include the CIs that were provided in our source material. As such, we provide CIs for data collected through the Youth Risk Behavior Survey (YRBS) and the Behavior Risk Factor Surveillance System (BRFSS) but not the National Survey on Drug Use and Health (NSDUH). The CIs are represented on the line graphs by vertical lines at the point of the population estimate. Estimates with very wide CIs should be interpreted with caution because they may be imprecise.

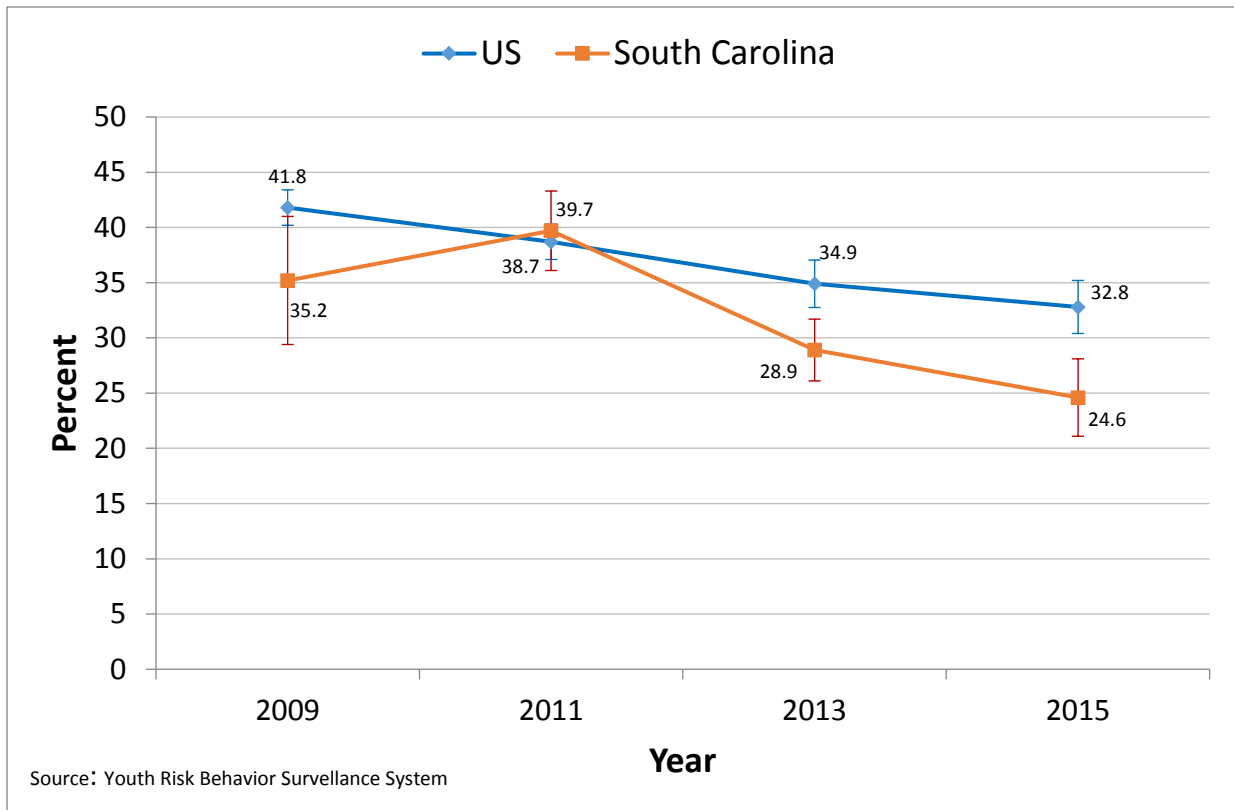
In addition to showing how precise sample estimates are, CIs can be used to determine whether there are differences between groups. If the CIs for two groups (e.g., data collected in different years or for South Carolina versus the United States) are overlapping, it generally means that there is no difference between the groups—even if the estimate itself appears to be different. If, on the other hand, the CIs do not overlap, the two groups are likely to be different from one another.

ALCOHOL USE

Alcohol Use among High School Students

Past 30-day alcohol use among high school students has declined in South Carolina and the US since 2009, with rates in South Carolina being slightly lower than the US rates. In 2015, 24.6% of South Carolina high school students reported drinking in the past 30 days, down from 28.9% in 2013.

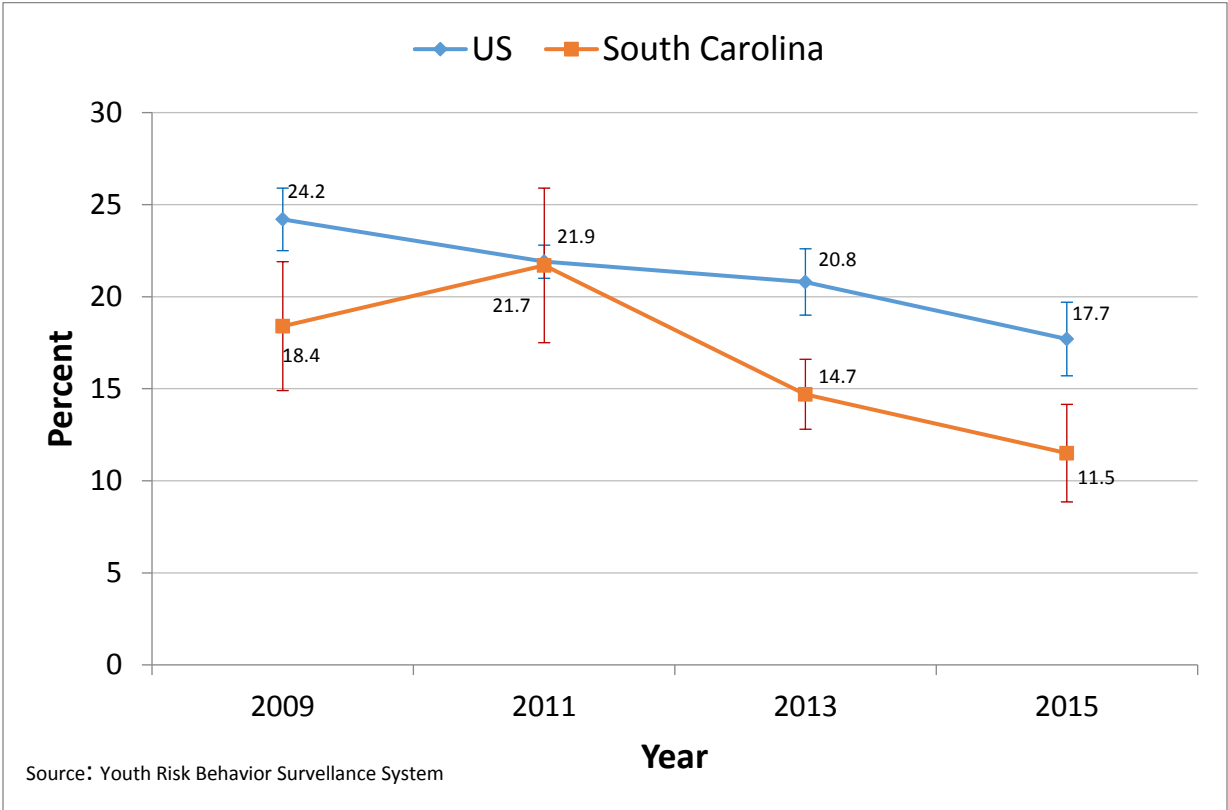
Past 30-Day Alcohol Use among High School Students,
South Carolina and US, 2009 to 2015



Binge Drinking among High School Students

Binge drinking in the past 30 days among high school students has declined in South Carolina and the US since 2009, with South Carolina typically having lower rates than the US. In 2015, 11.5% of South Carolina high school students reported binge drinking in the past 30 days, down from 14.7% in 2013.

Binge Drinking* in the Past 30 Days among High School Students, South Carolina and US, 2009 to 2015

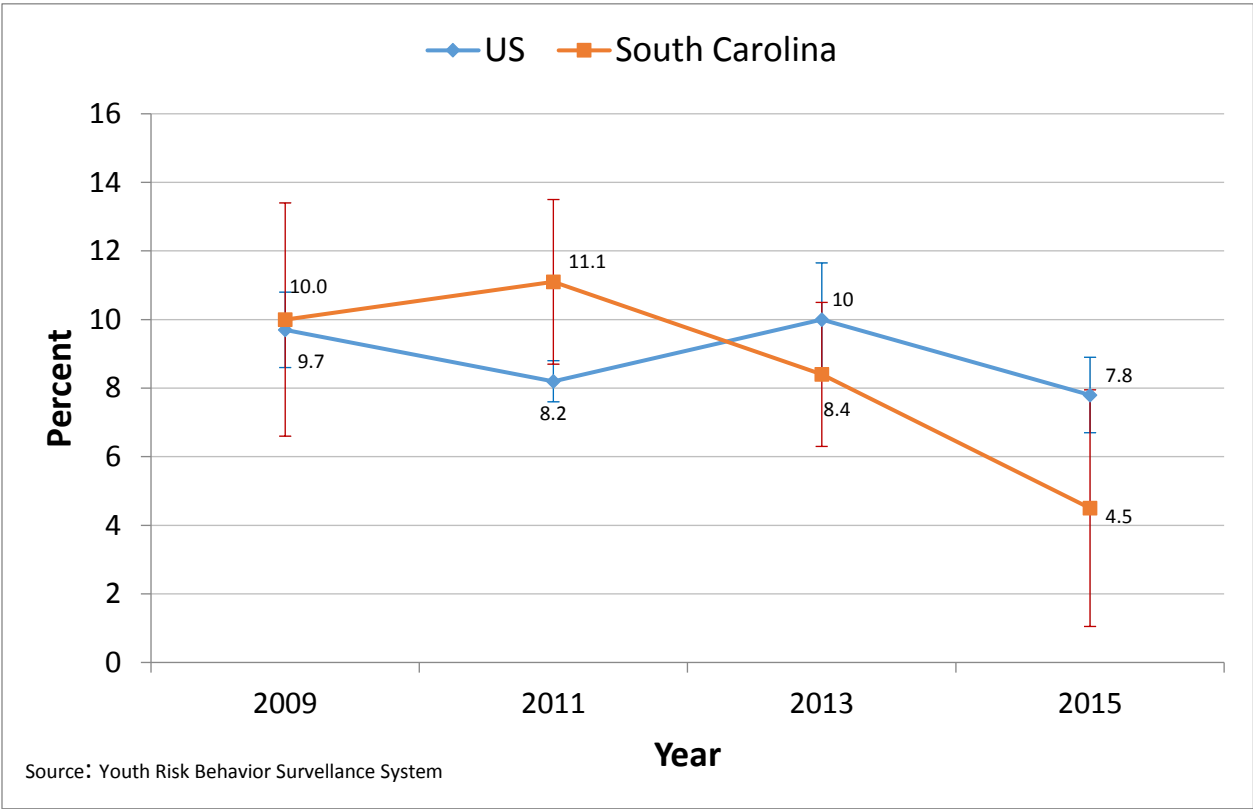


* Defined as five or more drinks in a row within a couple of hours on at least one day.

