

# KIP Survey 2016



## State and Regional Data Report

—10th Graders—



Kentucky Cabinet for Health and Family Services  
Department for Behavioral Health,  
Developmental and Intellectual Disabilities  
Division of Behavioral Health

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\* The KIP survey questions for these substances have either changed or were included for the first time in 2014 and, therefore, are trendable for 2014-2016 *only*.





# Introduction

The purpose of the KIP survey is to anonymously assess student use of alcohol, tobacco, and other drugs (ATOD), as well as a number of factors related to potential substance abuse. The survey provides information about student self-reported use of substances (e.g., within last 30 days, last year), student perceptions about substance use (e.g., level of risk, peer and parent disapproval), and perceived accessibility of substances in the community.

### History and Development of the KIP Survey

Since 1999, the KIP Survey has been administered in Kentucky through the Substance Abuse Prevention Program in the Cabinet for Health and Family Services, through agreements with individual school districts across the state. The intent of the survey is to anonymously assess student use of alcohol, tobacco, and other drugs (ATOD), as well as a number of factors related to potential substance abuse (e.g., peer influences, perception of risk, school safety). Since 2006, questions addressing additional illicit substances, bullying, gambling, mental health and relationship violence have been added to the survey. School district and individual student participation have always been on a voluntary basis.

Originally, the KIP survey was used as part of a federal initiative that funded state incentive grants for substance abuse prevention across the country. In our state, these pilot programs were termed the Kentucky Incentives for Prevention program (thus, the name “KIP Survey”). The core items on the present KIP survey were originally chosen by the federal Center for Substance Abuse Prevention (CSAP), based on extensive research on risk and resilience factors associated with youth substance

abuse. Additional items have been added that are specific to Kentucky. Basing the scale on the federal model enables comparisons to other states and to the nation, while at the same time making within-state comparisons. The fact that the KIP survey has been administered since 1999 within Kentucky enables school-community comparisons over time.

The survey is now conducted bi-annually in the fall in even-numbered years (2014, 2016, etc.), with 6th, 8th, 10th, and 12th graders attending school in Kentucky communities. There is no cost to the individual districts (costs are paid by the Substance Abuse Prevention Program, Cabinet for Health and Family Services). Extensive efforts go into assuring the anonymity of students who complete the brief survey, and to insuring that no student feels coerced to participate. Parents who do not wish their child to participate are given the opportunity, through both general and specific notifications, to refuse on behalf of their child.

Effective with the 2008 administration, both a paper and web-based version of the KIP survey were made available to districts. Classroom administration of the paper survey (including distribution, giving instructions, completing the survey, and collecting the survey) takes between forty and fifty minutes. Classroom administration of the web-based survey takes slightly less time. School districts have some flexibility as to when to administer the survey within an approximate 5-week window (October), and results are scanned, tabulated and reported in three to four months following administration. District results are reported only to the school district and not released in a public report.

### Sample Size

In 2016 the total sample size for 6th, 8th, 10th, and 12th grades was 111,700. The sample includes schools from 113 out of 120 Kentucky counties, and 149 out of 173 public school districts. The total samples for Regional Prevention Centers and individual counties can be found on page 2.

### 10th Grade Data

Most of the statistics in this report relate to 10th graders since this is likely the most accurate indicator of levels of use for high school students. By 12th grade, the effect of drop-out rates artificially depresses these numbers. Below are the 2016 10th grade sample sizes for Regional Prevention Centers.

Please note that when looking at the use of inhalants (sniffing glue, inhaling contents of aerosol spray cans, etc.) we examine the consumption patterns of *8th graders rather than 10th graders [SEE PAGES 54-55]*. Historically, younger students are more likely to use inhalants than older students.

### 10th grade Sample Size, 2016

Four Rivers (RPC 01).....	1694
Pennyroyal (RPC 02).....	1854
River Valley (RPC 03).....	2045
LifeSkills (RPC 04).....	1532
Communicare (RPC 05).....	2254
Centerstone (RPC 06).....	2725
NorthKey (RPC 07).....	3533
Comprehend (RPC 08).....	590
Pathways (RPC 09/10).....	1838
Mountain (RPC 11).....	1276
Kentucky River (RPC 12).....	723
Cumberland River (RPC 13).....	1867
Adanta (RPC 14).....	1774
Bluegrass (RPC 15).....	4674

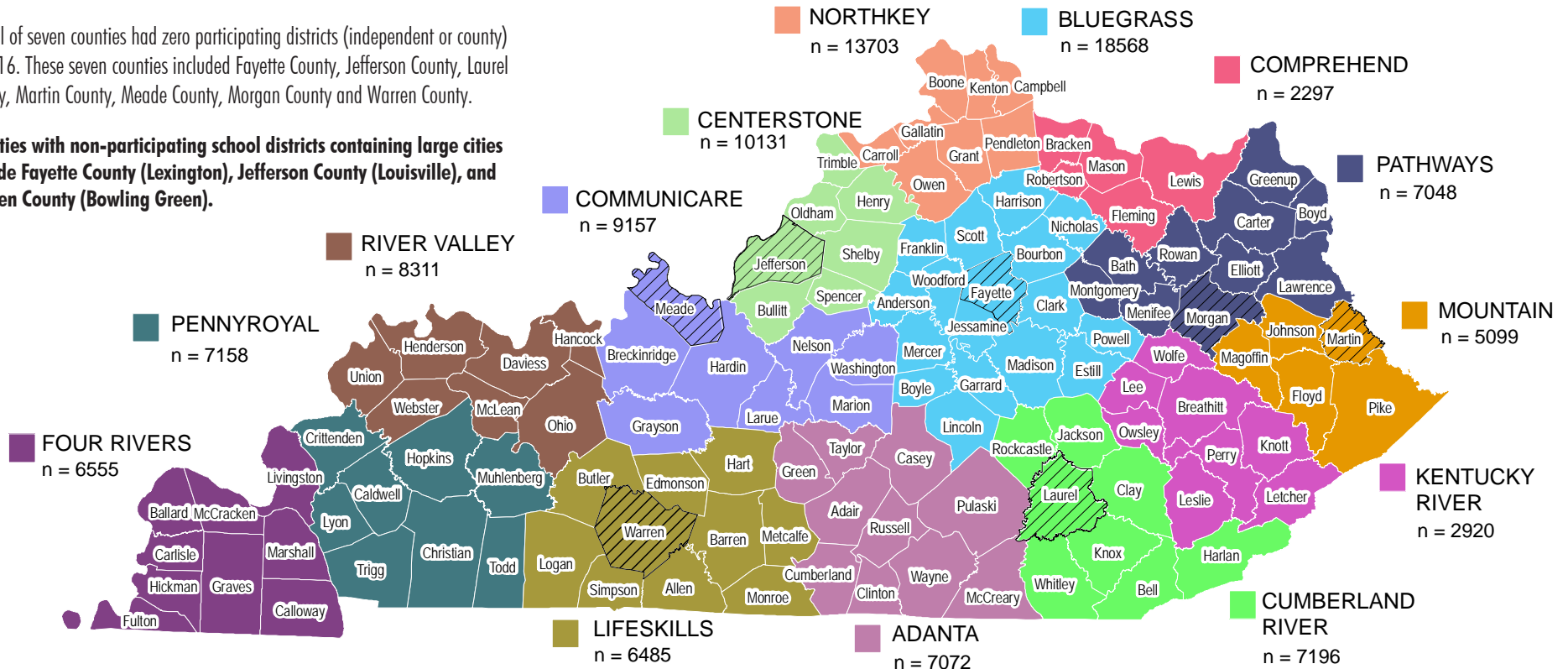
# Regional Prevention Centers

n = 2016 KIP sample size (6th, 8th, 10th and 12th grades)

 Counties with zero participating school districts

A total of seven counties had zero participating districts (independent or county) in 2016. These seven counties included Fayette County, Jefferson County, Laurel County, Martin County, Meade County, Morgan County and Warren County.

Counties with non-participating school districts containing large cities include Fayette County (Lexington), Jefferson County (Louisville), and Warren County (Bowling Green).



**Twenty-four out of 173 school districts** did not participate in the 2016 KIP Survey. Non-participating school districts included: Anchorage Independent (Jefferson County), Ashland Independent (Boyd County), Beechwood Independent (Kenton County), Bellevue Independent (Campbell County), Bowling Green Independent (Warren County), Calloway County, Dawson Springs Independent (Hopkins County), East Bernstadt Independent (Laurel County), Eminence Independent (Henry County), Fayette County, Jackson Independent (Breathitt County), Jefferson County, Kenton County, Laurel County, Martin County, Meade County, Morgan County, Paintsville Independent (Johnson County), Perry County, Science Hill Independent (Pulaski County), Southgate Independent (Campbell County), Taylor County and Warren County. In some cases, the total county-level sample sizes listed reflect the sole participation of an independent school district(s) within a county.

## COUNTY-LEVEL SAMPLE SIZES (6th, 8th, 10th, and 12th Grades)

Adair	605	Butler	533	Edmonson	518	Hardin	3753	Lawrence	531	McCreary	703	Perry	267	Trimble	305
Allen	785	Caldwell	540	Elliott	288	Harlan	1177	Lee	246	McLean	394	Pike	2487	Union	490
Anderson	846	Calloway	196	Estill	564	Harrison	824	Leslie	330	Menifee	226	Powell	592	Washington	399
Ballard	383	Campbell	2987	Fleming	618	Hart	485	Letcher	912	Mercer	845	Pulaski	2562	Wayne	696
Barren	1701	Carlisle	207	Floyd	1276	Henderson	1665	Lewis	552	Metcalfe	204	Robertson	106	Webster	580
Bath	482	Carroll	491	Franklin	1666	Henry	602	Lincoln	929	Monroe	445	Rockcastle	723	Whitley	2013
Bell	1174	Carter	1143	Fulton	232	Hickman	190	Livingston	300	Montgomery	1102	Rowan	697	Wolfe	266
Boone	5700	Casey	598	Gallatin	430	Hopkins	1691	Logan	1087	Muhlenberg	1263	Russell	600	Woodford	1115
Bourbon	827	Christian	2001	Garrard	709	Jackson	526	Lyon	261	Nelson	1827	Scott	2233		
Boyd	938	Clark	1167	Grant	1188	Jessamine	1803	Madison	3012	Nicholas	277	Shelby	1643		
Boyle	1159	Clay	657	Graves	1496	Johnson	836	Magoffin	500	Ohio	1023	Simpson	727		
Bracken	401	Clinton	436	Grayson	1039	Kenton	1840	Marion	728	Oldham	3286	Spencer	790		
Breathitt	427	Crittenden	318	Green	409	Knott	408	Marshall	1221	Owen	478	Taylor	254		
Breckinridge	887	Cumberland	209	Greenup	1641	Knox	926	Mason	620	Owsley	64	Todd	531		
Bullitt	3505	Daviess	3733	Hancock	426	Larue	524	McCracken	2330	Pendleton	589	Trigg	553		



## 30-day Use

### Alcohol

Although reported use has declined steadily, alcohol remains the most widely abused substance among young people in Kentucky. In 2016, 19.4% of 10th graders in Kentucky reported drinking alcohol in the 30-day period prior to the survey. This percentage is nearly identical the national average, and down 1.6 percentage points from Kentucky's average of 21% in 2014.

Regionally, Pennyroyal (24.1%) and Four Rivers (23.3%) reflected the highest percentages of 10th graders reporting 30-day use of alcohol in 2016; both fall above the statewide rate. Mountain and Cumberland River regions in Eastern Kentucky reported the lowest 30-day alcohol use for 10th graders in 2016 [SEE PAGES 10-11].

### Binge Drinking

In 2016, 10.4% of 10th graders reported the consumption of five or more drinks in a row at one or more times in the two weeks prior to taking the survey. Binge drinking has been steadily decreasing since 2004; the 2016 rate is down from 12% in 2014, and 14.5% in 2012. Four Rivers and Pennyroyal 10th graders reported the highest rates of 10th grade binge drinking in 2016, while Adanta and Centerstone reported the lowest rates [SEE PAGES 12-13].

### Cigarettes

Tenth graders in Kentucky continue to demonstrate significantly higher rates of smoking than 10th graders at the national level. In 2016, 13.1% of 10th graders in Kentucky reported smoking one or more times in the 30 days prior to taking the survey. This is compared to a rate of just 4.9% for 10th graders nationally.

The regions of Kentucky River, Pennyroyal and Cumberland River reported the highest levels of

10th grade smoking in 2016 (all above the statewide rate.) Centerstone and NorthKey have the lowest rates of smoking for 10th graders, although both regions nonetheless remain nearly five percentage points higher than national figures [SEE PAGES 14-15].

### Smokeless Tobacco

In 2016, the rate of 10th graders reporting the use of smokeless tobacco in the 30 days prior to taking the survey was 9.7%. This is nearly three times the 2016 national rate for 10th graders of 3.5%.<sup>1</sup>

At 14.6%, 10th graders in Cumberland River reported the highest rate of smokeless tobacco use for 10th graders in 2016. Centerstone and Northkey came in below the statewide average, both at 6.7% [SEE PAGES 16-17].

## Novel Tobacco Products

Over the past several years, the tobacco industry has introduced several types of novel smokeless tobacco products. Data indicate that sales and use of these products are on the rise (while sales of traditional cigarettes and smokeless tobacco continue to decline), and that they are being promoted as an alternative to traditional cigarettes. This strategy was documented in a report released by the U.S Food and Drug Administration (FDA)'s Tobacco Products Scientific Advisory Committee (TPSAC), which concluded that dissolvable tobacco products could increase overall tobacco use by encouraging young people to start using tobacco.<sup>2,3,4</sup> However, use among youth in Kentucky from 2014-2016 has declined.

The authors of the Monitoring the Future National Results on Adolescent Drug Use found that "the new product of e-cigarettes has made rapid inroads among adolescents, and its prevalence is now higher than the prevalence of tobacco cigarette smoking."<sup>5</sup>

These factors prompted the need to address adolescent use of these various new products in Kentucky, and the following question was added to the KIP survey in 2014:

*During the past 30 days, which of the following tobacco products did you use on at least one day?*

- Roll-your-own cigarettes
- Smoking tobacco from a hookah or waterpipe
- Snus (for example, Camel or Marlboro Snus)
- Dissolvable tobacco products (for example, Ariva, Stonewall, Camel orbs, Camel sticks or Camel strips)
- Electronic cigarettes (for example, NJOY, V2, Bull Smoke, Halo)
- Some other new tobacco product not listed here

Regional highs and lows for each of these products are detailed in the following paragraphs, and maps depicting regional response rates can be found on pages 18-28.

### Roll-Your-Own Cigarettes

In 2016, Kentucky River (at 8.6%) reported the highest rates of roll-your-own cigarette use among 10th graders. Reported use was lowest in the Centerstone and Northkey regions. The statewide figure was 5.3%, a slight decrease from 6.4% in 2014.

### Smoking Tobacco from a Hookah or Waterpipe

10th graders in the Comprehend, NorthKey and Bluegrass regions exhibited the highest rates of smoking tobacco from a hookah or waterpipe in 2016. Centerstone, Adanta and Kentucky River reported 2.9%, the lowest rates of use. The statewide figure was 3.8%, down from 6.9% in 2014.