Drinking and Driving among High School Students

Drinking and driving during the past 30 days among high school students has declined sharply in South Carolina since 2009, whereas it has fluctuated down and up in the US. In 2015, only 4.5% of South Carolina high school students reported drinking and driving in the past 30 days, down from 8.4% in

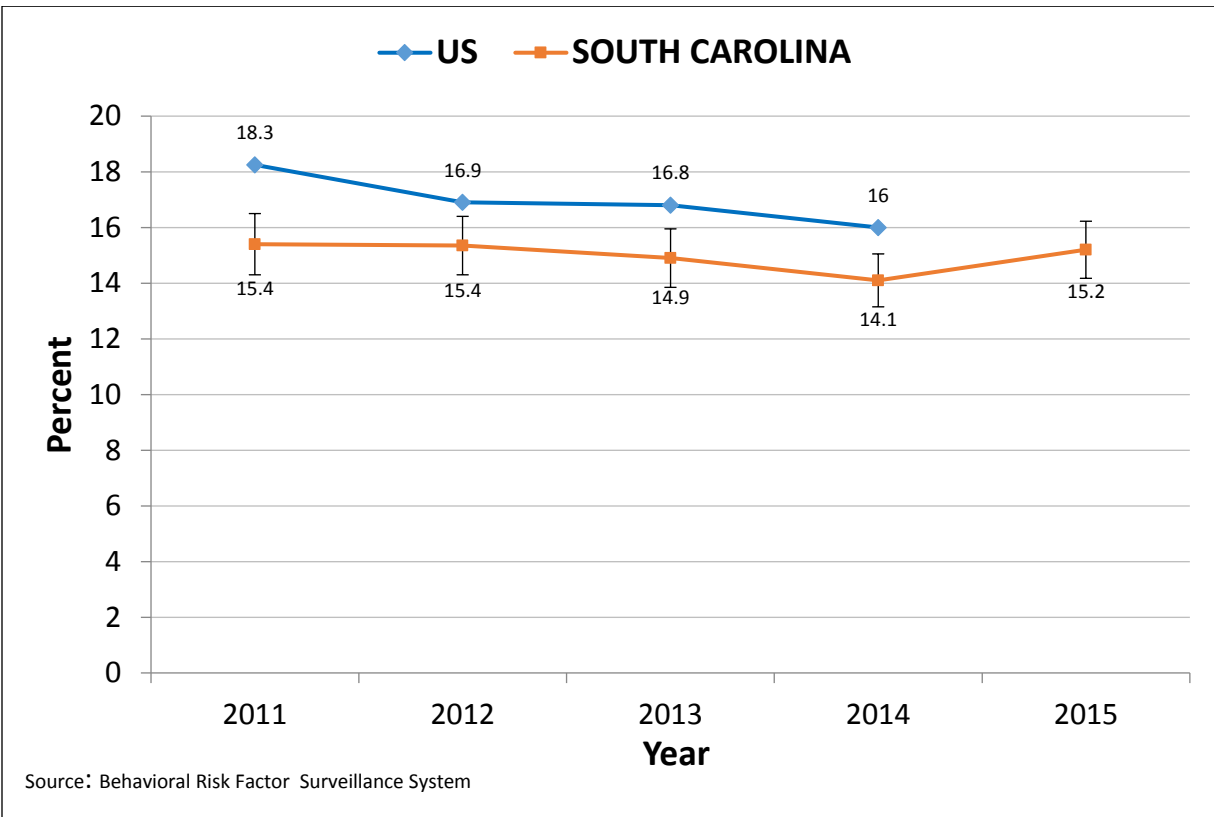
Drinking and Driving in the Past 30 Days among High School Students, South Carolina and US, 2009 to 2015



Binge Drinking among Adults

Binge drinking in the past 30 days among adults has remained relatively stable since 2011 in South Carolina and has declined somewhat in the US. The rates in South Carolina have been consistently lower than the US rates. In 2015, 15.2% of adults in the state engaged in binge drinking in the past 30 days, up from 14.1% in 2014.

Binge Drinking* in the Past 30 Days among Adults (18 and Over),
South Carolina and US, 2011 to 2015



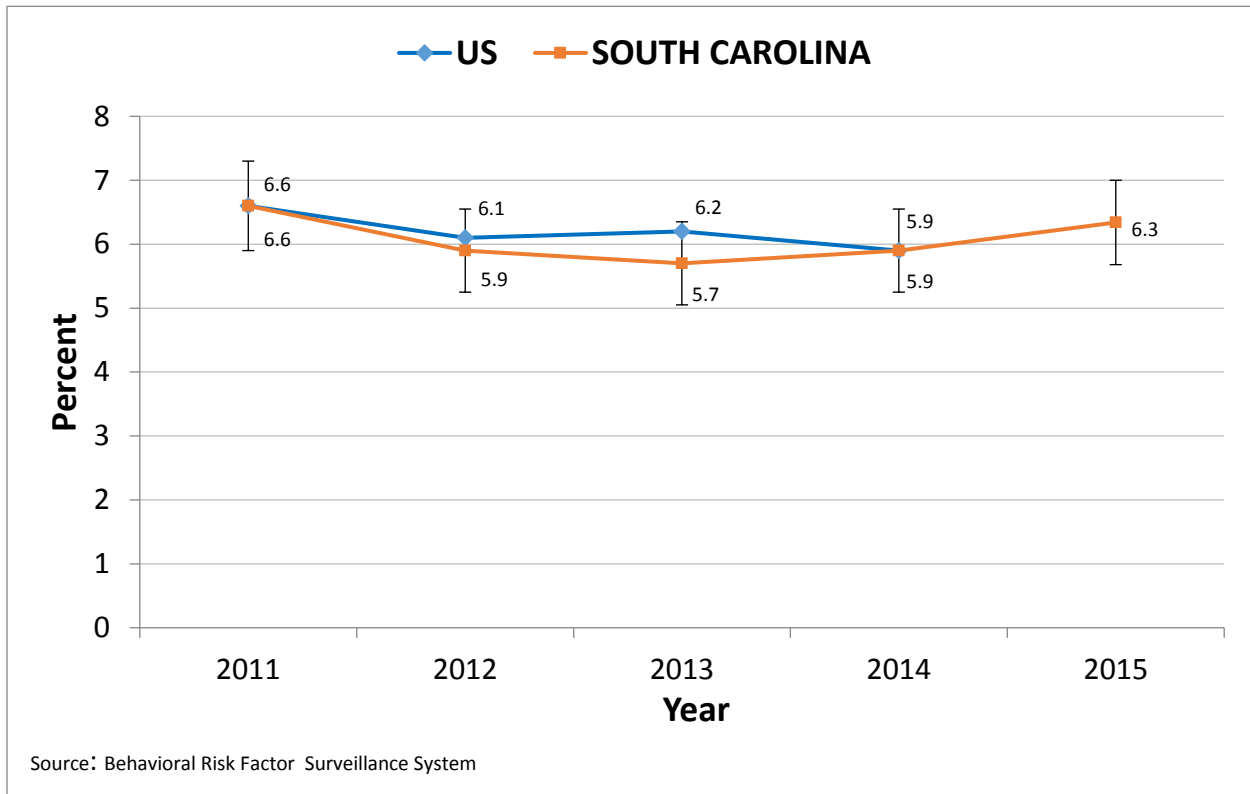
*Defined as five or more drinks on a single occasion for men and four or more drinks on a single occasion for women.

Notes: 2015 data are not yet available for the US as a whole. All US 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 – 2015.

Heavy Use of Alcohol among Adults

Heavy alcohol use among adults in South Carolina dipped slightly from 2011 to 2013 but has risen slightly since then. Rates in South Carolina and the US have been nearly identical during this period. In 2015, 6.3% of adults in the state engaged in heavy drinking in the past 30 days, up from 5.9% in 2014.

Heavy Alcohol Use* among Adults (18 and Over),
South Carolina and US, 2011 to 2015



*Defined as having more than two drinks per day for adult men and more than one drink per day for adult women.

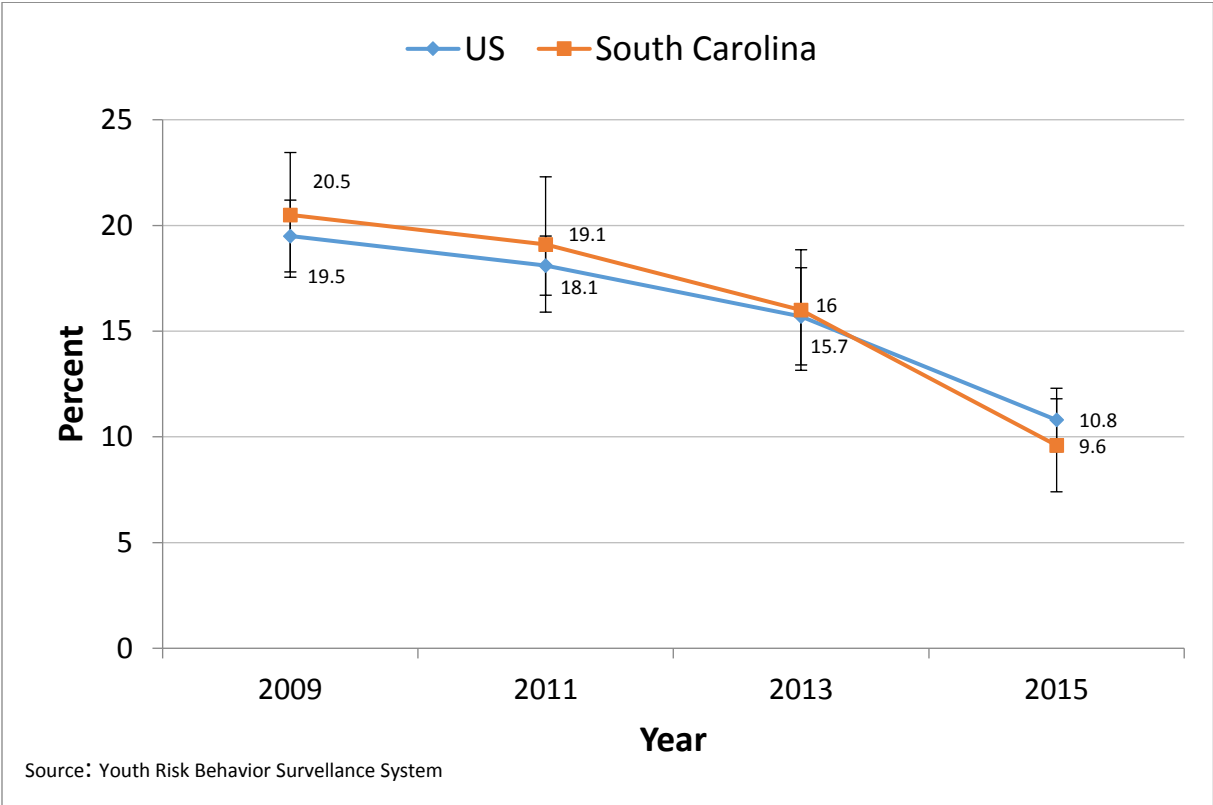
Notes: 2015 data are not yet available for the US as a whole. All US data are median values for all the states and the District of Columbia combined and, therefore, do not include confidence intervals. We only present data since 2011 because data prior to 2011 are not comparable to data from 2011 – 2015.

TOBACCO USE

Cigarette Use among High School Students

Cigarette use during the past 30 days among high school students has declined since 2009 in South Carolina and the US as a whole, with rates being very similar during this period. In 2015, only 9.6% of South Carolina high school students smoked cigarettes during the past 30 days, down from 16.0% in 2013.

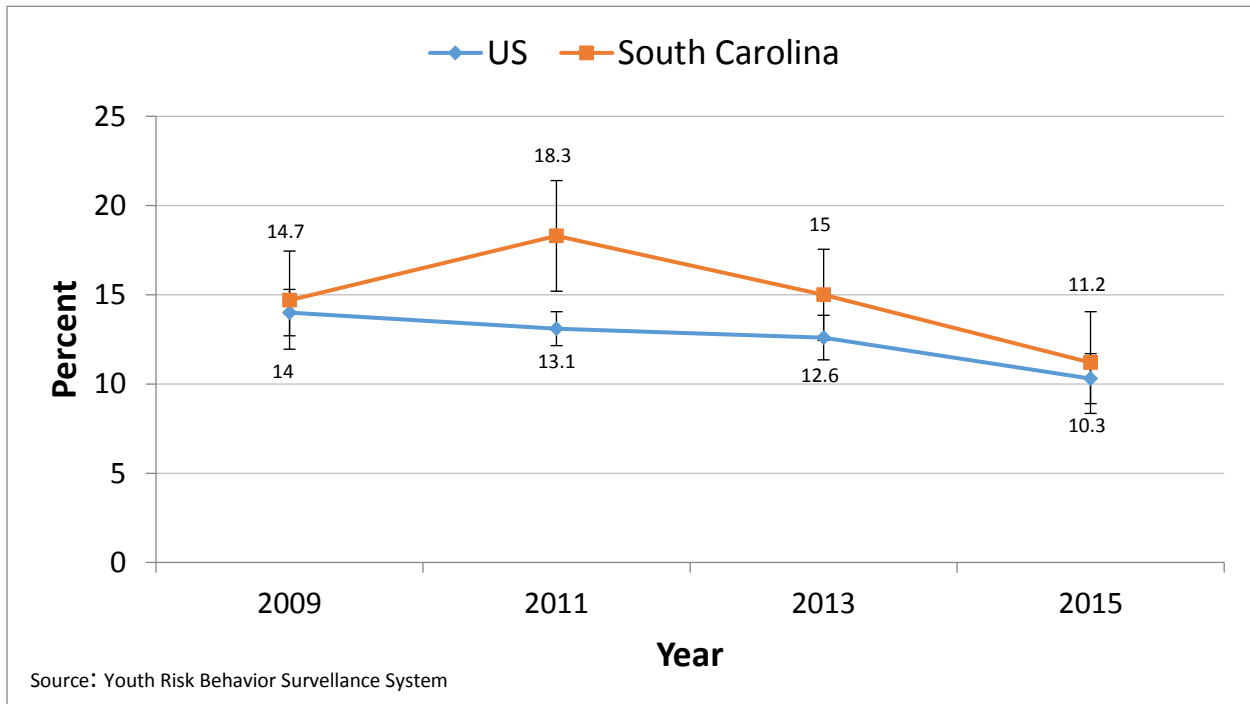
Past 30-Day Cigarette Use among High School Students, South Carolina and US, 2009 to 2015



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 US as a whole, with South Carolina rates typically being somewhat higher than US rates. In 2015, 11.2% of South Carolina high school students smoked cigarettes during the past 30 days, down from 15.0% in 2013.

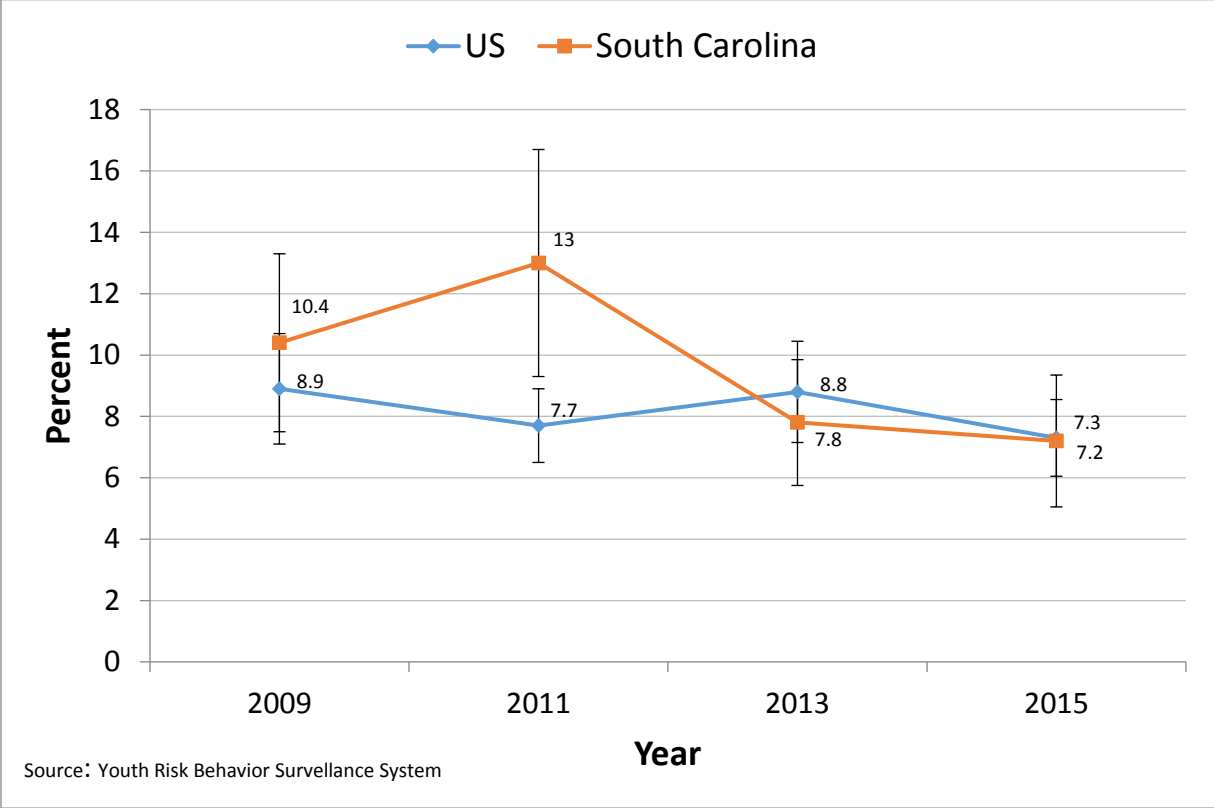
Past 30-Day Cigar Use among High School Students,
South Carolina and US, 2009 to 2015



Smokeless Tobacco Use among High School Students

Use of smokeless tobacco during the past 30 days among high school students has declined since 2009 in South Carolina and the US, though the trajectories look different. In South Carolina there was a substantial increase in 2011 and decrease in 2013, whereas the US rate has fluctuated much less dramatically. In 2015, 7.2% of South Carolina high school students used smokeless tobacco during the past 30 days, down from 7.8% in 2013 and a peak during this period of 13.0% in 2011.

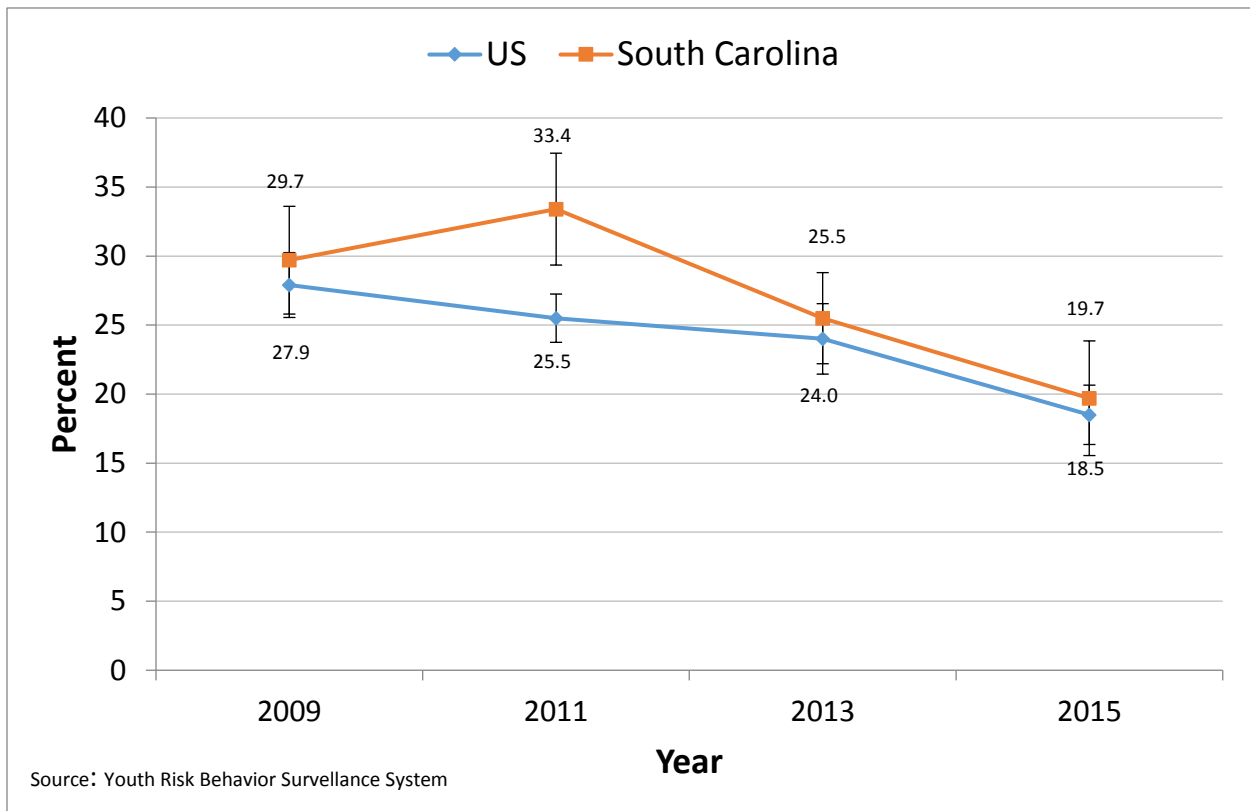
Past 30-Day Smokeless Tobacco Use among High School Students, South Carolina and US, 2009 to 2015



Cigarette, Cigar, or Smokeless Tobacco Use among High School Students

Use of cigarettes, cigars, or smokeless tobacco during the past 30 days among high school students has declined since 2009 in South Carolina and the US as a whole, with South Carolina rates typically being slightly higher than US rates. In 2015, 19.7% of South Carolina high school students used cigarettes, cigars, or smokeless tobacco during the past 30 days, down from 25.5% in 2013.