### Snus

Centerstone and NorthKey reported the lowest 2016 usage rates of snus (both 3.9%). Mountain, Pennyroyal and Kentucky River 10th graders all

report the highest rates of use in the 7% range. Statewide, 5.7% of Kentucky 10th graders reported using snus in the past 30 days.

### Dissolvable Tobacco Products

There was little variation in reported rates of use of dissolvable tobacco products throughout the state – 10th graders in all regions reported use between 0.6% and 1.9%. The statewide rate was 1.2%.

### Electronic Cigarettes

Of all the new tobacco products addressed on the KIP Survey, electronic cigarettes continue to be used most commonly, despite a reported decrease in use since 2014. At 11.4%, Kentucky 10th graders in 2016 reported rates of use 4.7 percentage points below 10th graders in 2014. Rates of use were highest in the Pennyroyal, River Valley and Communicare regions, and lowest in the NorthKey region.

### Other Tobacco Products

As new products are continually being introduced to the market, the KIP survey also addresses “*other new tobacco products*.” In the Comprehend region, 9% of 10th graders reported using other tobacco products in the past 30 days, while 3.7% of 10th graders in Centerstone reported doing so.

## Marijuana

### Marijuana

Marijuana remains the most widely used illegal substance by young people in Kentucky. In 2016, the rate of 10th graders in Kentucky reporting the use of marijuana in the 30 days prior to taking the survey was 11.3%; this is less than the national rate of 30-day marijuana use for 10th graders of 14%. The rate of 10th grade marijuana use in Kentucky has been on the decline since 2010.

Regionally, 10th graders in Pennyroyal (at 14.7%) reported the highest rates of 10th grade marijuana use in 2016. Regions with the lowest rate of

marijuana use in 2016 were Mountain and Adanta [SEE PAGES 30-31].

### Synthetic Marijuana

Synthetic marijuana, also known as K2 or Spice, refers to a wide variety of herbal mixtures that produce experiences similar to marijuana and that are marketed as “safe,” legal alternatives to that drug. In response to increasing reports of synthetic marijuana abuse and overdoses in Kentucky, a question to address adolescent use was added to the KIP Survey in 2014.

In 2016, Four Rivers and Cumberland River regions reported the highest rates of synthetic marijuana use at 2.5% and 2.4%, compared to 1.1% in Kentucky River and 1.3% in NorthKey. The statewide number of 10th graders reporting past 30-day use was 1.7%, down from 3% in 2014 [SEE PAGES 32-33].

## Narcotics or Prescription Drugs

This category refers to narcotic drugs that one needs a prescription to obtain. Effective with the 2014 survey, the wording of this question was changed to read, “*On how many occasions (if any) have you taken narcotics or drugs that require a doctor’s prescription, without a doctor telling you to take them?*” In prior years, this question ended with the phrase “in order to get high”. To maintain compliance with federal reporting requirements for Drug Free Communities (DFC) grantees, this phrase was removed in 2014. **Due to this significant wording change, valid trend data is available since 2014 only.**

Statewide, 2.7% of 10th graders responded that they had used prescription drugs without a doctor’s prescription one or more times in the past 30 days. Tenth graders in the Pennyroyal (4.8%) region reported the highest rates of prescription drug use in 2016, while the Comprehend region displayed the lowest regional rate of 0.7% [SEE PAGES 34-35.]

### Painkillers

Effective with the 2014 version of the KIP survey, the wording of this question was updated to reflect the abuse of several painkillers including OxyContin, Percocet, Vicodin and Codeine. In prior years, this question addressed OxyContin only. **Due to this significant wording change, valid trend data is available since 2014 only.**

In 2016, 10th graders in Pennyroyal (5.7%) and Communicare (4.8%) reported the highest rates of painkiller use similar to 2014; both are above the statewide rate of 3.4%. The Comprehend region in northeastern Kentucky reported the lowest rate of 1.6% [SEE PAGES 36-37.]

### Speed/Uppers

Effective with the 2014 version of the KIP survey, the wording of this question was updated to include the more commonly recognized drug names Adderall and Ritalin. In prior years, this question simply addressed use of “*speed/upper other than methamphetamine*.” **Due to this significant wording change, valid trend data is available since 2014 only.**

The Four Rivers (2.7%) region reported the highest rate of speed/upper use in 2016; Kentucky River reported the lowest rate of 0.7% [SEE PAGES 38-39.]

### Tranquilizers

Typical types of tranquilizers used by young people include prescription medications such as Valium and Xanax. In 2016, the rate of 30-day usage of tranquilizers for 10th graders in Kentucky was 1.2%. Nationally, 1.5% of 10th graders reported using tranquilizers in the 30 days prior to the survey.

Four Rivers (2.3%) and Communicare (2.2%) reported the highest rate of 30 day tranquilizer use in 2016. Regions with the lowest rates were Cumberland River, Kentucky River and Comprehend [SEE PAGES 40-41].

## Over-the-Counter Drugs

This category refers to medications that anyone can purchase at their local grocery or drug store, including products such as stay-awake pills or cough syrup. In 2016, the rate for Kentucky 10th graders misusing Over-the-Counter (OTC) drugs was 2.5%.

Reported rates of use were highest in the Pennyroyal region at 4%; Comprehend, Adanta and Kentucky River reported the lowest rates, all in the 1% range [SEE PAGES 42-43].

## Heroin

Heroin is a highly addictive opioid drug that is typically injected, but can also be smoked or snorted.

According to the Centers for Disease Control:

- Most demographic groups are increasingly using heroin and other drugs. During the past decade, heroin use has increased across the United States among men and women, most age groups, and all income levels. Some of the greatest increases occurred in demographic groups with historically low rates of heroin use: women, the privately insured, and people with higher incomes.
- A wider variety of people are using heroin. Rates remained highest among males, 18–25 year olds, people with annual incomes less than \$20,000, people living in urban areas, and people with no health insurance or those enrolled in Medicaid. However, rates increased significantly across almost all study groups. They doubled among women and more than doubled among non-Hispanic whites.
- It is common for people who use heroin to use other drugs. Nearly all (96 percent) people who reported heroin use also reported using at least one other drug in the past year. More than half (61 percent) used at least three other drugs. Prescription opioid painkiller abuse or dependences was the strongest risk factor for heroin abuse or dependence; 45% of people who used heroin also abused or were dependent on prescription opioid painkillers in the past year.
- As heroin abuse or dependence increased, so have heroin-related overdose deaths. From 2002 through 2013, the rate of heroin-related overdose deaths nearly quadrupled.<sup>6</sup>

In response to these national data and other local reports related to the alarming increase of heroin use, the following question to address past 30-day use of the substance was added to the 2014 KIP Survey: *“On how many occasions (if any) have you used heroin (“smack,” “junk,” or “China White”) in the past 30 days?”* To assess perception of risk associated with use, the survey also now asks, *“How much do you think people risk harming themselves (physically or in other ways) if they try heroin once or twice?”*

On the 2016 KIP Survey, **less than 1% of 10th graders in all fourteen Kentucky regions responded that they had used heroin in the past 30 days** [SEE PAGES 44-45].

Compared to a state rate of 82.7%, only 77% of 10th graders in Four Rivers reported a high perception of risk; in other words, fewer students in that region perceive that trying heroin once or twice is a moderate or great risk. In the NorthKey region, 86.5% of 10th graders reportedly perceive a moderate or great risk in trying heroin once or twice. In several regions, perception of risk has decreased slightly since 2014 [SEE PAGES 46-47].

## Cocaine and Crack

The KIP survey asks students if they have used cocaine or crack in the same question, while the national “Monitoring the Future” survey has separate questions for cocaine and crack use.<sup>7</sup> For Kentucky 10th graders in 2016, the rate of 30-day cocaine or crack use was 0.7%, down from 0.9% in 2014 [SEE PAGES 48-49].

## Methamphetamines

The rate of 30-day methamphetamine use for Kentucky 10th graders showed a slight decrease from 0.7% in 2014 to 0.5% in 2016. The national rate of 30-day methamphetamine for 10th graders was 0.2%.

Less than 1% of 10th graders in all 14 regions responded that they had used methamphetamines in the 30 days prior to the 2016 KIP Survey [SEE PAGES 50-51].

## Ecstasy

The 2016 percentage of Kentucky 10th graders using ecstasy in the 30 days prior to the survey decreased slightly to 0.8%, down from 1% in 2014. The national percentage of 10th graders reportedly using ecstasy was 0.5% in 2016.

On the 2016 KIP Survey, less than 1% of 10th graders in all fourteen Kentucky regions responded that they had used ecstasy in the past 30 days. Thirteen out of fifteen regions either decreased or experienced no change in usage rates in 2016 [SEE PAGES 52-53].

## Inhalants

When looking at the use of inhalants (sniffing glue, inhaling contents of aerosol spray cans, etc.), we examine the consumption patterns of 8th graders rather than 10th graders. Historically, younger students are more likely to use inhalants than older students. The rate of Kentucky 8th graders using inhalants in the 30 days prior to taking the KIP survey was 2.5% in 2016, down from 3.0% in 2014. The national rate of 10th grade inhalant use dropped notably to 1% in 2016.

In the Comprehend, Pathways, Communicare and Pennyroyal regions, between 3-4% of 8th graders reported using inhalants at least once within the past 30 days. In all other regions, less than 3% of 8th graders reported use. [SEE PAGES 54-55].

# School Safety

## Drunk or High at School

To assess levels of substance abuse occurring specifically while on school grounds, the KIP

Survey asks, “How many times (if any) in the past year have you been drunk or high at school?” In 2016, 9.7% of participating Kentucky 10th graders responded that they had been drunk or high at school at least one time within the past year. Regionally, 13.3% of Pennyroyal 10th graders represent the higher end of the spectrum, compared to 5.7% of 10th graders in the Pathways region [SEE PAGES 56-57].

### Carried a Handgun

To assess access that youth have to handguns, the KIP Survey asks, “How many times (if any) in the past year (12 months) have you carried a handgun?” Since 2010, the percent of students who reported carrying a handgun in the past year has steadily increased across all grades. In 2016, 12.4% of 10th graders said they had carried a handgun. The Pennyroyal region had the highest rate of 15.9% of 10th graders and the NorthKey region had the lowest, at 9.1%. [SEE PAGES 58-59]

### Handgun to School

Since its inception in 1999, the KIP Survey has asked students, “How many times (if any) in the past year have you taken a handgun to school?” Less than 1% of 10th graders in all fourteen regions reported having done so at least one time in 2016; all regions fell within a reporting range of 0.2%-0.8% [SEE PAGES 60-61].

### Safe at School

To start off a series of questions assessing specifics related to school safety, the KIP Survey asks students generally, “How safe do you feel at school?” In 2016, 14.8% of Kentucky 10th graders responded that they felt unsafe or very unsafe at school; this is an increase of 1% since 2014. In the Kentucky River, Pennyroyal and Bluegrass regions, the number of students responding that they feel unsafe was over three percentage points higher than the statewide average. On the low end, in the Centerstone region, 11.2% of 10th graders reported feeling unsafe or very unsafe. In 2016, the percentage of students feeling

unsafe increased in eight regions and decreased in the other seven since 2014 [SEE PAGES 62-63].

## Bullying

### Bullying at School

Accompanying the bullying questions (added to the KIP Survey in 2014) is the following explanation of what constitutes bullying: “*Bullying is when one or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when two students of about the same strength or power argue, fight or tease each other in a friendly way. Bullying involves an imbalance of power and repeated incidents over time.*”

Students are asked, “During the past year (12 months), have you ever been bullied on school property?” Approximately 26% (a range of 25.1%-27.2%) of 10th graders in the Four Rivers, Kentucky River and Comprehend regions reported that they had been bullied on school property within the past year. The lowest number of students was reported by the Mountain region at 18.2%. The statewide average was 22.8% [SEE PAGES 64-65].

### Cyberbullying

The KIP Survey also now addresses cyberbullying with the question, “During the past year (12 months), have you ever been electronically bullied?” Students are instructed to include “being bullied through e-mail, chat rooms, instant messaging, websites, social networks, or texting.”

The 2016 statewide rate of 18% is slightly higher than the national rate of 16.6%. The Centerstone and Four Rivers regions reported the highest rates of cyberbullying at 20.5% and 20.2% (Four Rivers also reported one of the highest rates of bullying at school.) On the lower end, 15.4% of Mountain 10th graders and 15.5% of Adanta 10th graders reported having been electronically bullied in the past year [SEE PAGES 66-67].

## Dating Violence

Teen dating violence is a pattern of behaviors used by one partner to manipulate power and control in a relationship. It may involve physical, emotional, verbal and/or sexual abuse. One in three adolescents in the U.S. is a victim of physical, sexual, emotional or verbal abuse from a dating partner.<sup>8</sup> Research shows that violent relationships in adolescence can have serious ramifications by putting the victims at higher risk for substance abuse, eating disorders, risky sexual behavior and further domestic violence.<sup>9</sup>

To bring attention to dating violence as an issue prevalent among our youth, and to recognize relationship violence as a risk factor for substance abuse, two questions addressing the matter were added to the KIP Survey in 2014.

### Physical Harm

To address physical dating violence, the KIP Survey asks: “During the last school year, did a boyfriend or girlfriend physically hurt you (hit, push, pull your hair) on purpose?”

In the Pennyroyal region, 7.5% of 10th graders responded that they had been physically hurt on purpose by a boyfriend or girlfriend in the past year. Centerstone and Adanta reported the lowest rates of 4.6% and 4.7%. The 2016 statewide rate was 5.8% [SEE PAGES 68-69].

### Emotional Harm

The survey also addresses emotional dating violence: “During the last school year, did a boyfriend or girlfriend emotionally hurt you (threaten, make threatening phone calls/texts, call you names, harass you online) on purpose?”

At 13.9%, 10th graders in the River Valley region reported the highest rate of past-year emotional

dating violence. Lower rates of 11% were reported in the Lifeskills and Adanta regions. The 2016 statewide rate was 12.5% [SEE PAGES 70-71].

## Mental Health

Research continually reinforces the acute connection between substance use and mental health. Data show that each is a risk factor for the other. In other words, people with a mental health issue are more likely to use alcohol or drugs than those not affected by a mental illness. Conversely, substance use disorders and other mental illnesses are developmental disorders that often begin in the teen years or even younger – periods when the brain experiences dramatic developmental changes. Early exposure to drugs may change the brain in ways that increase the risk for mental health issues.<sup>10</sup>

Alcohol and drug abuse are second only to depression and other mood disorders as the most frequent risk factors for suicide. In 2008, alcohol was a factor in approximately one-third of suicides reported in 16 states. According to SAMHSA's Drug Abuse Warning Network report on drug-related emergency department visits, in 2011, there was a 51% increase in drug-related suicide attempt visits to hospital emergency departments among people aged 12 and older.