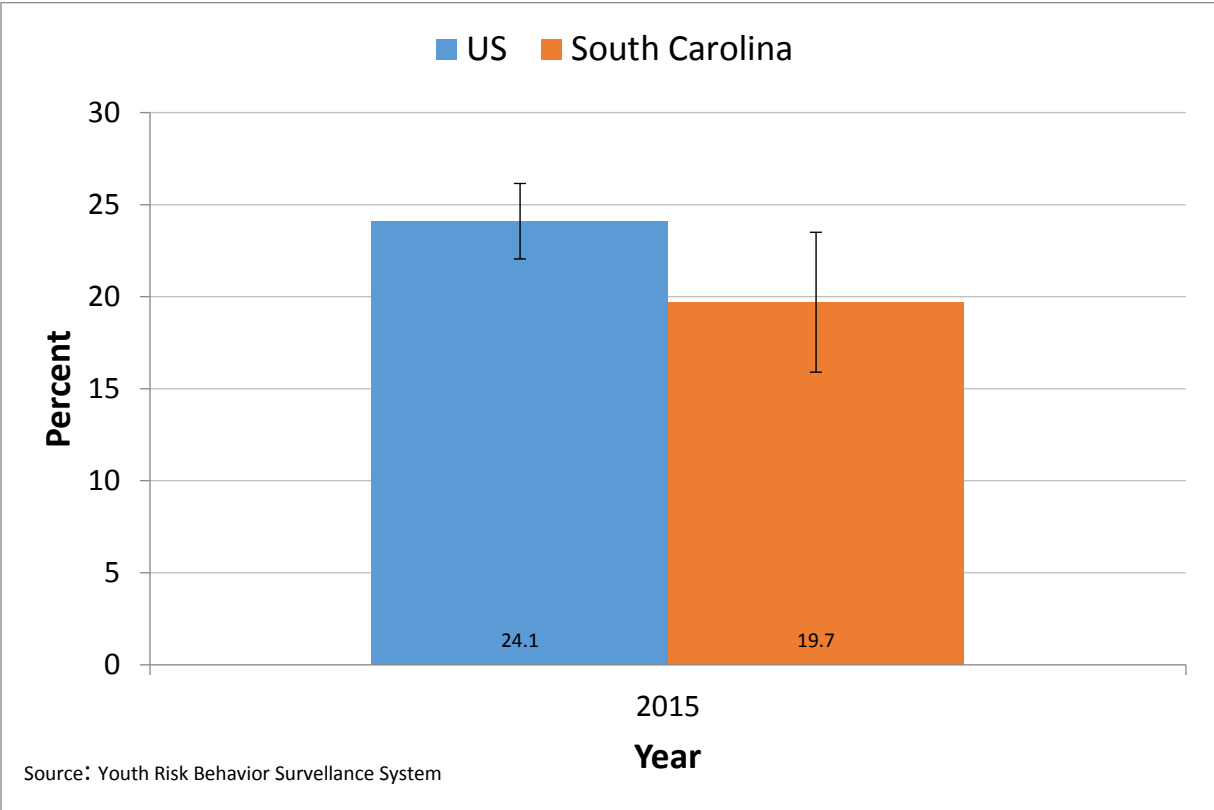
Past 30-Day Cigarette, Cigar, or Smokeless Tobacco Use among High School Students, South Carolina and US, 2009 to 2015



Electronic Vapor Product Use among High School Students

Use of electronic vapor products (e.g., e-cigarettes, e-cigars, e-pipes, vape pipes, and e-hookahs) during the past 30 days among high school students was lower in South Carolina than in the US in 2015, the first year it was included in the YRBS. In 2015, 19.7% of South Carolina high school students used electronic vapor products, compared to 24.1% of US high school students.

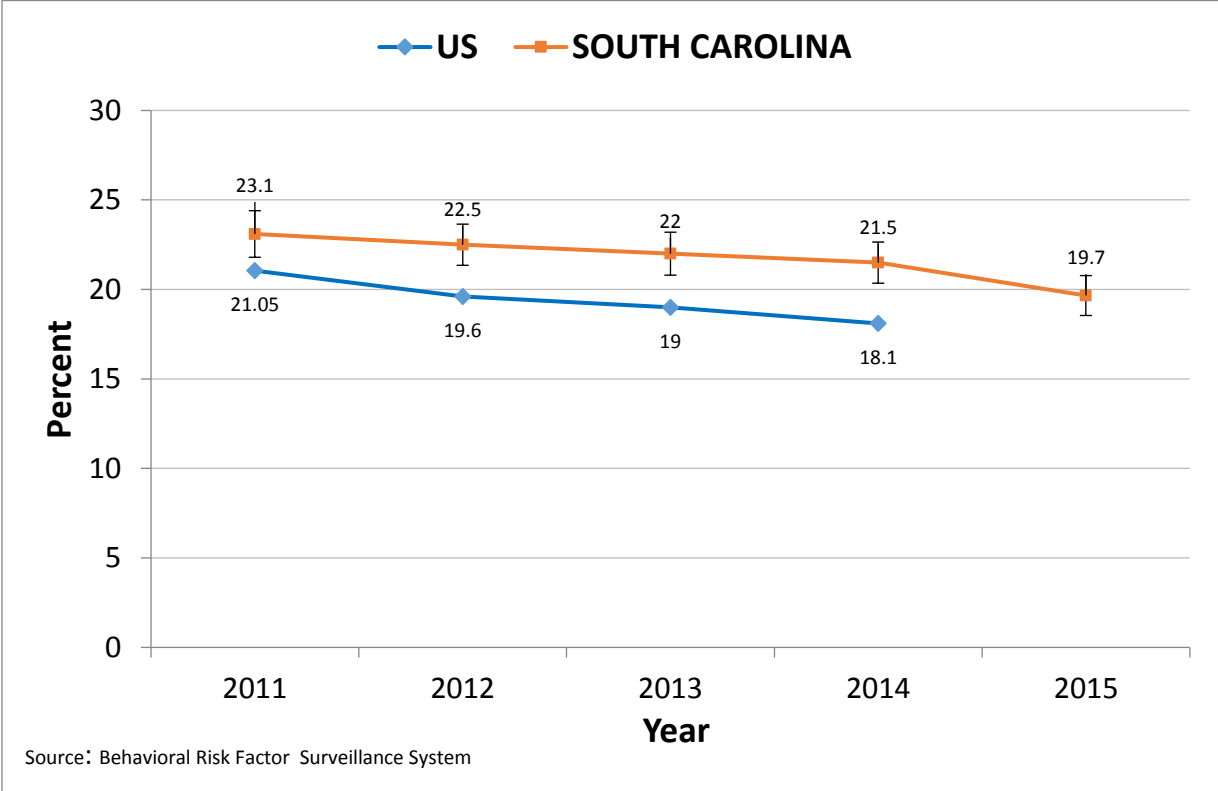
Electronic Vapor Product Use among High School Students, South Carolina and US, 2015



Cigarette Use among Adults

Cigarette use during the past 30 days among adults has decreased since 2011 in South Carolina and the US as a whole. South Carolina rates were consistently higher than US rates. In 2015, 19.7% of South Carolina adults smoked cigarettes during the past 30 days, down from the 21.5% in 2014.

Past 30-Day Cigarette Use among Adults (18 and Over), South Carolina and US, 2011 to 2015



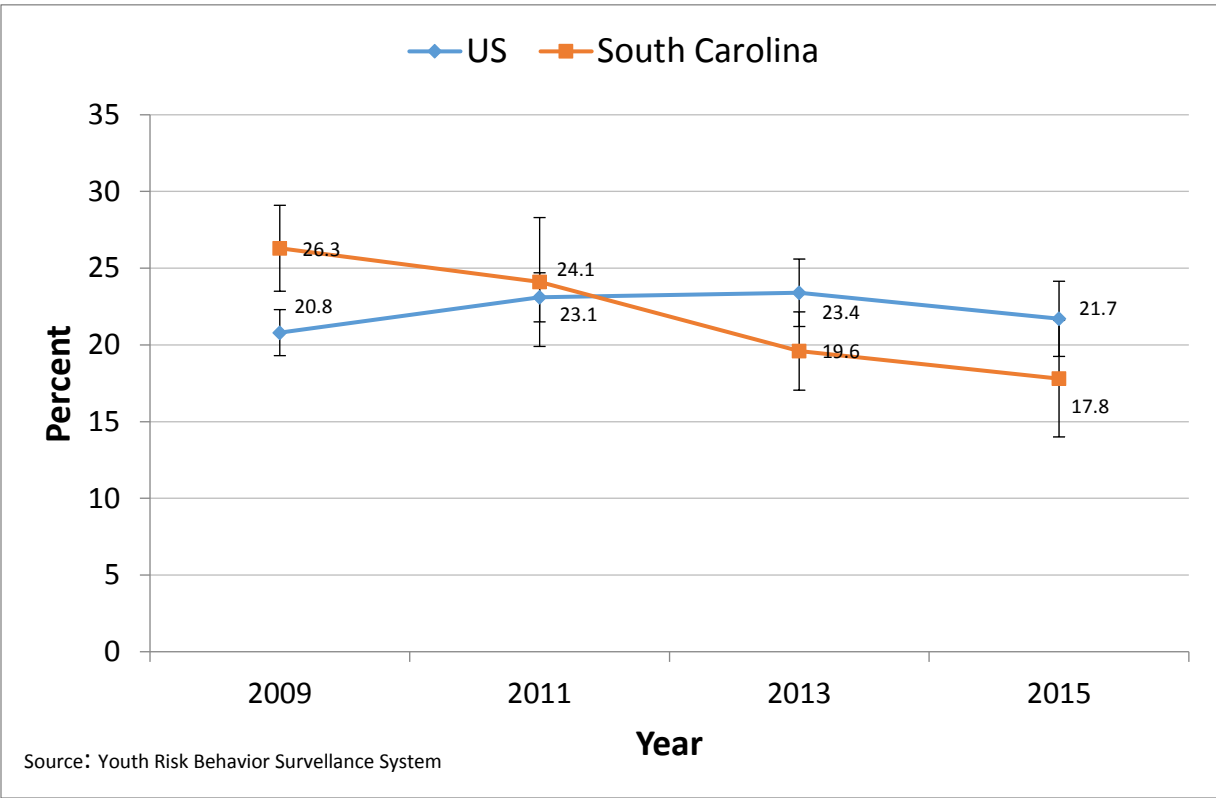
Notes: 2015 data are not yet available for the US as a whole. All US data are median values for all the states and the District of Columbia combined and, therefore, do not include confidence intervals. We only present data since 2011 because data prior to 2011 are not comparable to data from 2011 – 2015.

MARIJUANA USE

Marijuana Use among High School Students

Marijuana use during the past 30 days among high school students has declined since 2009 in South Carolina while it has risen in the US as a whole. In 2015, 17.8% of South Carolina high school students used marijuana during the past 30 days, down from 19.6% in 2013 and 26.3% in 2009.

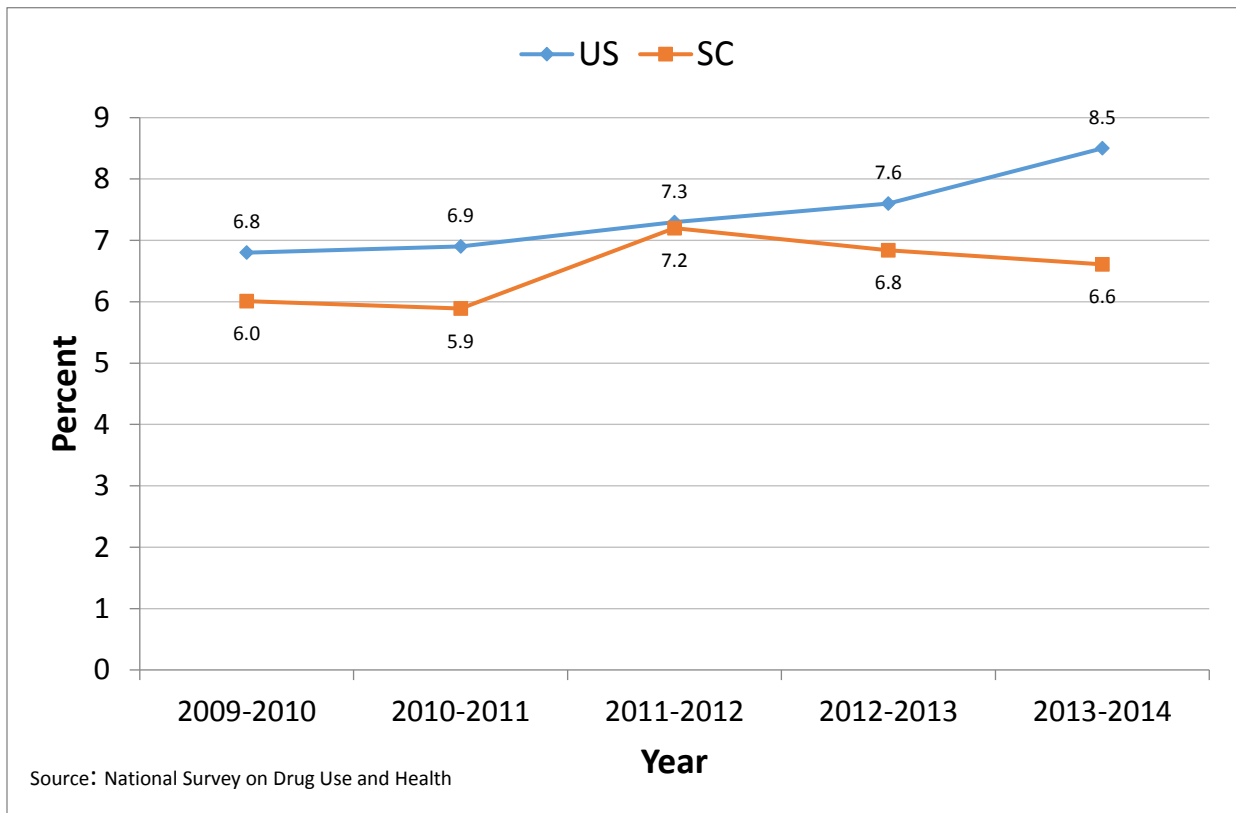
Past 30-Day Marijuana Use among High School Students, South Carolina and US, 2009 to 2015



Marijuana Use among Adults

Marijuana use during the past 30 days among adults has fluctuated since 2009-10 in South Carolina while it has steadily risen in the US as a whole. In 2013-14, 6.6% of South Carolina adults used marijuana during the past 30 days, down from its peak of 7.2% during this period but up from 6.0% in 2009-10.

Past 30-Day Marijuana Use among Adults (18 and Over),
South Carolina and US, 2009-10 to 2013-2014



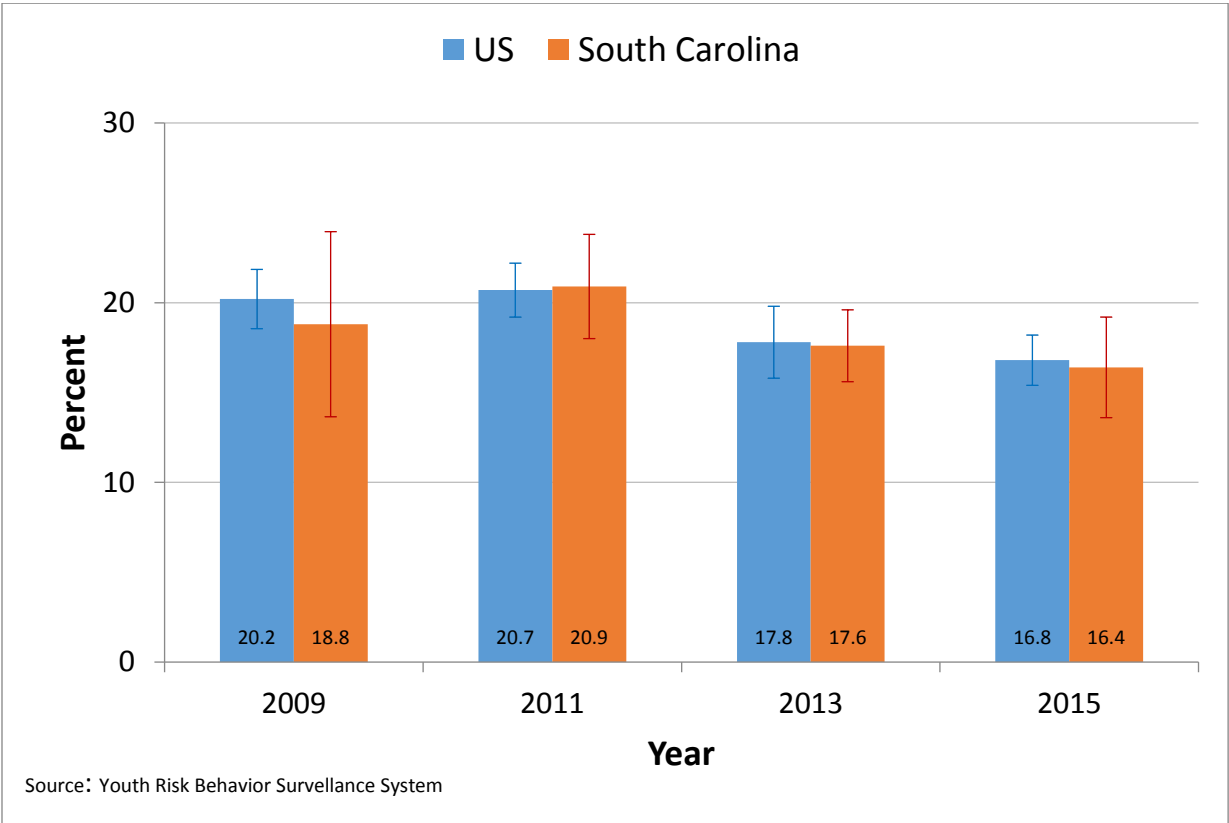
Note: Confidence intervals were not available.

NONMEDICAL USE OF PRESCRIPTION DRUGS

Prescription Drug Use without a Doctor's Prescription among High School Students

High school students who reported ever using prescription drugs without a doctor's prescription declined in South Carolina and US since 2009, with rates being very similar during that period. In 2015, 16.4% of South Carolina high school students reported every using prescription drugs without a doctor's prescription, down from 17.6% in 2013.

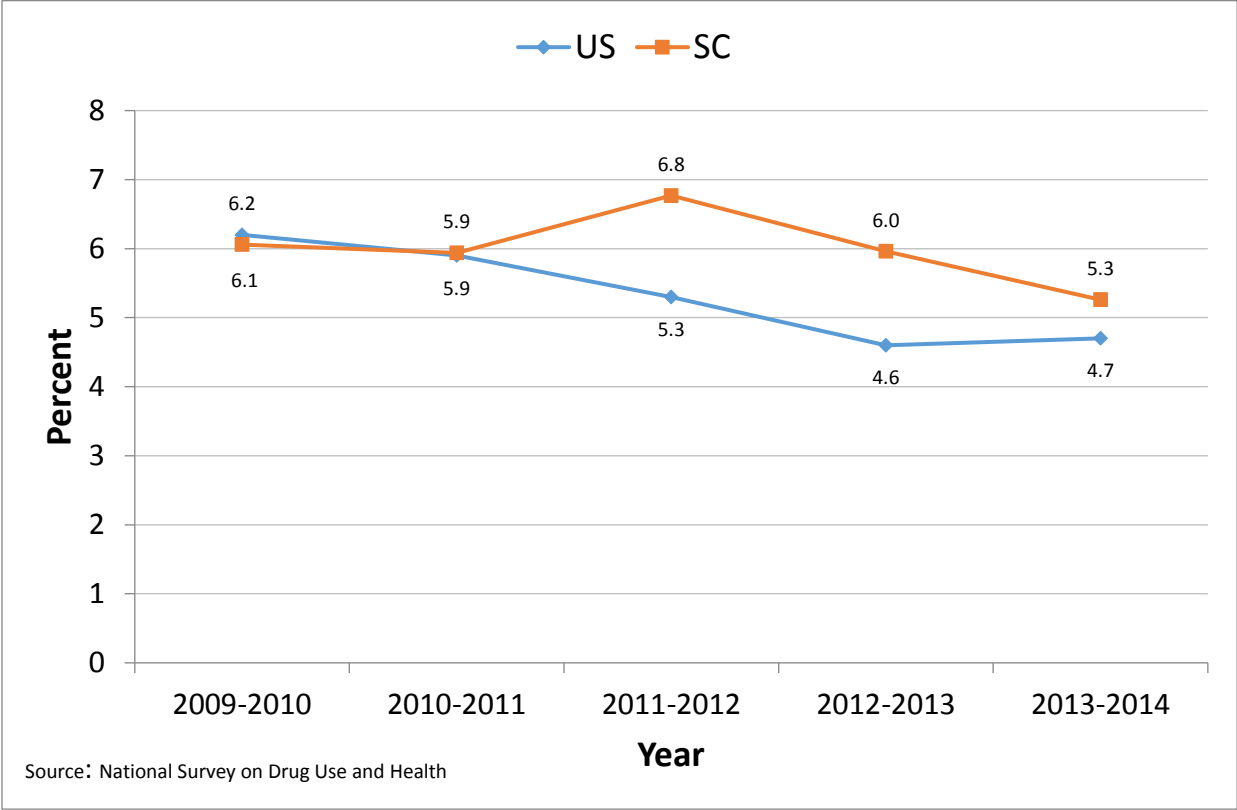
Lifetime Use of Prescription Drugs without a Doctor's Prescription, High School Students, South Carolina and US, 2009 to 2015



Nonmedical Use of Pain Relievers among Adolescents

Nonmedical use of pain relievers during the past year among adolescents has decreased in South Carolina and the US during the last five years. South Carolina adolescents reported an increase in use in 2011-12 and then a steady decline, whereas the US rates have shown a steady decline. In 2013-14, 5.3% of use of adolescents reported the nonmedical use of pain relievers, down from 6.0% in 2012-13.