Nearly 40,000 people in the United States die from suicide annually, or 1 person every 13 minutes. Among high school students, more than 17% (approximately 2.5 million ninth through twelfth graders) have seriously considered suicide, more than 13% have made a suicide plan, and more than 8% have attempted suicide. **These rates have been rising over the past decade.**<sup>11</sup>

In acknowledgement of the profound need for increased awareness and prevention strategies related to issues of mental health and suicide in our

communities, a series of questions addressing self-harm and suicide were added to the KIP Survey in 2014. The K6, a validated scale for assessing serious psychological distress among adolescents, was added in 2012.

### Serious Psychological Distress

Serious psychological distress is assessed on the KIP Survey via the Kessler 6 (K6) scale. The K6 is a standardized and validated tool; a score of 13 or more on the K6 is used to indicate non-specific serious psychological distress (SPD). The K6 instrument offers a useful way for districts to assess the potentially unmet mental health needs of students.<sup>12</sup> The question asks how often during the past 30 days students have felt *"nervous, hopeless, restless or fidgety, so depressed that nothing could cheer you up, that everything was an effort, or worthless."*

In 2016, 20.6% of participating Kentucky 10th graders scored 13 or more on the K6, meeting the threshold for serious psychological distress; this was an increase from 18% in 2014. Six regions reported numbers higher than the statewide figure. It is worth noting that across all regions, the scores of at least 16% of 10th graders indicated serious psychological distress [SEE PAGES 72-73.]

### Self-Harm

Self-Harm is defined as the intentional, direct injuring of body tissue.<sup>13</sup> Studies have found an increased risk of suicide in individuals who self-harm<sup>14</sup>, though not all who self-harm are suicidal.<sup>15</sup>

The KIP Survey addresses self-harm by asking: *"Have you ever cut or harmed yourself on purpose?"* In the Pennyroyal and Communicare regions, approximately 24% of 10th graders responded that they had cut or harmed themselves on purpose in their lifetime. At 16.3%, the Mountain region reported a lower incidence of self-harm. **Each of these three regions, along with six others, saw**

**an increase in the number of students reporting self-harm since 2014.** The 2016 statewide average was 20.8%; in other words, **1 in 5 participating 10th graders has reportedly cut or harmed themselves on purpose at least once in their lifetime.** [SEE PAGES 74-75].

### Suicidal Ideation

Suicidal thoughts are a significant concern. Having serious thoughts of suicide increases the risk of a person making an actual suicide attempt.<sup>16</sup> The KIP Survey addresses suicidal thoughts with the question, *"During the past 12 months, did you ever seriously consider attempting suicide?"*

Nationally, 18.3% of students reported that they had seriously considered attempting suicide during the previous 12 months.<sup>17</sup> Statewide figures are slightly lower - **15.4% of Kentucky 10th grade graders reported having suicidal thoughts within the past year; rates have risen in eight out of fourteen regions since 2014.** Communicare (18.2%) and Pennyroyal (17.6%) reported the highest rates of suicidal ideation in 2016, compared to 12.2% in the Mountain region and 12.8% in the Adanta region [SEE PAGES 76-77].

### Suicide Plan

The KIP Survey now addresses past-year suicide plans with the question, *"During the past 12 months, did you make a plan about how you would attempt suicide?"*

In 2016, 15.4% of students nationally reported that they made a plan about how they would attempt suicide.<sup>18</sup> Statewide, **12.5% of Kentucky 10th graders reported that they had made a plan about how they would attempt suicide during the past 12 months; rates have risen in seven out of fourteen regions since 2014.** Regionally, students in the Pennyroyal and Communicare regions reported the highest rates; the lowest rate of 9.9% was in the Kentucky River region. [SEE PAGES 78-79].

## Suicide Attempts

According to the Centers for Disease Control and Health, there are more than 25 attempted suicides for each suicide death.<sup>19</sup> To assess the level of past-year suicide attempts, the KIP Survey asks: “During the past 12 months, how many times did you actually attempt suicide?”

Nationally, 9.4% of students reported that they had attempted suicide one or more times during the 12 months.<sup>20</sup> Statewide, **8.2% of Kentucky 10th graders reported a past-year suicide attempt in 2016; rates have risen in eight out of fourteen regions since 2014.** Three contiguous western Kentucky regions, Four Rivers, Pennyroyal and River Valley reported the highest number of students responding that they had actually attempted suicide at least one time in the past year. Students in the Mountain and Centerstone regions [again] reported the lowest rates at 6.8% and 7% [SEE PAGES 80-81].

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# **State and Regional Data Report**

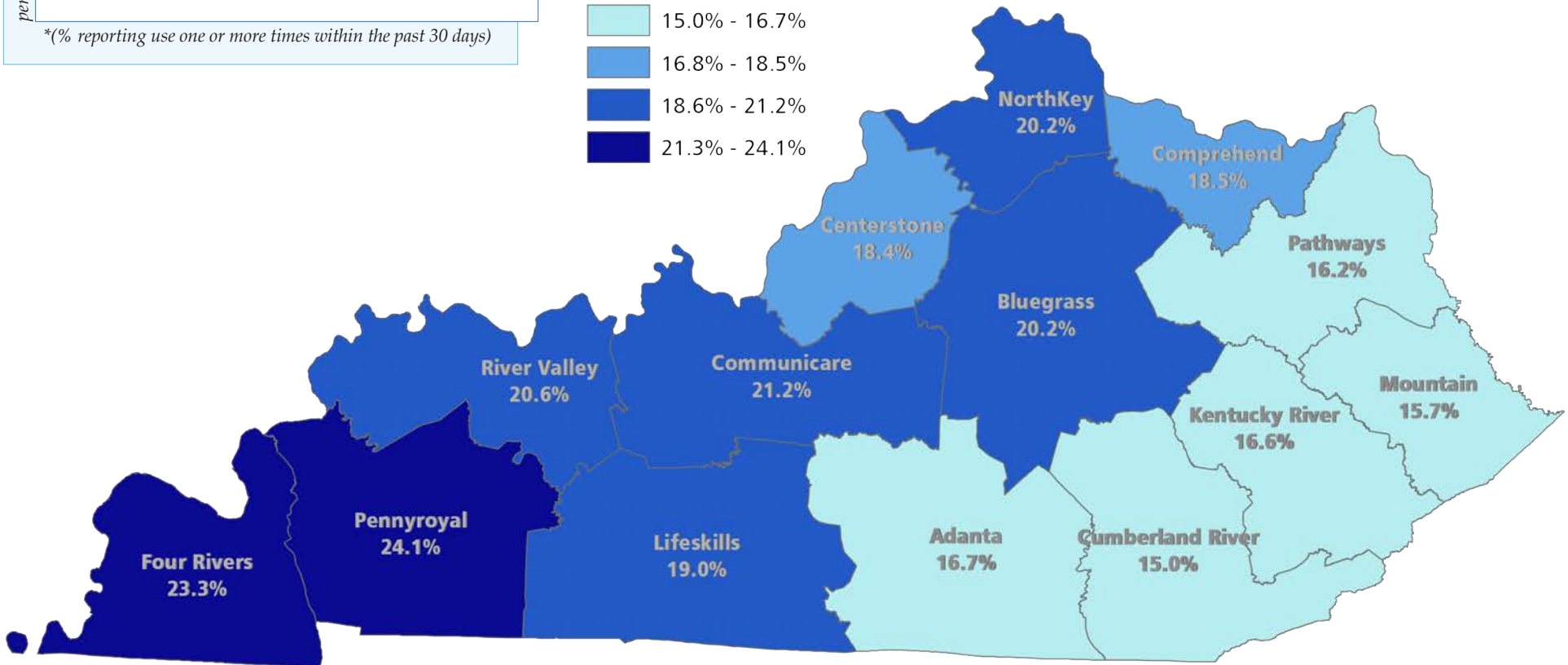
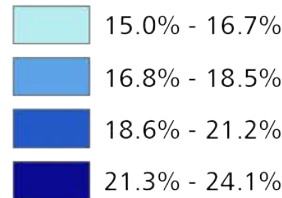
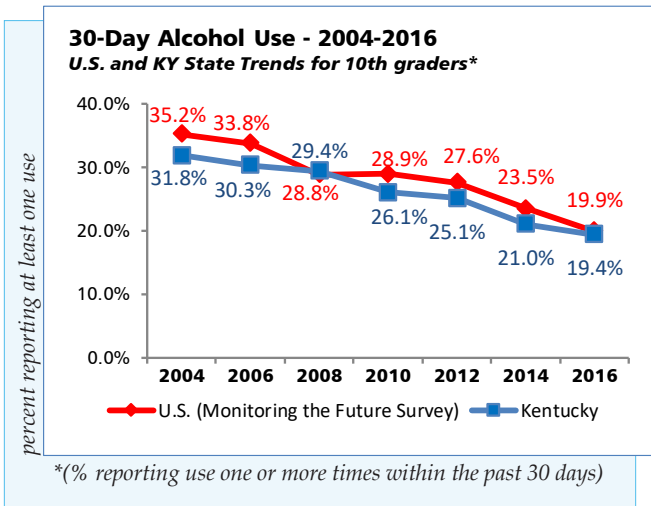
## Maps and Trend Graphs

# Grade 10 - Alcohol (more than just a few sips) 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 15.0% (CUMBERLAND RIVER); Max: 24.1% (PENNYROYAL)



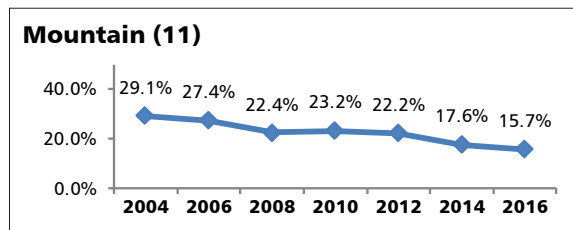
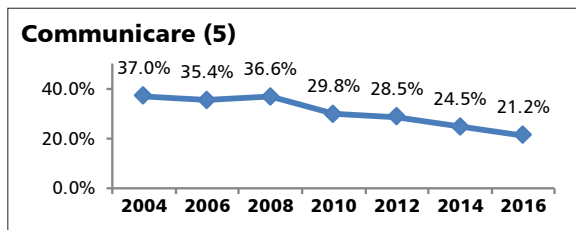
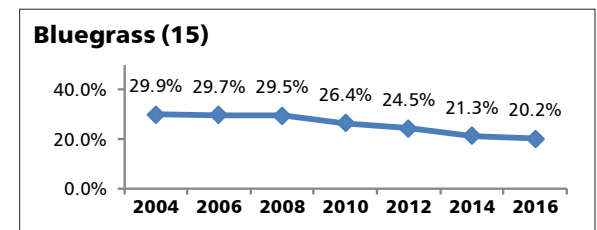
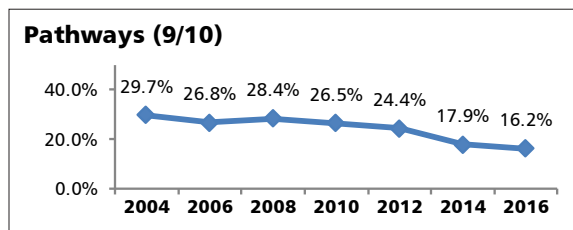
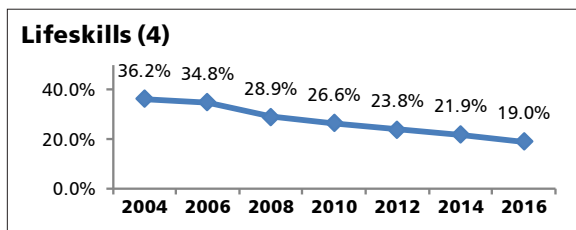
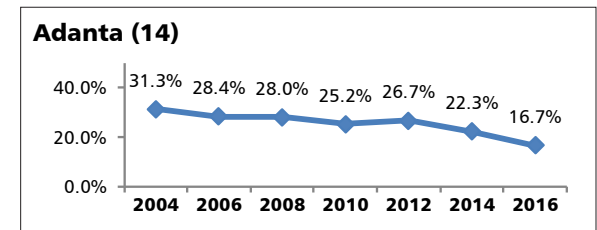
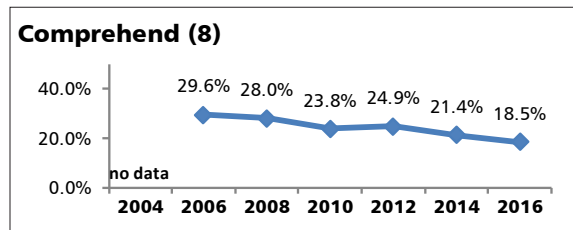
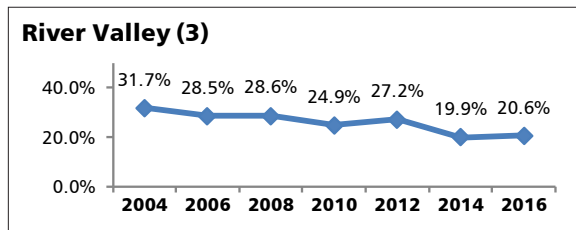
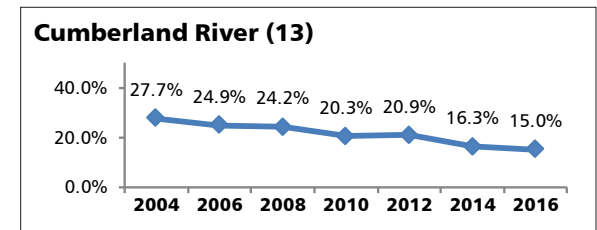
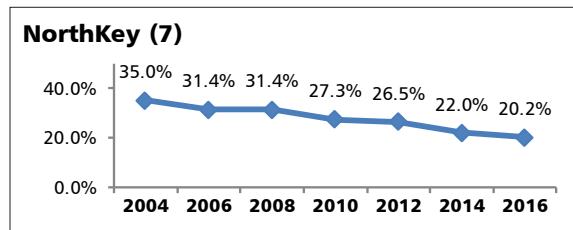
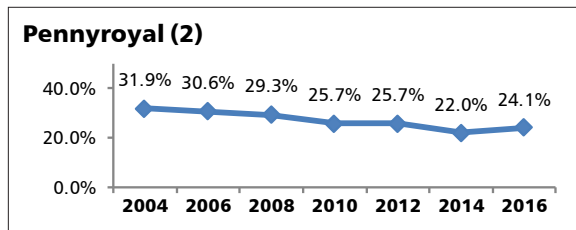
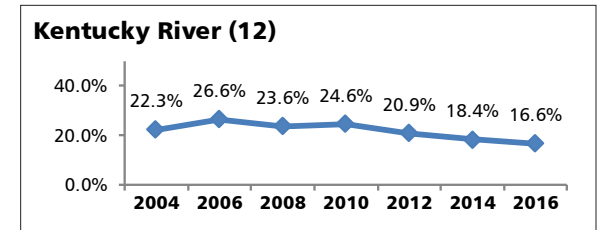
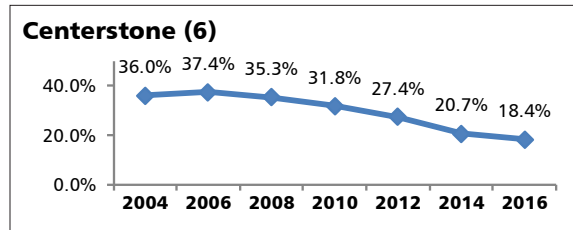
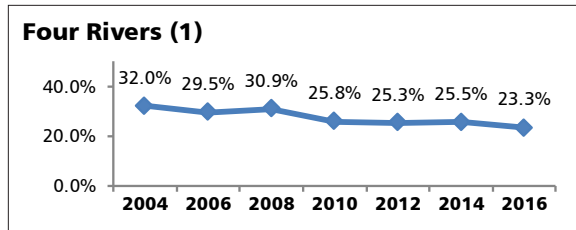
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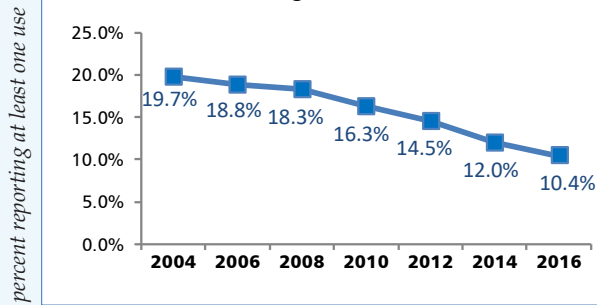


## Regional Trends—**Alcohol, 30-Day Use** by 10th Graders, 2004-2016

(% responding that they had used the substance one or more times within the past 30 days)



**Binge Drinking - 2004-2016**  
**KY State Trend for 10th graders\***



\*(% reporting they had 5 or more drinks in a row one or more times within the past two weeks.)