Past Year Nonmedical Use of Pain Relievers among Adolescents (12 – 17), South Carolina and US, 2009-10 to 2013-14

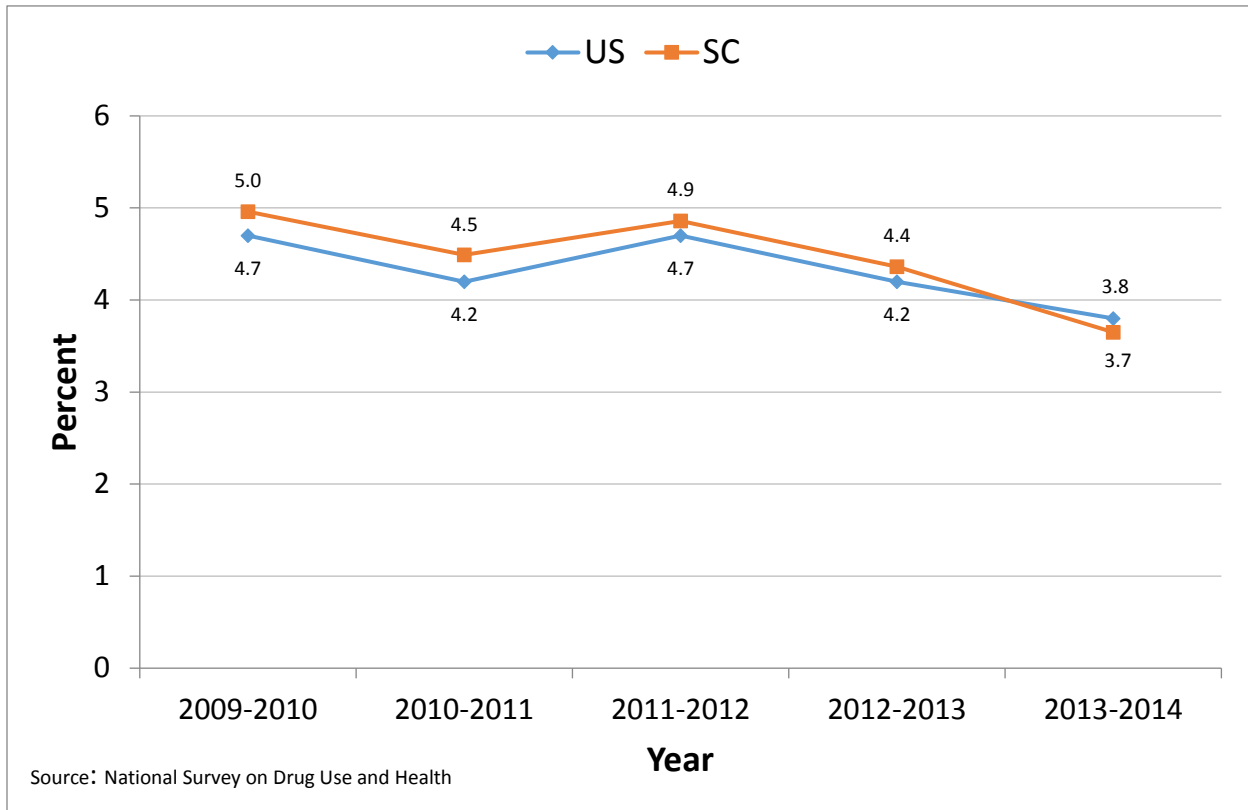


Note: Confidence intervals were not available.

Nonmedical Use of Pain Relievers among Adults

Nonmedical use of pain relievers during the past year among adults has decreased during the last five years, with rates being nearly identical in South Carolina and the US. In 2013-2014, 3.7% of use of adults reported the nonmedical use of pain relievers, down from 4.4% in 2012-2013.

Past Year Nonmedical Use of Pain Relievers among Adults (18 and Over),
South Carolina and US, 2009-10 to 2013-14



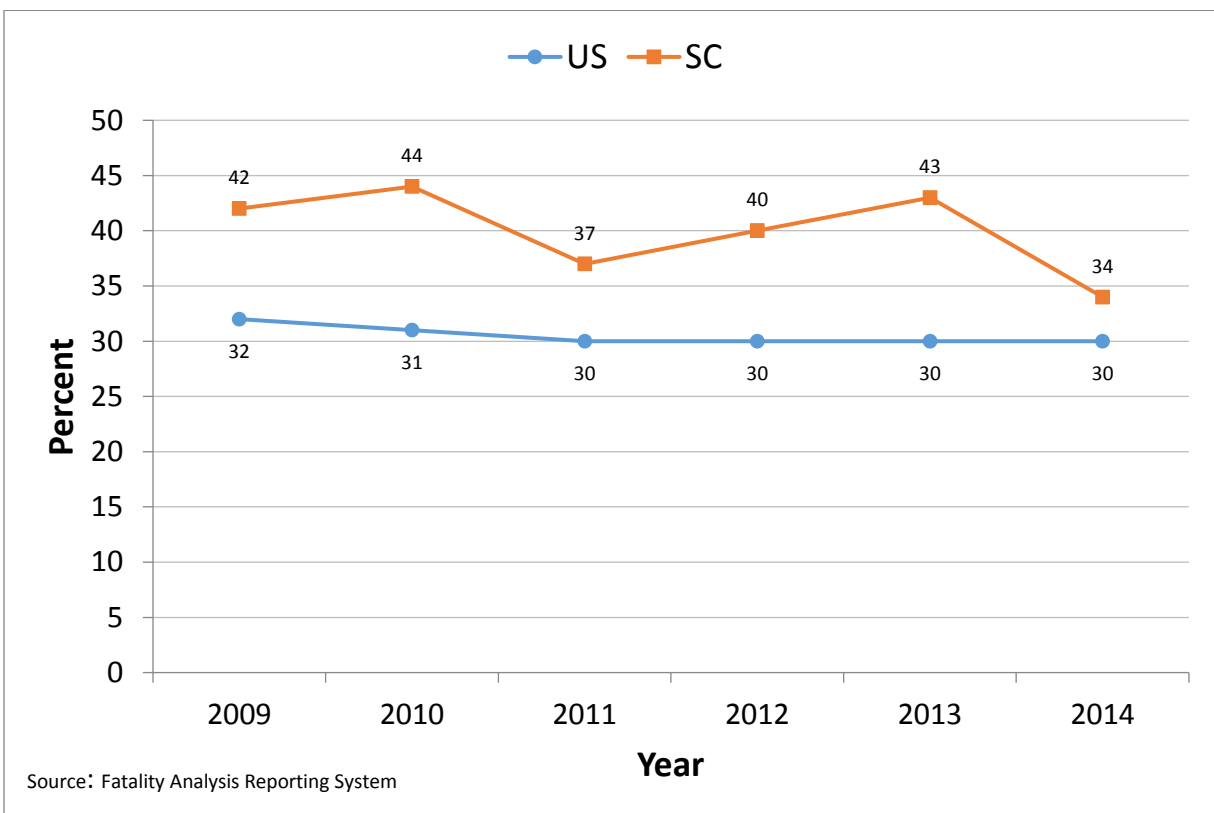
Note: Confidence intervals were not available.

CONSEQUENCES 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 US rate has remained quite steady and has been lower than the South Carolina rate. In 2014, 34.0% of fatal crashes were alcohol involved, down from 43% in 2013.

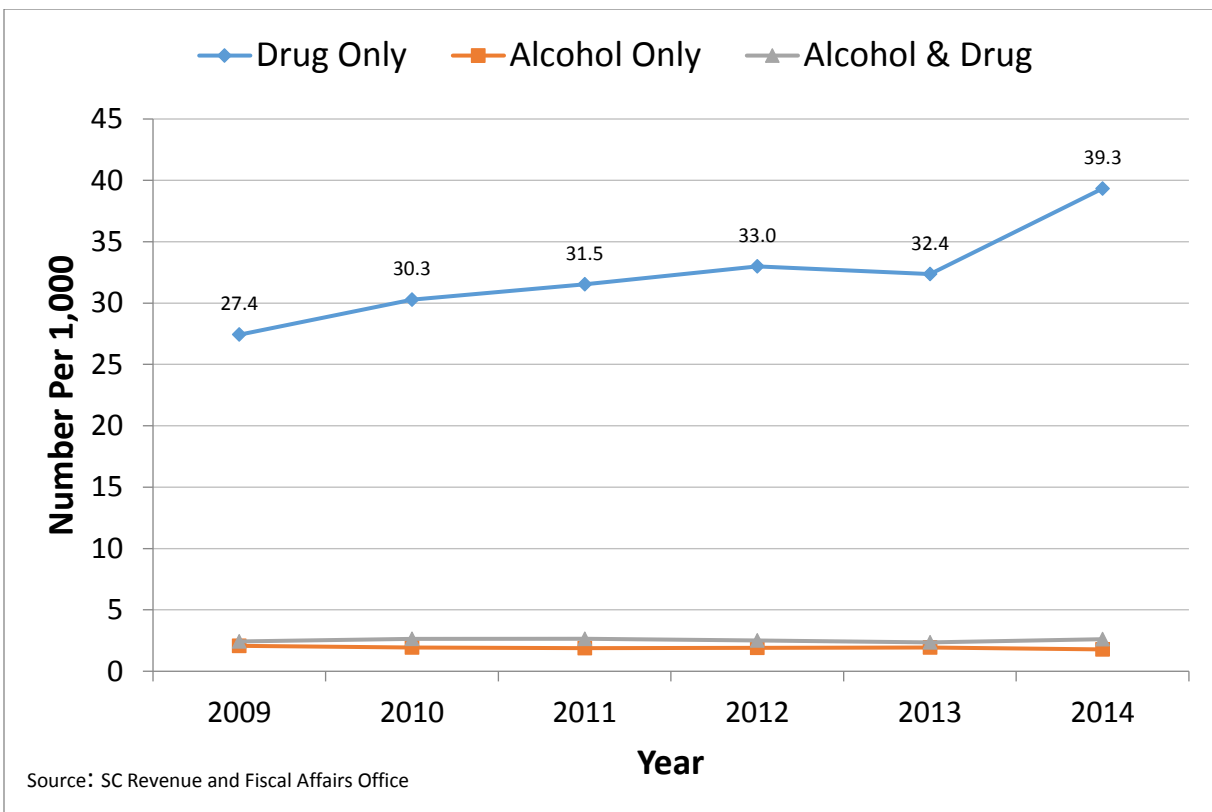
Alcohol-Involved Fatal Traffic Crashes, South Carolina and US, 2009 to 2014



Alcohol and Drug-Involved Emergency Department Visits

Since 2009, drug-only Emergency Department (ED) visits have risen in South Carolina, with a relatively large spike in 2014. In 2014, the rate of drug-only visits to the ED was 39.3 per 1,000 persons, up from 32.4 in 2013 and 27.4 in 2009. Notably, the rate of alcohol-only ED visits and alcohol *and* drug ED visits was steady and much lower than the drug-only visits. Also worth noting is that, even though the rate of drug-only visits increased in the last five years, it has leveled off quite a bit since the early 2000s when the rate was as low as 12.4 per 1,000 (not shown).

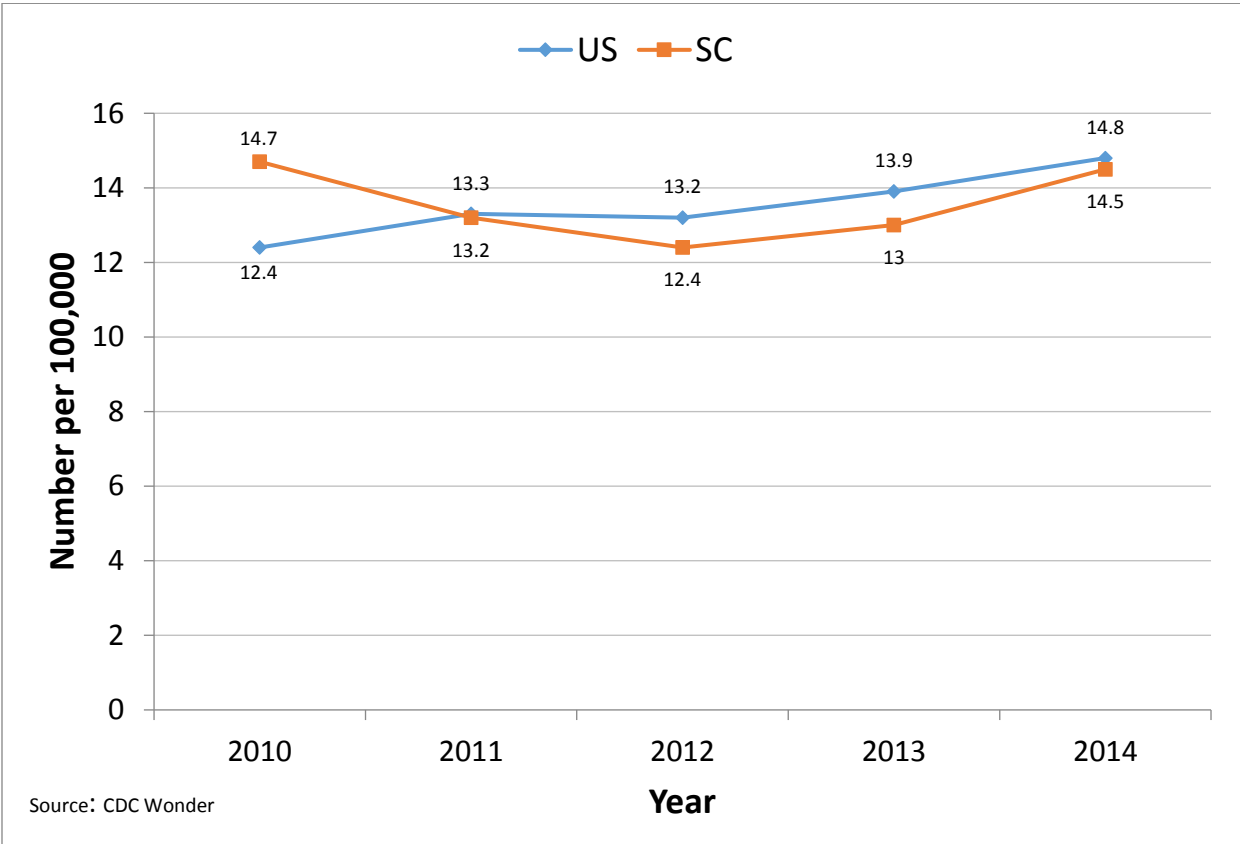
Alcohol and Drug-Involved Emergency Department Visits, South Carolina and US, 2009 to 2014



Prescription Drug Deaths

Deaths from prescription drugs have fluctuated in South Carolina during the past five years, peaking during this time in 2010, dropping substantially through 2012, and then near peaking again in 2014. Rates for the US have steadily increased during the same period. In 2014 in South Carolina, the death rate from prescription drugs was 14.5 per 100,000, up considerably from 13.0 per 100,000 in 2013.

Prescription Drug Deaths,
South Carolina and US, 2010 to 2014

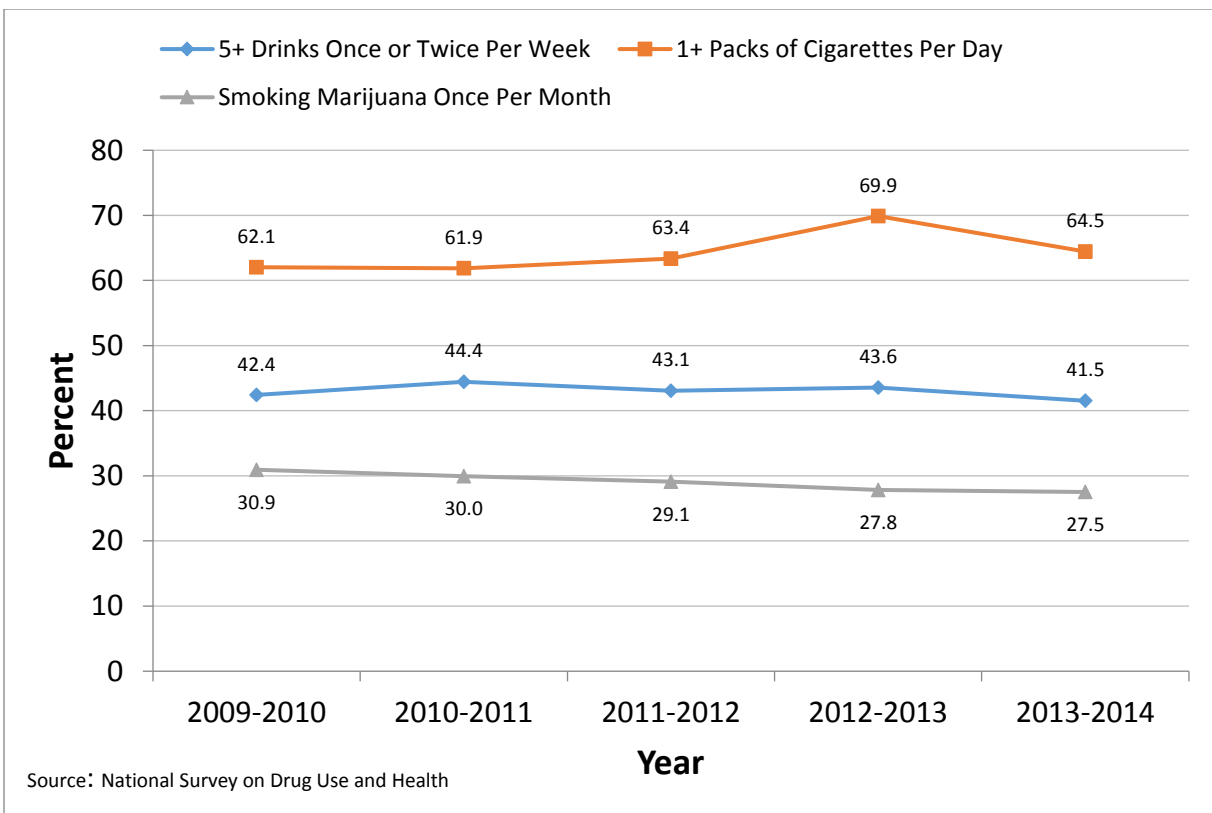


PERCEPTIONS OF RISK

Perceptions of Great Risk of Using Alcohol, Cigarettes, and Marijuana among Adolescents

Perceptions of great risk, as reported by 12 – 17 year olds in South Carolina, are highest for cigarette use (one or more packs a day), followed by alcohol use (five or more drinks once or twice a week) and marijuana use (once per month). For the five most recent years of data, perceptions of risk have increased slightly for cigarette use, remained relatively steady for alcohol use, and declined slightly for marijuana use.

Perceptions of Great Risk of Using Alcohol, Cigarettes, and Marijuana among Adolescents (12 – 17), South Carolina, 2009-10 to 2013-14

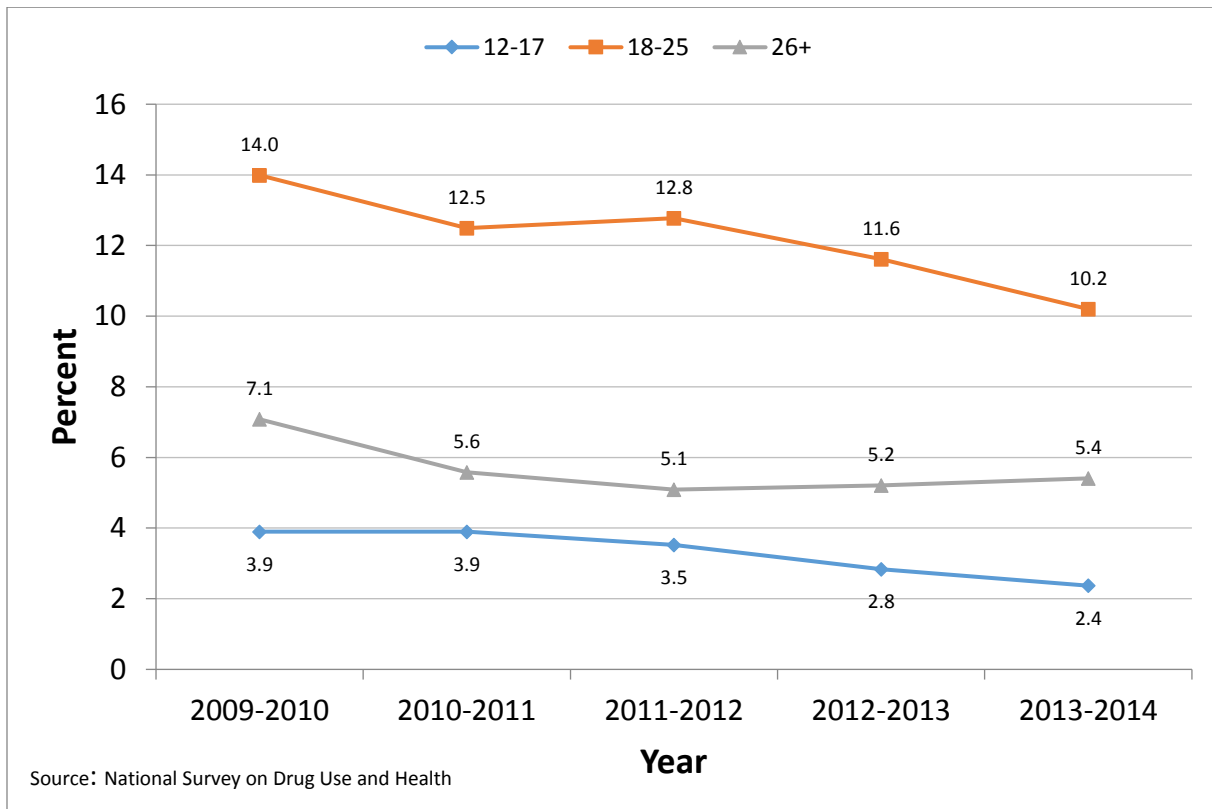


GAPS IN TREATMENT SERVICES

Needing but Not Receiving Treatment for Alcohol Use

The percent of persons who reported needing but not receiving treatment for alcohol use decreased for various age groups in South Carolina since 2009-10. The largest gap in treatment has consistently been for persons ages 18 – 25, although that age group also reported the most marked decline during the same period. In 2013-14, 10.2% of 18-25 year olds reported needing but not receiving treatment for alcohol use, down from 11.6% in 2012-13.