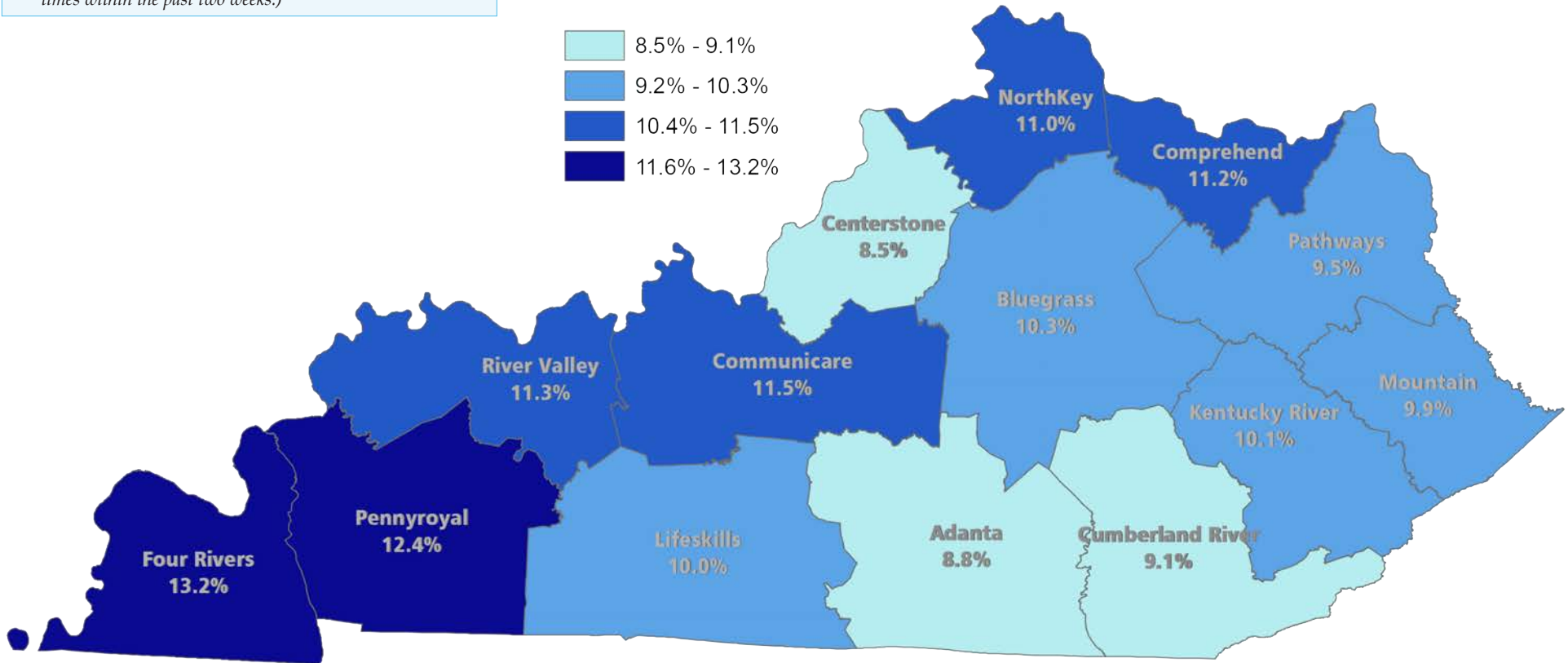
## Grade 10 - Binge Drinking, 2016

(5 or more drinks in a row in the past two weeks)

(% responding that they had 5 or more drinks in a row one or more times within the past two weeks)

### PERCENTAGE OF 10TH GRADERS, 2016

Min: 8.5% (CENTERSTONE); Max: 13.2% (FOUR RIVERS)

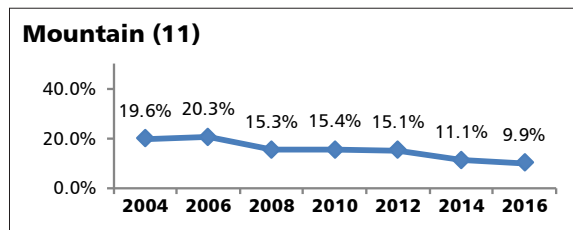
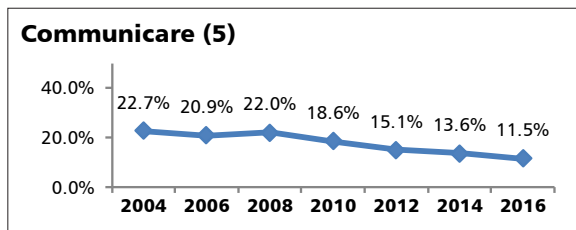
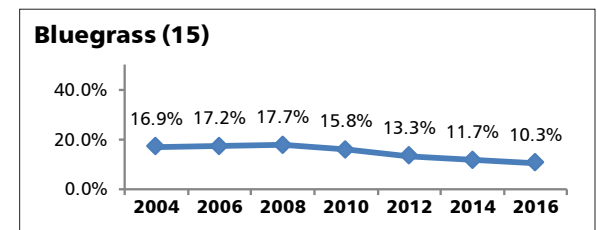
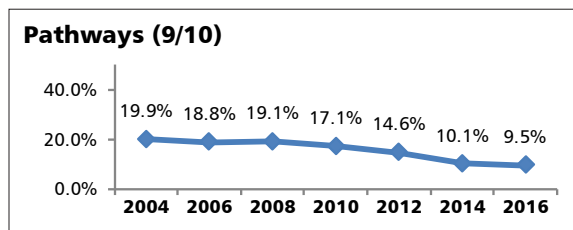
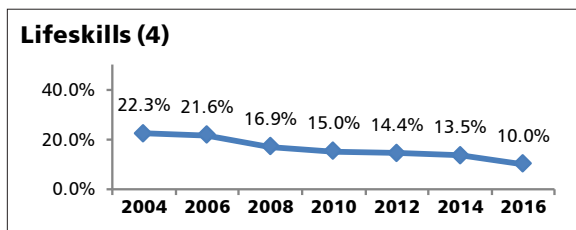
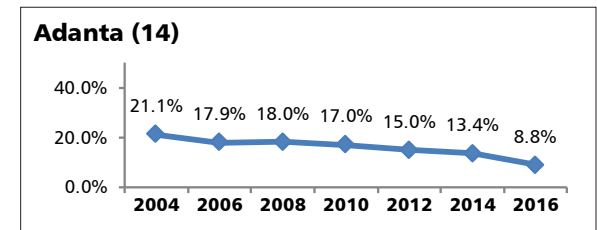
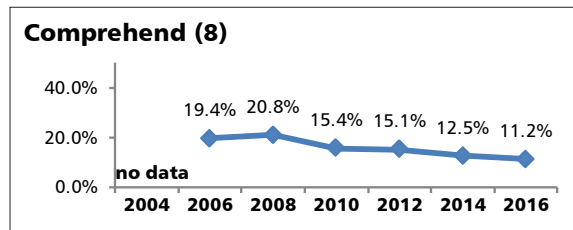
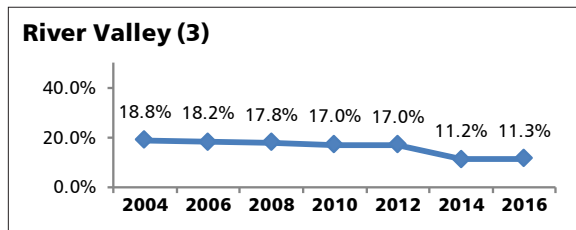
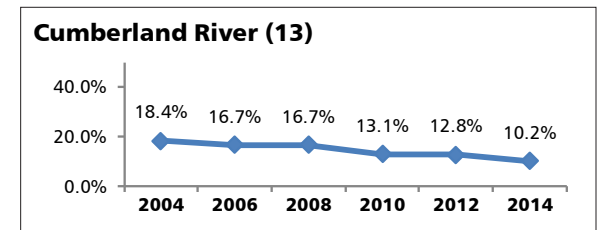
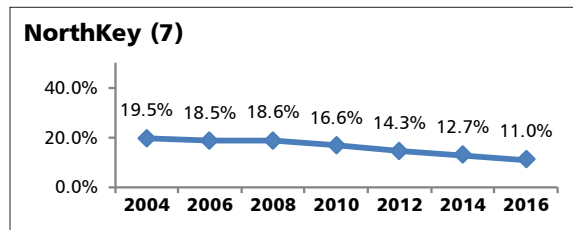
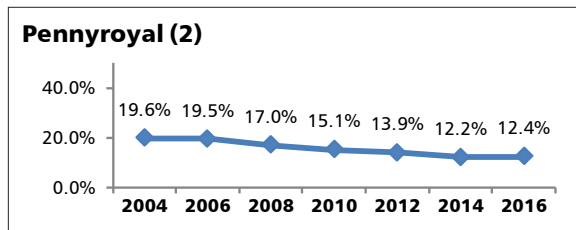
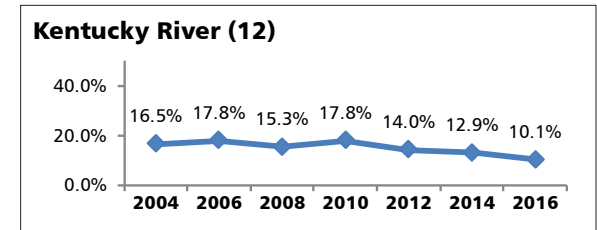
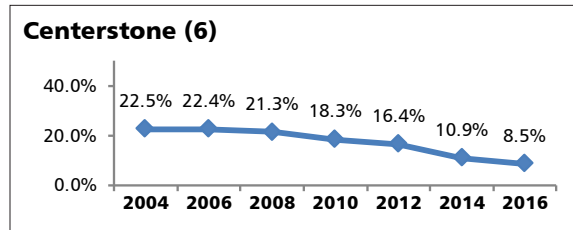
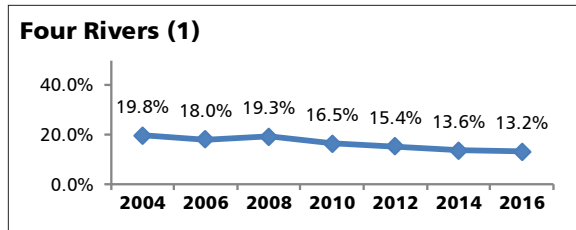


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## Regional Trends—**Binge Drinking** by 10th Graders, 2004-2016

(% responding that they had 5 or more drinks in a row one or more times within the past two weeks)

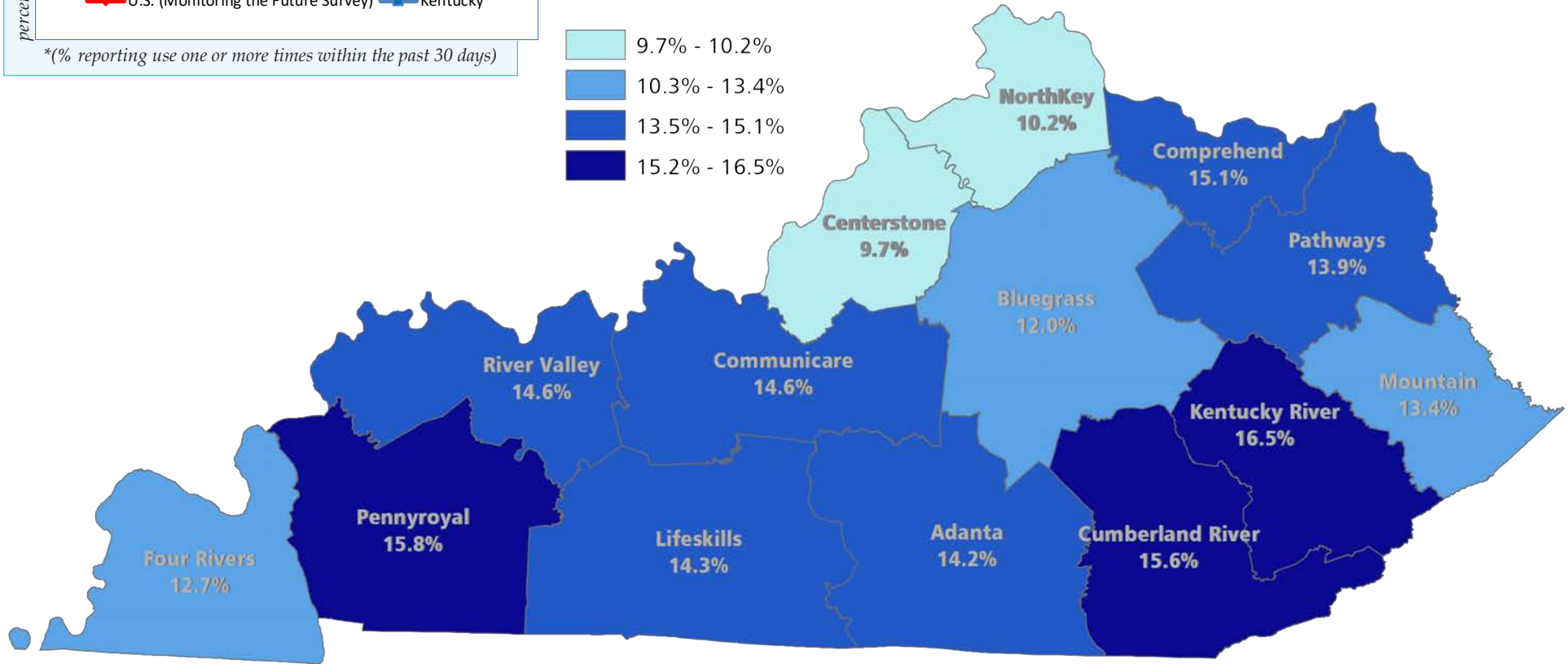
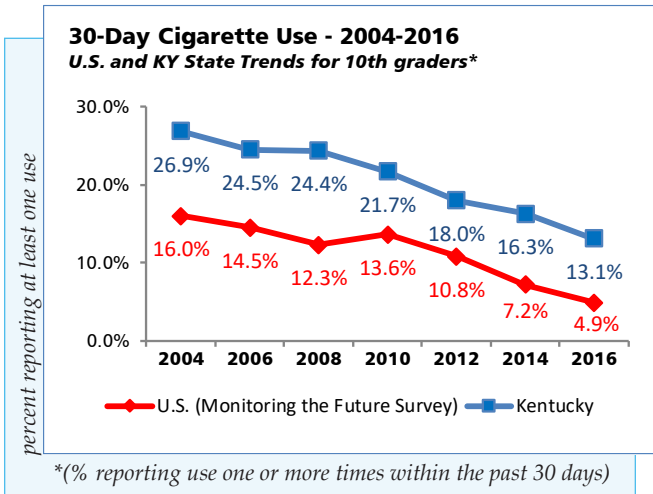


# Grade 10 - Cigarettes, 30-Day Use, 2016

(% responding that they had smoked one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

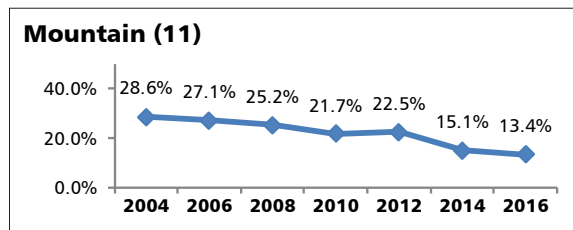
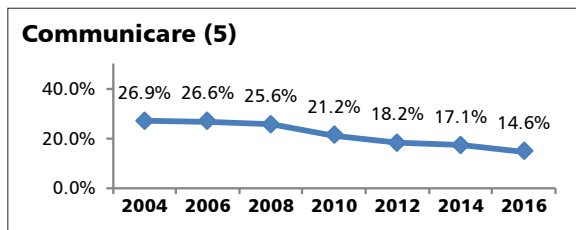
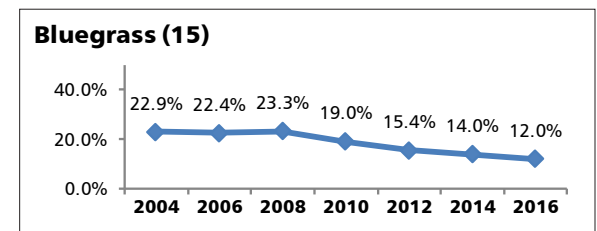
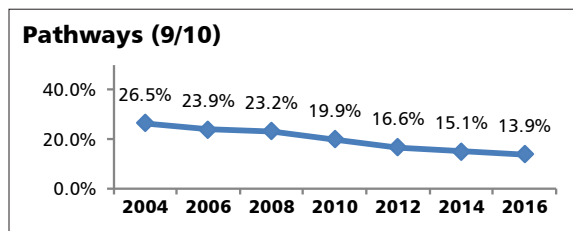
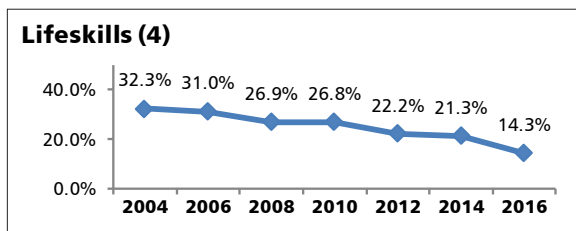
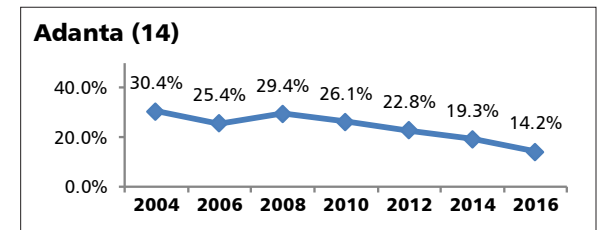
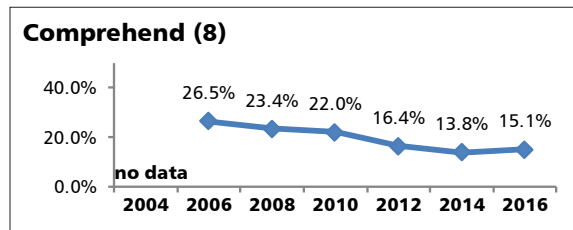
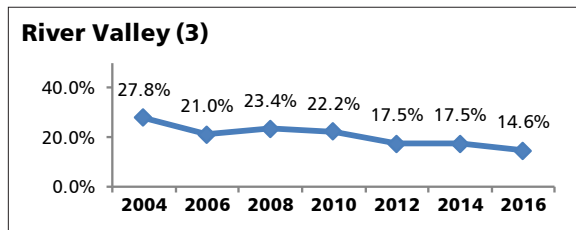
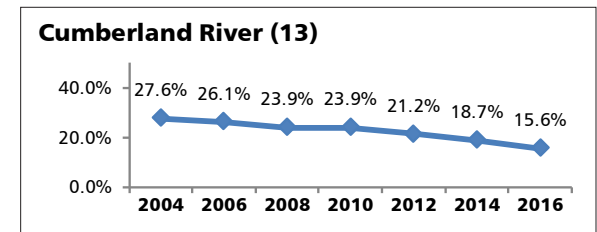
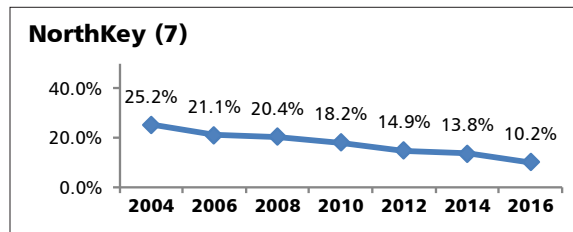
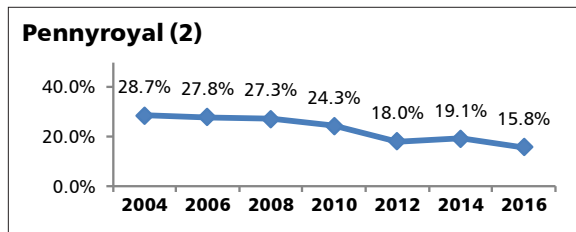
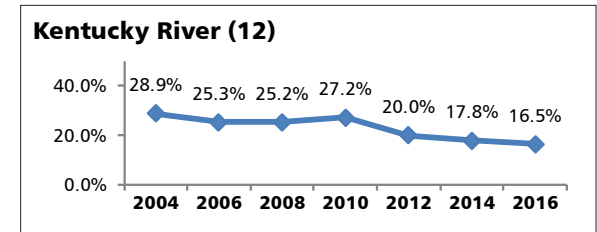
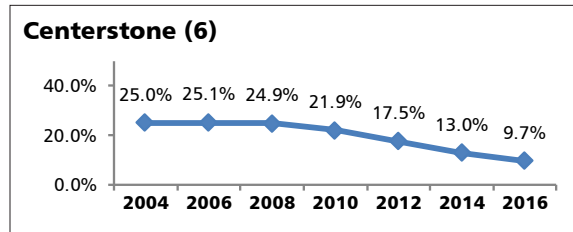
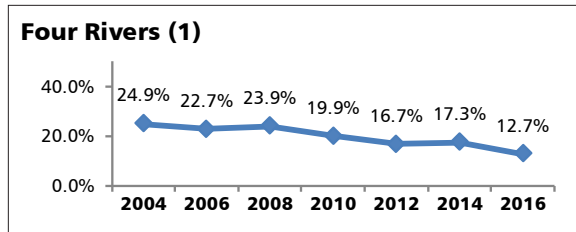
Min: 9.7% (CENTERSTONE); Max: 16.5% (KENTUCKY RIVER)



**NON-PARTICIPATING DISTRICTS BY REGION:** FOUR RIVERS (Calloway County, Murray Independent), PENNYROYAL (Dawson Springs Independent), LIFESKILLS (Bowling Green Independent, Warren County), COMMUNICARE (Meade County), CENTERSTONE (Anchorage Independent, Eminence Independent, Jefferson County), NORTHKEY (Beechwood Independent, Bellevue Independent, Kenton County, Southgate Independent), PATHWAYS (Ashland Independent, Morgan County), MOUNTAIN (Martin County, Paintsville Independent), CUMBERLAND RIVER (East Bernstadt Independent, Laurel County), BLUEGRASS (Fayette County).

Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.

## Regional Trends—**Cigarettes, 30-Day Use** by 10th Graders, 2004-2016 (% responding that they had smoked one or more times within the past 30 days)

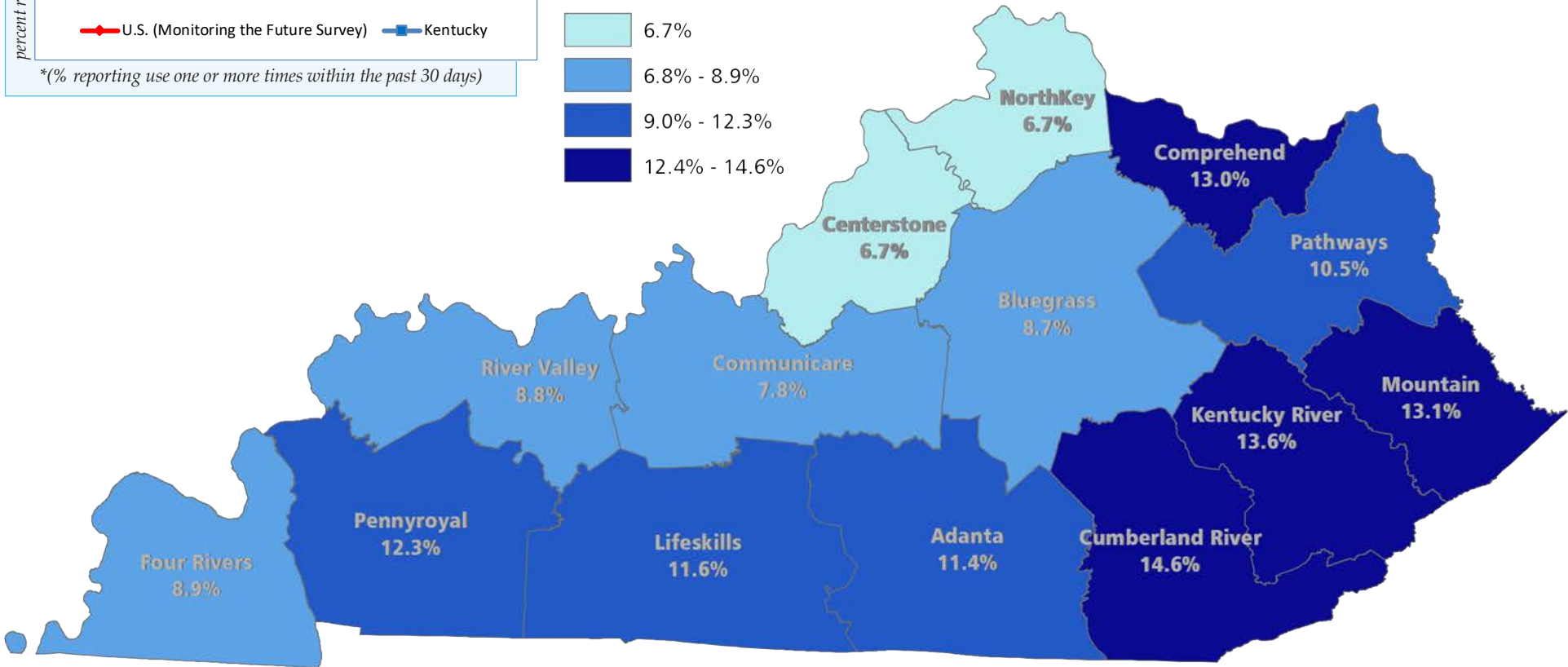
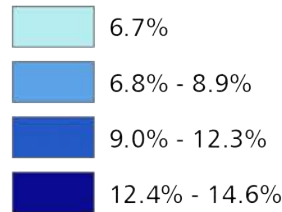
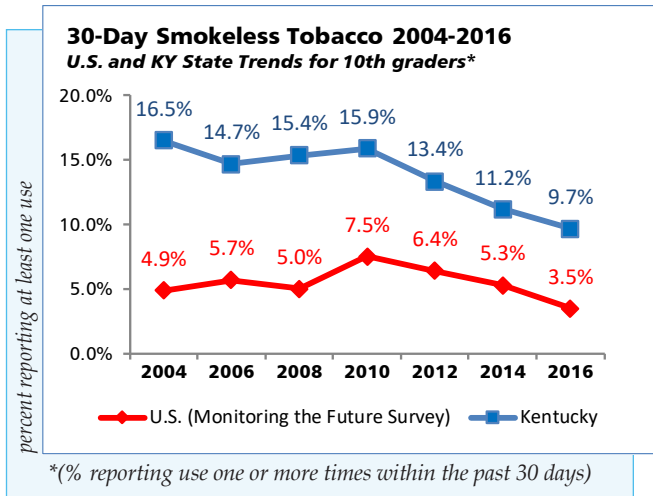