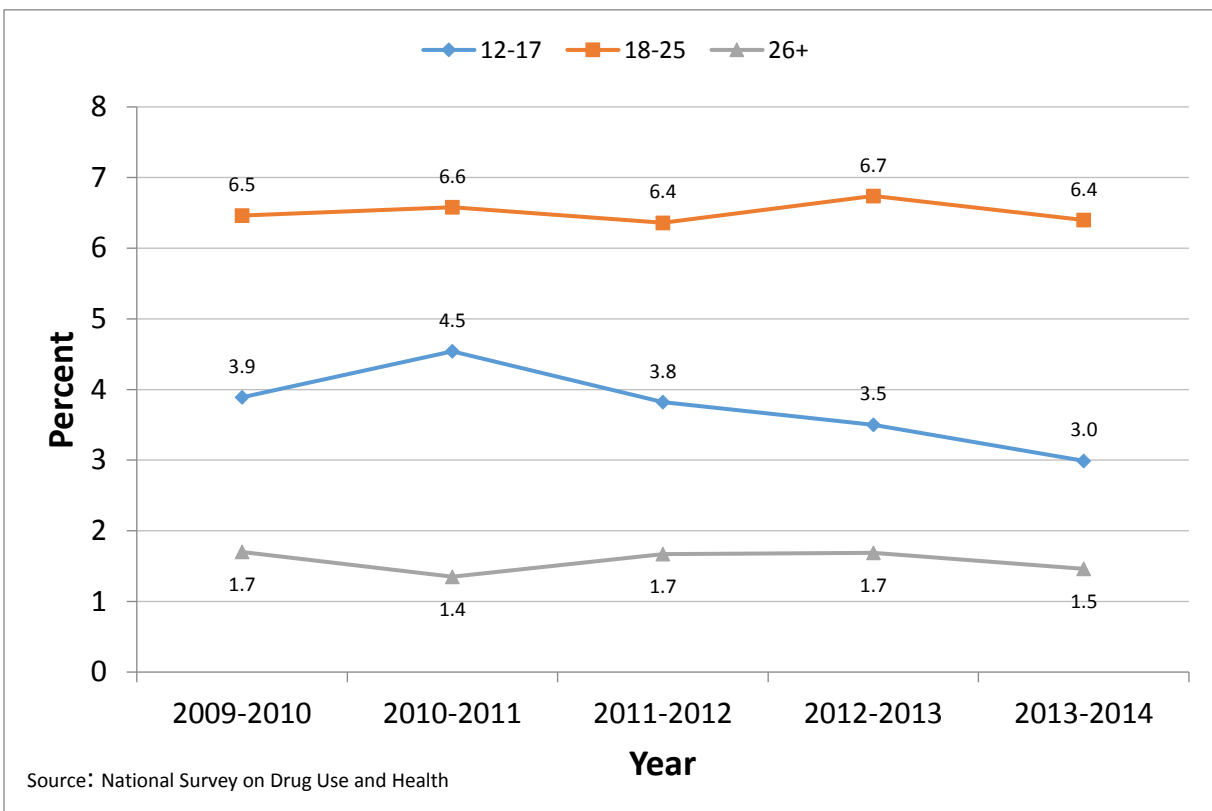
Needing but Not Receiving Treatment for Alcohol Use,
South Carolina by Age Groups, 2009-10 to 2013-14



Needing but Not Receiving Treatment for illicit Drug Use

Similar to treatment for alcohol use, the percent of persons who reported needing but not receiving treatment for illicit drug use has been greatest for persons ages 18 – 25. Rates for persons in South Carolina have remained relatively steady since 2009-10, although it has declined for 12-17 year olds. In 2013-14, 3.0% of 12-17 year olds reported needing but not receiving treatment for illicit drug use, down from 3.5% in 2012-13 and a peak of 4.5% in 2010-11.

Needing but Not Receiving Treatment for Illicit Drug Use,
South Carolina by Age Groups, 2009-10 to 2013-14



SUMMARY DATA

Youth Summary

The tables below summarize all the data in this report. The first table shows youth and the second shows adults, or any data that include adults. Green cells indicate a change from 2009/2010 to 2014/2015 of at least 10 percent in the desired direction. Red cells indicate a change of at least 10% in the undesired direction.

Of the 15 youth indicators, 12 (80%) moved in the desired direction by at 10 percent. One, perceptions of risk of smoking marijuana, moved in the undesired direction by at least 10 percent. **Thus, for the key indicators of substance abuse prevention in this report, South Carolina appears to have been moving in the right direction during the last five years.**

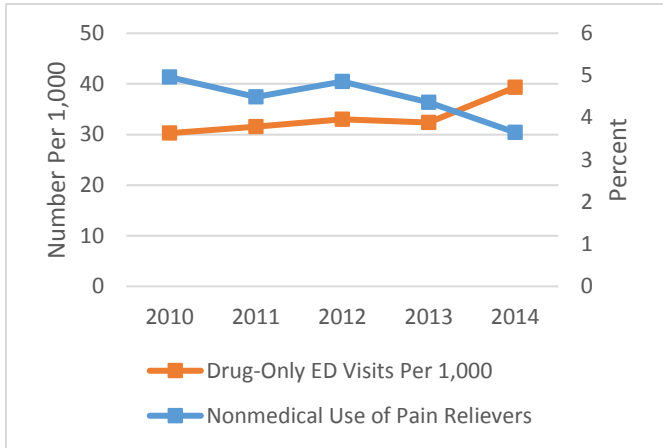
Indicator	Percent		Percent Change
	2009/2010	2014/2015	
ALCOHOL USE			
Alcohol use among HS students	35.2	24.6	-30.1%
Binge drinking among HS students	18.4	11.5	-37.5%
Drinking and Driving among HS students	10	4.5	-55.0%
TOBACCO USE			
Cigarette use among HS students	20.5	9.6	-53.2%
Cigar use among HS students	14.7	11.2	-23.8%
Smokeless tobacco use among HS students	10.4	7.2	-30.8%
Cigarette, cigar, or smokeless tobacco use among HS students	29.7	19.7	-33.7%
MARIJUANA USE			
Marijuana use among HS students	26.3	17.8	-32.3%
NONMEDICAL USE OF PAIN RELIEVERS			
Prescription drug use without a doctor's prescription among HS students	18.8	16.4	-12.8%
Nonmedical use of pain relievers among adolescents	6.1	5.3	-13.1%
PERCEPTIONS OF RISK AMONG ADOLESCENTS			
Alcohol, 5 or more drinks once or twice per week	42.4	41.5	-2.1%
Cigarettes, 1 or more pack per day	62.1	64.5	3.9%
Marijuana, smoking once per month	30.9	27.5	-11.0%
GAPS IN TREATMENT SERVICES			
Alcohol, needing but not receiving treatment			
12 - 17 years old	3.9	2.4	-38.5%
Illicit Drugs, needing but not receiving treatment			
12 - 17 years old	3.9	3	-23.1%

Adult Summary

The data for adults are also rather positive, though not quite as positive as those for youth. Of the 13 indicators that include adult data, seven (54%) moved in the desired direction by at 10 percent and two (15%) moved in the undesired direction by at least 10 percent. Positive changes included cigarette use, nonmedical use of pain relievers, alcohol-involved traffic crashes, alcohol-only emergency department visits, and gaps in treatment services. Negative changes included marijuana use and drug-only emergency department visits.

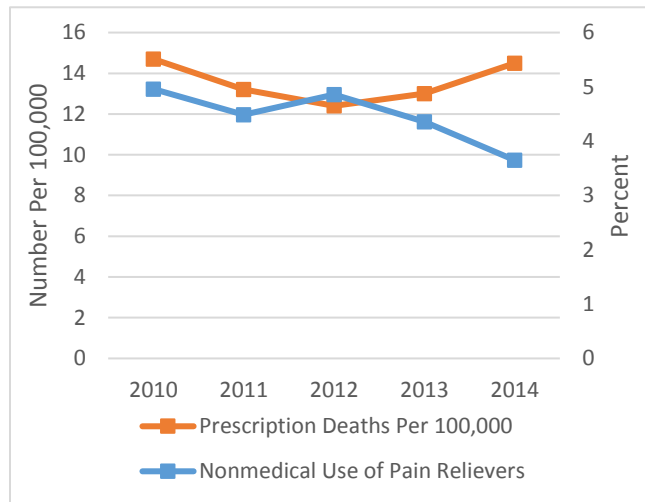
For the most part, the consequence data track the consumption data. For example, consequences of alcohol use are down, along with reductions in binge and heavy drinking (though the consumption reductions are not nearly as large as the consequence reductions). The one area that is difficult to reconcile is prescription drug consequences and consumption. For example, nonmedical use of pain relievers is down but drug-only emergency department visits are up. The figures on the next page more clearly show these contradictory patterns.

Indicator	Percent		Percent Change
	2009/2010	2014/2015	
ALCOHOL USE			
Binge drinking among adults (2011 - 2015)	15.4	15.2	-1.3%
Heavy alcohol use among adults (2011 - 2015)	6.6	6.3	-4.5%
TOBACCO USE			
Cigarette use among adults (2011 - 2015)	23.1	19.7	-14.7%
MARIJUANA USE			
Marijuana use among adults	6	6.6	10.0%
NONMEDICAL USE OF PAIN RELIEVERS			
Nonmedical use of pain relievers among adults	5	3.7	-26.0%
CONSEQUENCES OF ALCOHOL AND DRUG USE			
Alcohol-involved fatal crashes	42	34	-19.0%
Drug-only emergency department visits	27.4	39.3	43.4%
Alcohol-only emergency department visits	2.1	1.8	-14.3%
Prescription drug deaths	14.7	14.5	-1.4%
GAPS IN TREATMENT SERVICES			
Alcohol, needing but not receiving treatment			
18 - 25 years old	14	10.2	-27.1%
26 years old and older	7.1	5.4	-23.9%
Illicit Drugs, needing but not receiving treatment			
18 - 25 years old	6.5	6.4	-1.5%
26 years old and older	1.7	1.5	-11.8%



As nonmedical use of pain relievers has fluctuated down, up, and down again, drug-only emergency department visits have risen.

As nonmedical use of pain relievers has fluctuated down, up, and down again, prescription drug deaths have fallen and risen.



We recommend that the SC SEOW continue to monitor these variables and facilitate discussions among experts about why these contradictory patterns exist.