# Grade 10 - Smokeless Tobacco, 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

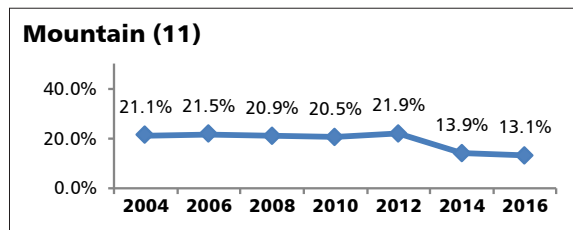
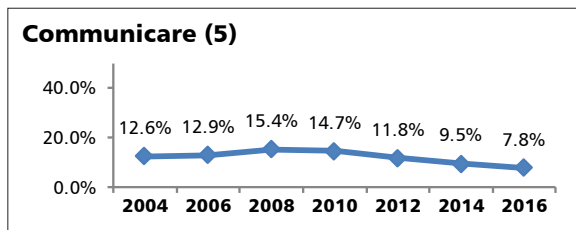
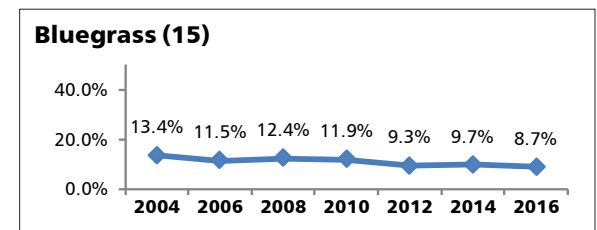
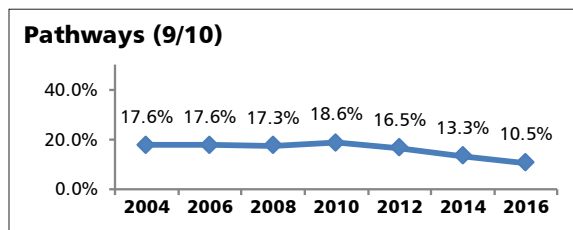
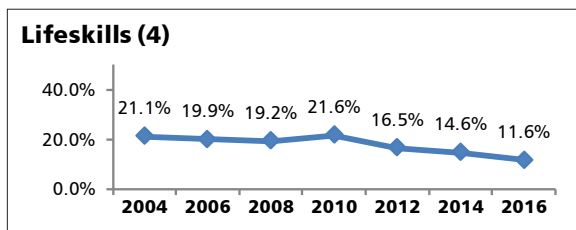
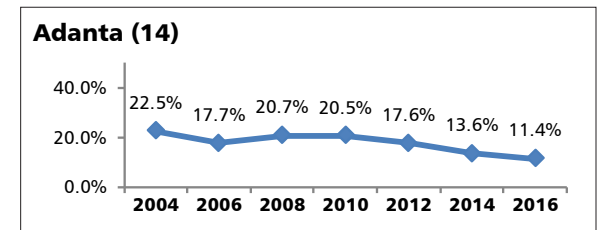
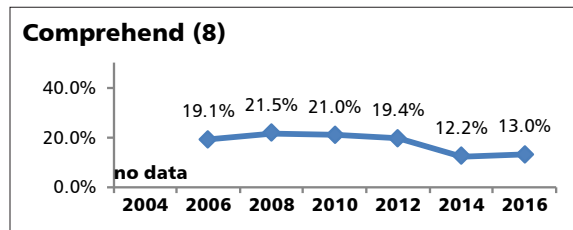
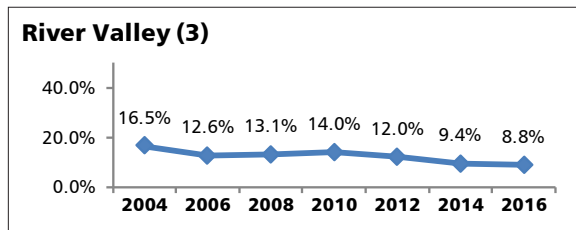
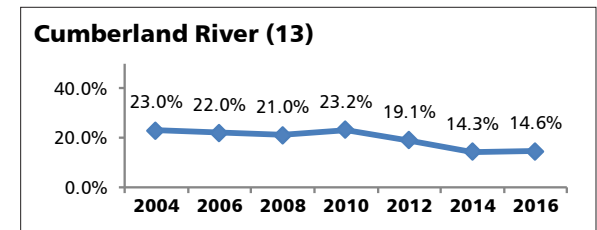
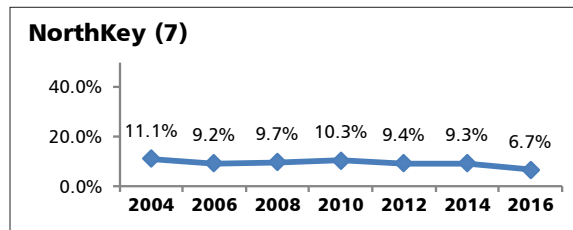
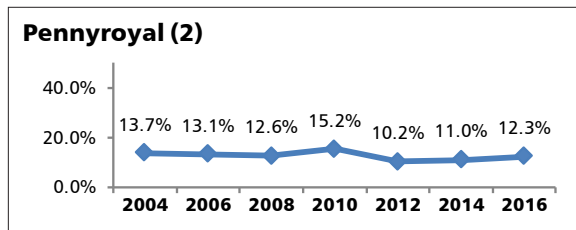
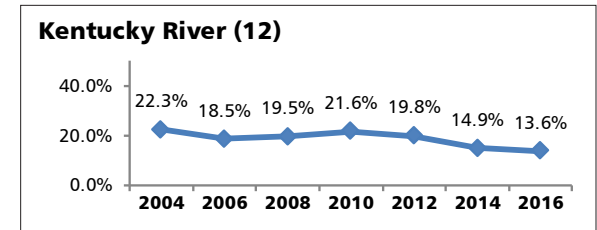
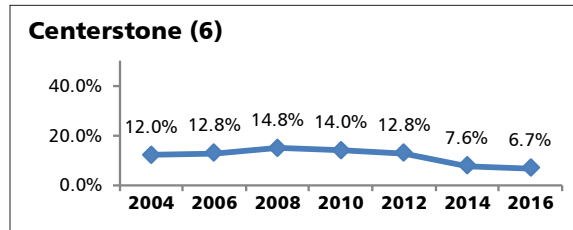
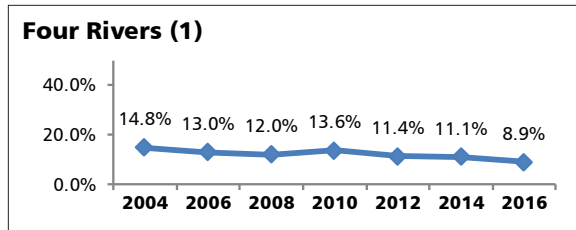
Min: 6.7% (CENTERSTONE); Max: 14.6% (CUMBERLAND RIVER)



**NON-PARTICIPATING DISTRICTS BY REGION:** FOUR RIVERS (Calloway County, Murray Independent), PENNYROYAL (Dawson Springs Independent), LIFESKILLS (Bowling Green Independent, Warren County), COMMUNICARE (Meade County), CENTERSTONE (Anchorage Independent, Eminence Independent, Jefferson County), NORTHKEY (Beechwood Independent, Bellevue Independent, Kenton County, Southgate Independent), PATHWAYS (Ashland Independent, Morgan County), MOUNTAIN (Martin County, Paintsville Independent), CUMBERLAND RIVER (East Bernstadt Independent, Laurel County), BLUEGRASS (Fayette County).

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## Regional Trends—**Smokeless Tobacco, 30-Day Use** by 10th Graders, 2004-2016 (% responding that they had used the substance one or more times within the past 30 days)

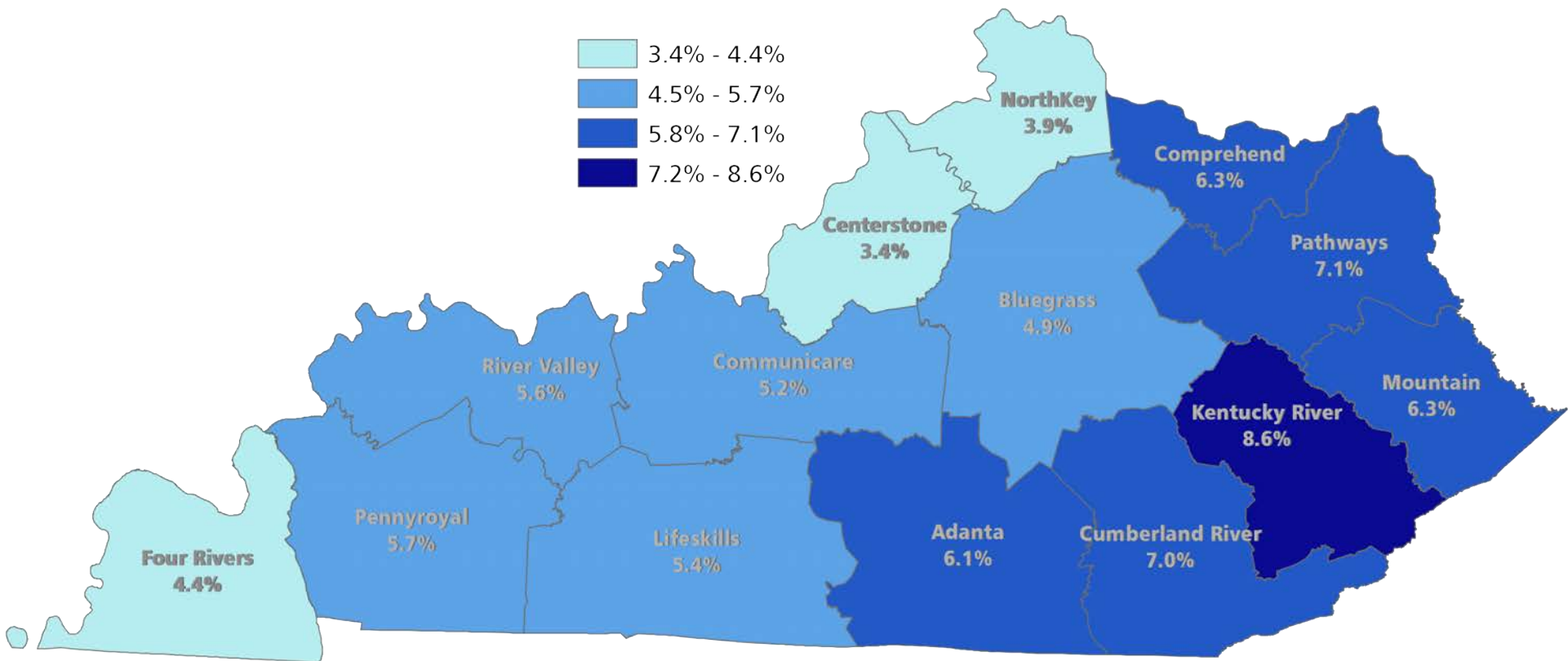
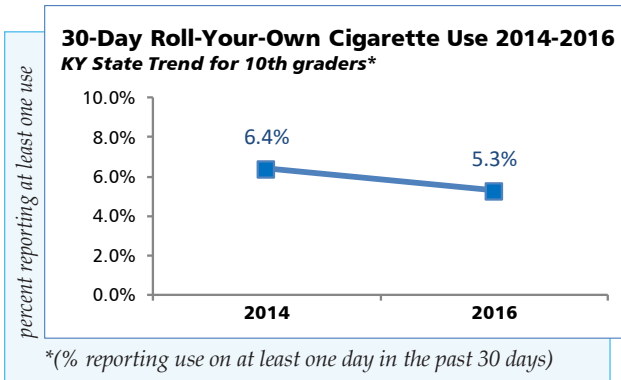


# Grade 10 - Roll-Your-Own Cigarettes, 30-Day Use, 2016

(% responding that they had used the substance on at least one day in the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 3.4% (CENTERSTONE); Max: 8.6% (KENTUCKY RIVER)

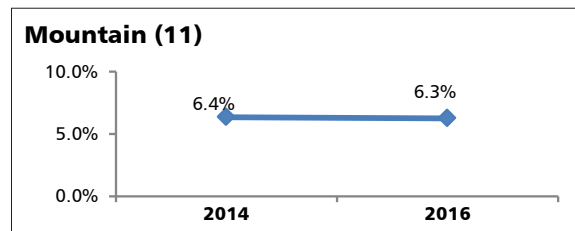
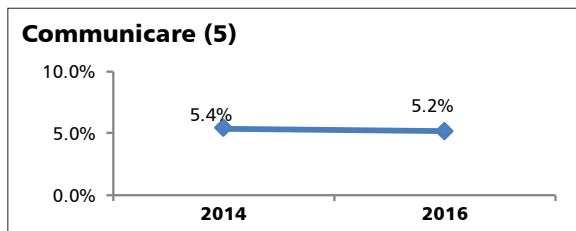
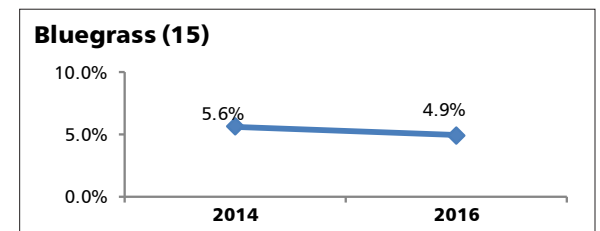
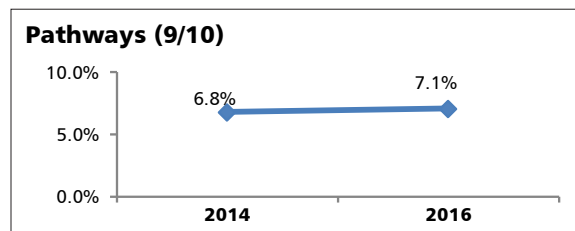
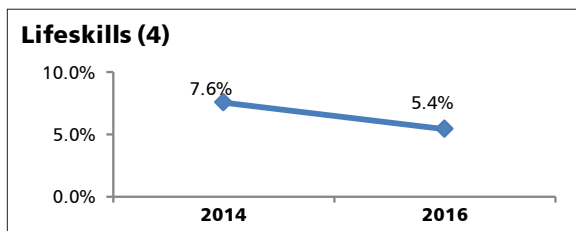
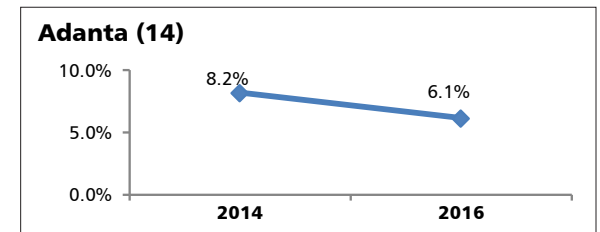
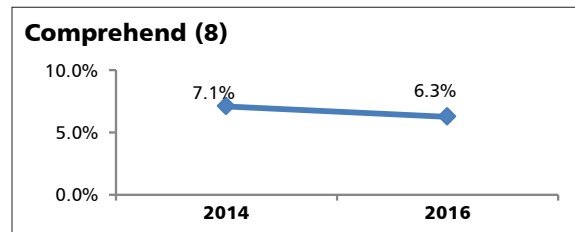
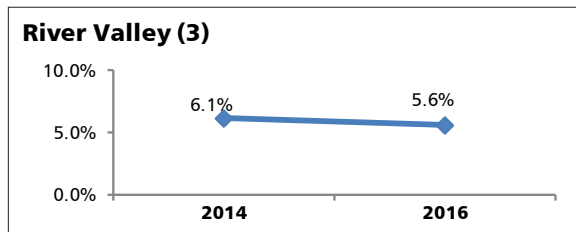
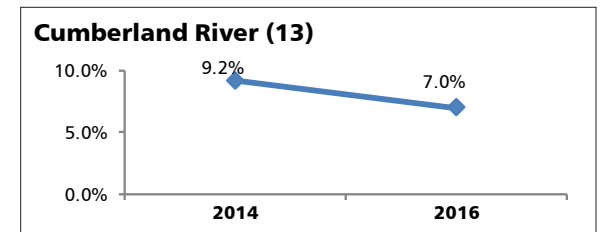
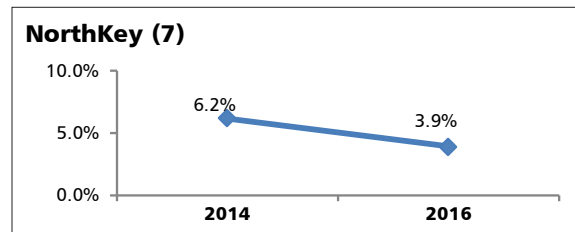
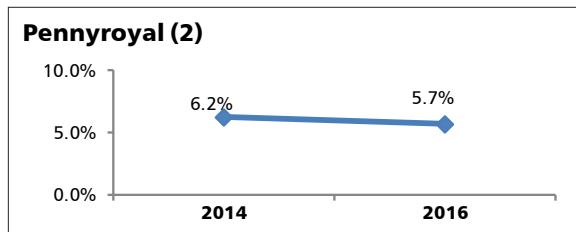
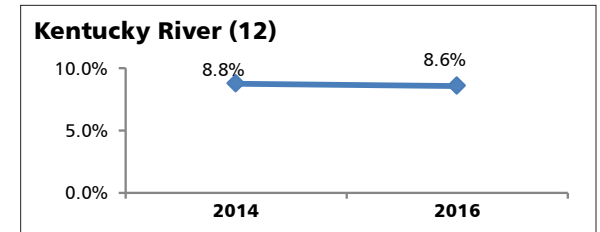
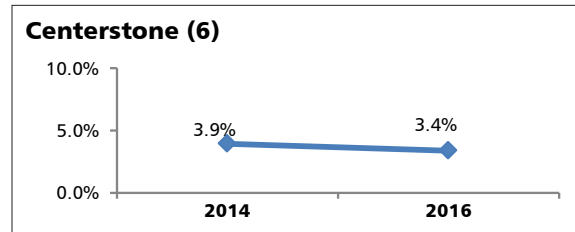
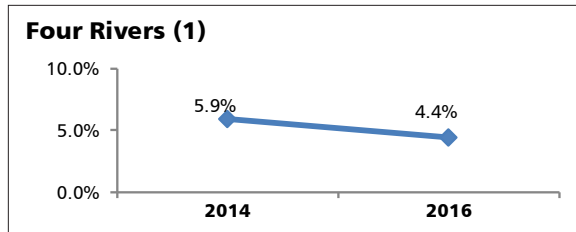


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Regional Trends—**Roll-Your-Own Cigarettes, 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance on at least one day in the past 30 days)

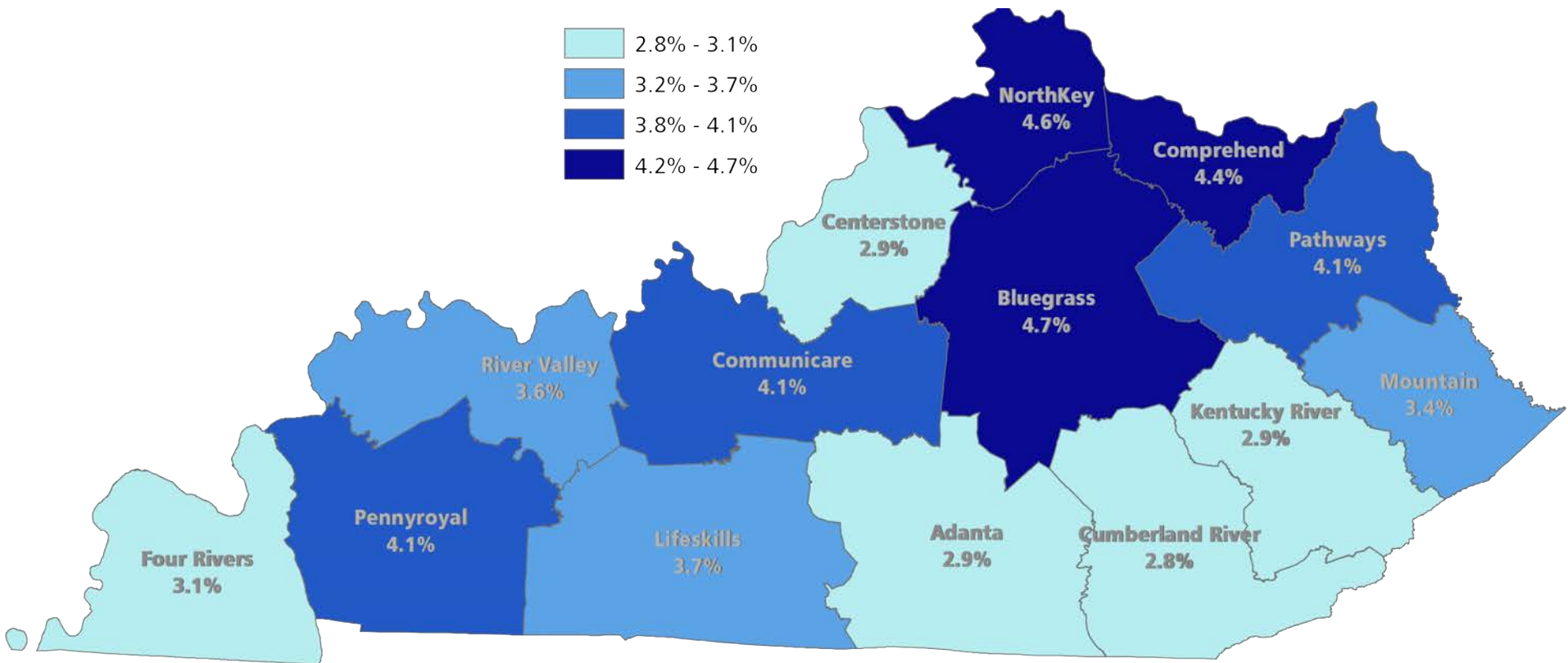
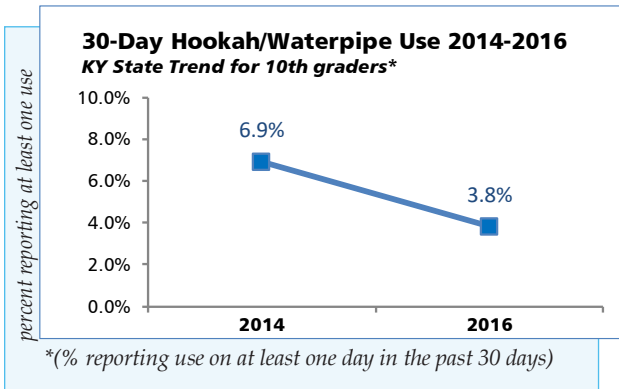


# Grade 10 - Smoking Tobacco from a Hookah or Waterpipe, 30-Day Use, 2016

(% responding that they had used the substance on at least one day in the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 2.8% (CUMBERLAND RIVER); Max: 4.7% (BLUEGRASS)

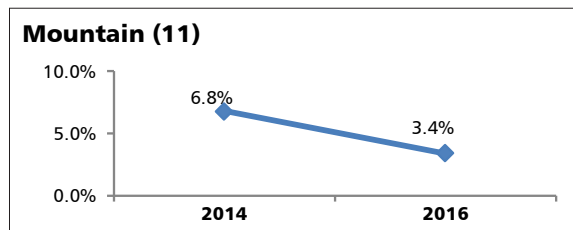
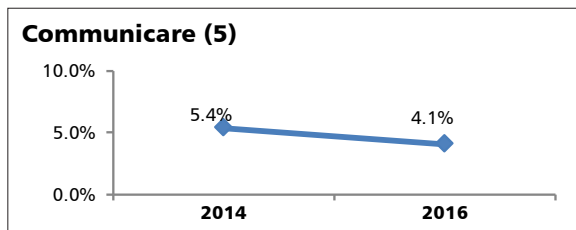
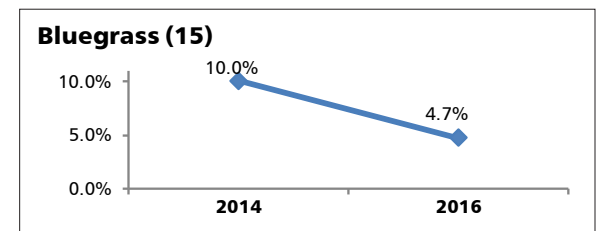
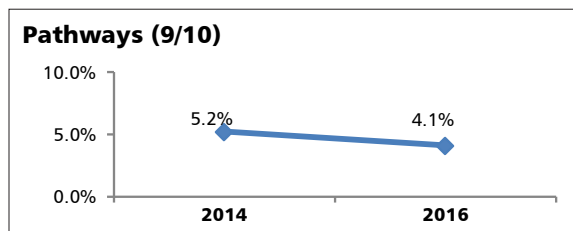
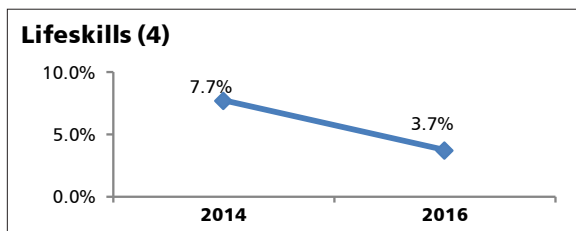
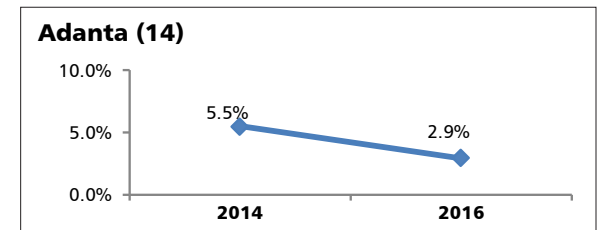
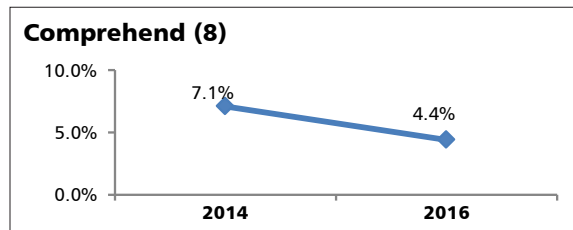
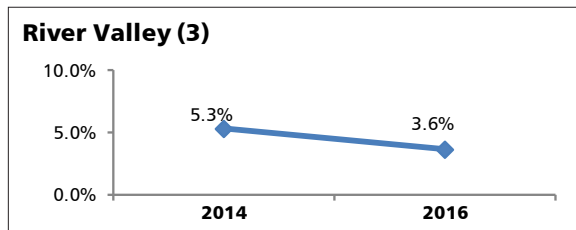
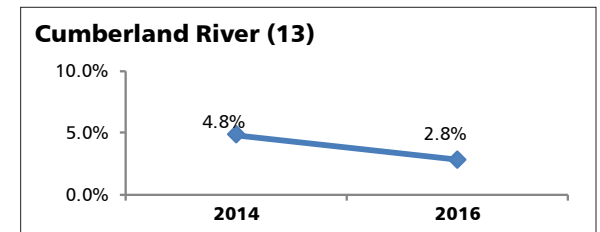
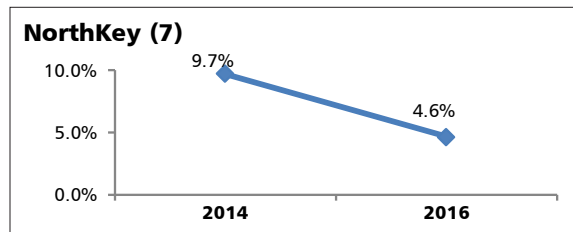
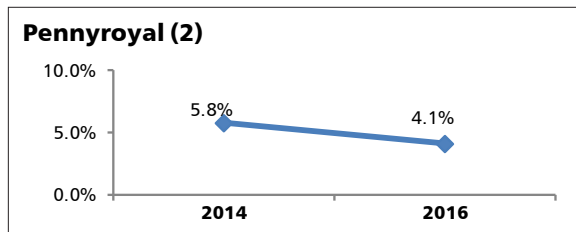
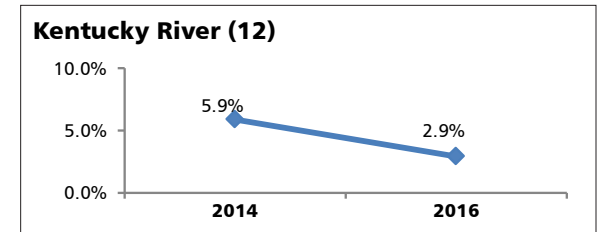
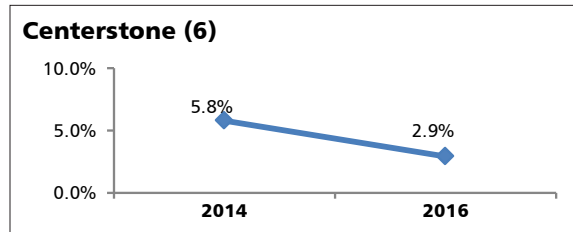
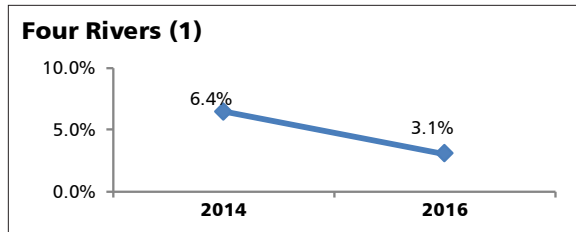


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# Regional Trends—Smoking Tobacco from a Hookah or Waterpipe, 30-Day Use by 10th Graders, 2014-2016

(% responding that they had used the substance on at least one day in the past 30 days)



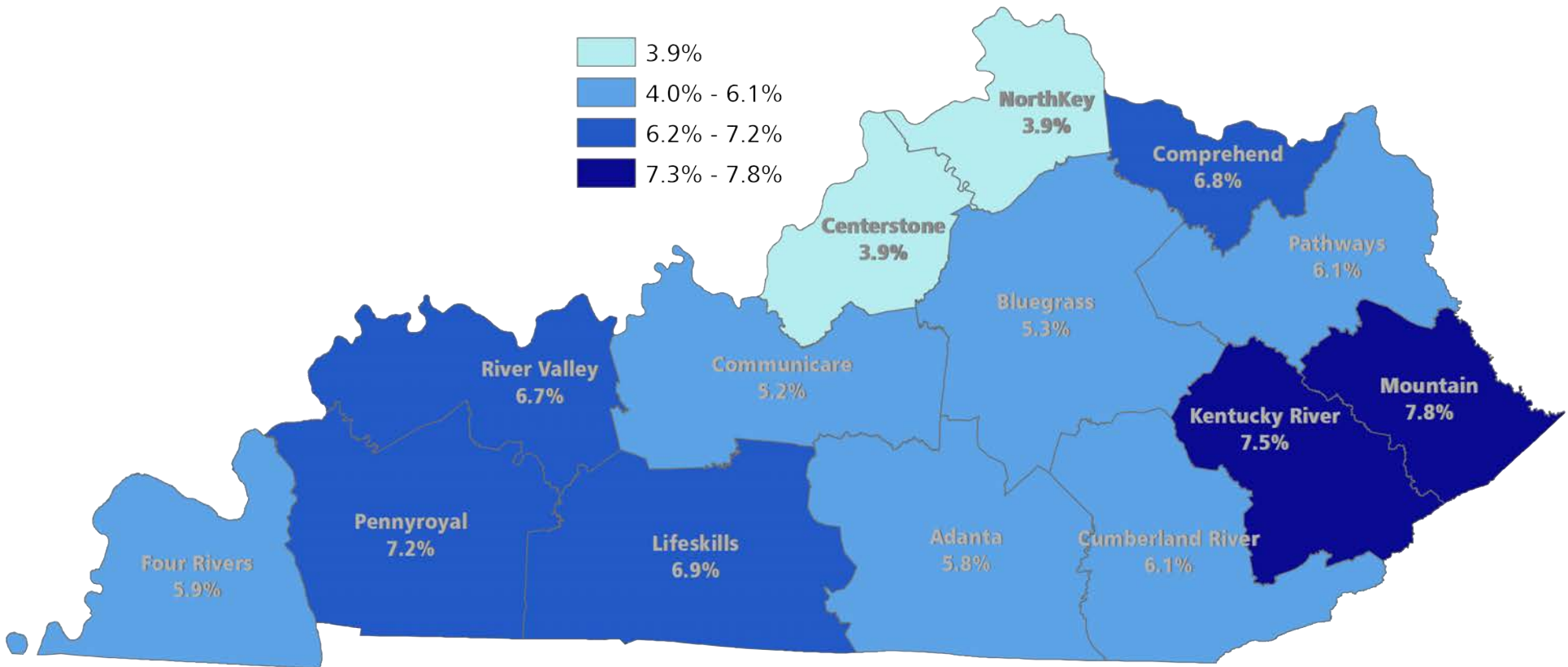
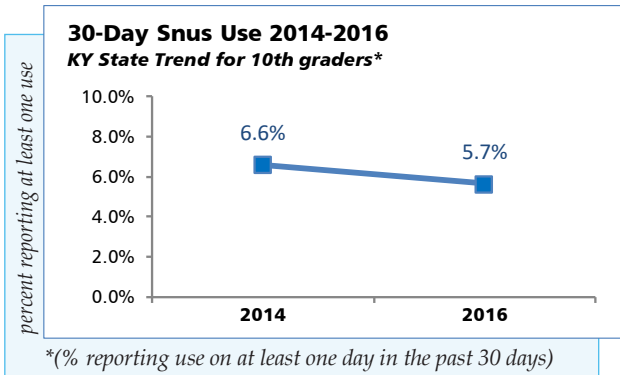
# Grade 10 - Snus,\* 30-Day, Use 2016

\*for ex. Camel or Marlboro Snus

(% responding that they had used the substance on at least one day in the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

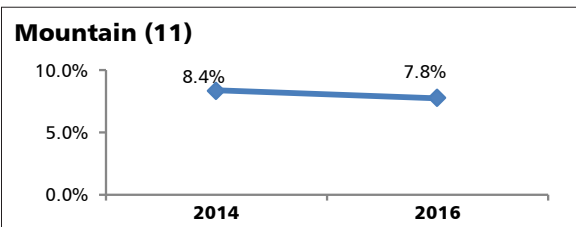
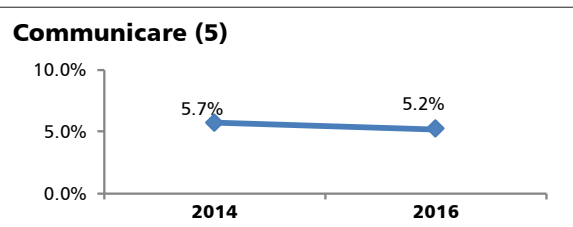
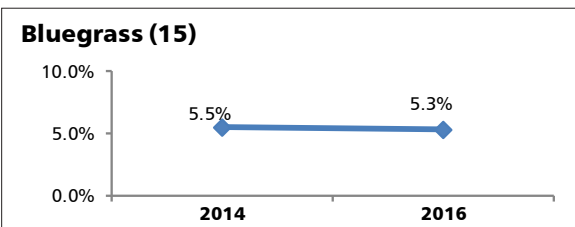
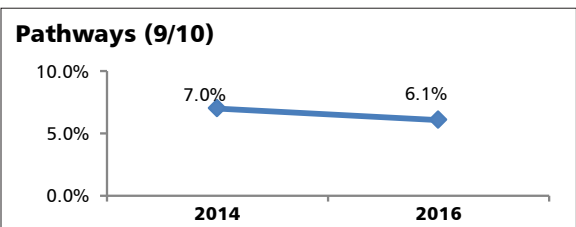
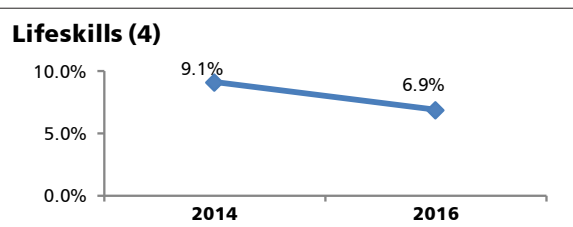
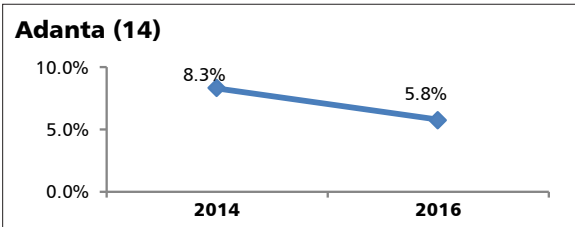
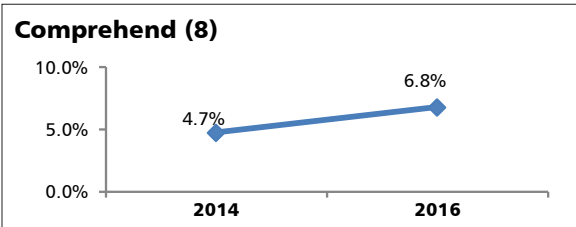
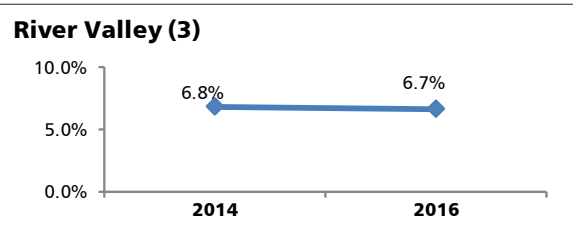
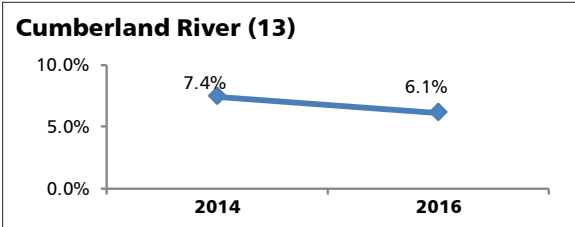
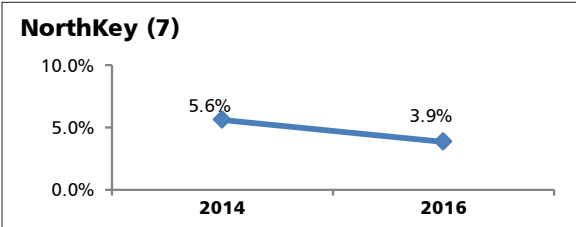
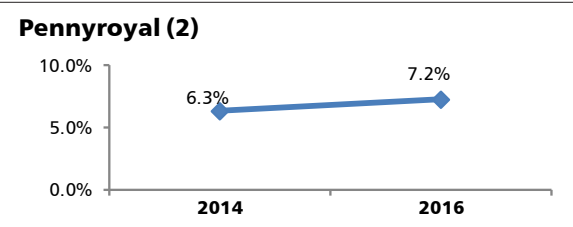
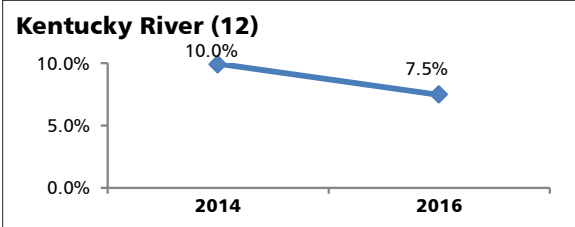
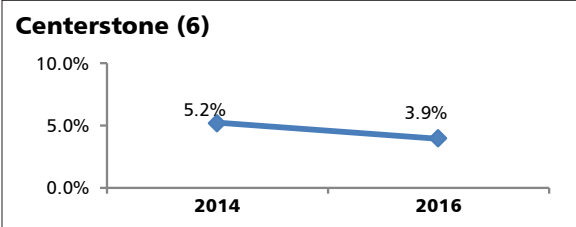
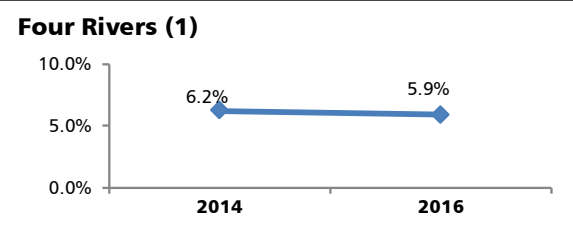
Min: 3.9% (CENTERSTONE/NORTHKEY); Max: 7.8% (MOUNTAIN)



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Regional Trends—**Snus,\* 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance on at least one day in the past 30 days)  
 \* for ex. Camel or Marlboro Snus



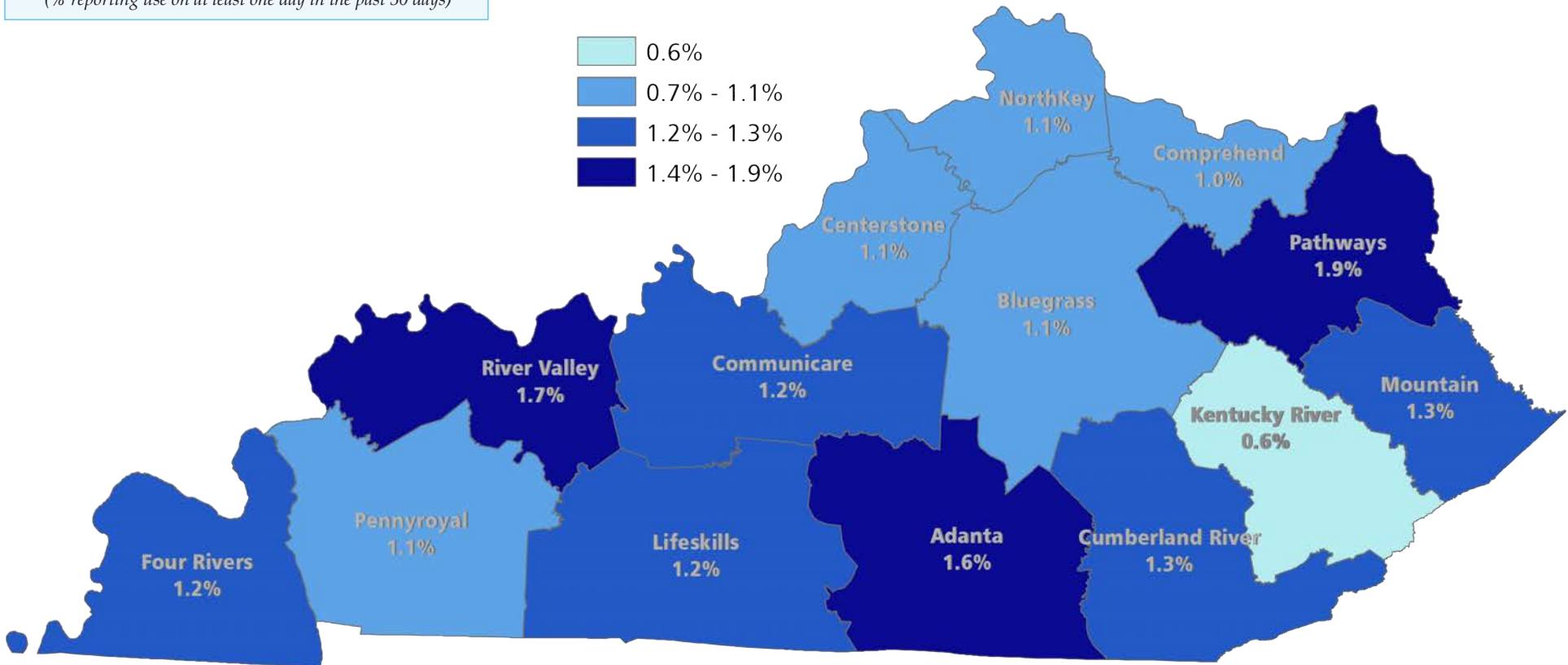
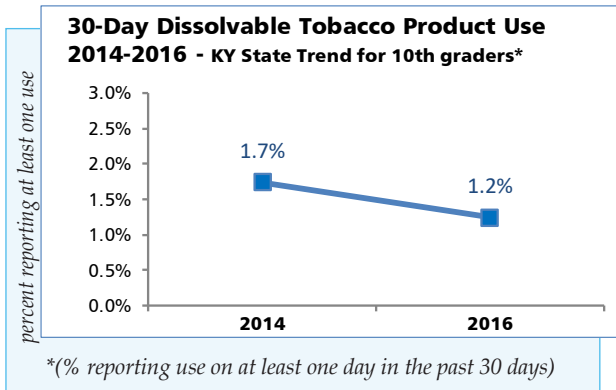
# Grade 10 - Dissolvable Tobacco Products,\* 30-Day Use, 2016

*\*for ex. Ariva, Stonewall, Camel orbs, Camel sticks or Camel Strips*

*(% responding that they had used the substance on at least one day in the past 30 days)*

## PERCENTAGE OF 10TH GRADERS, 2016

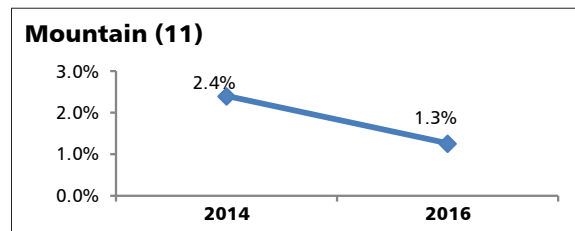
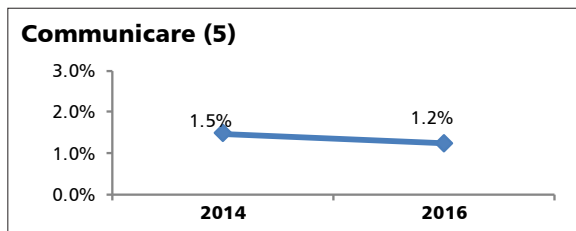
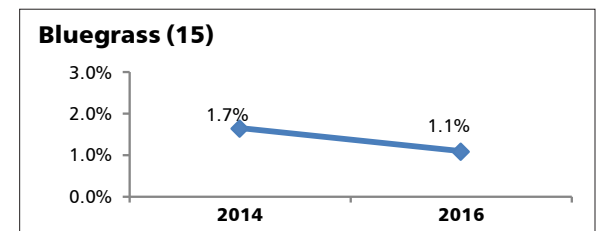
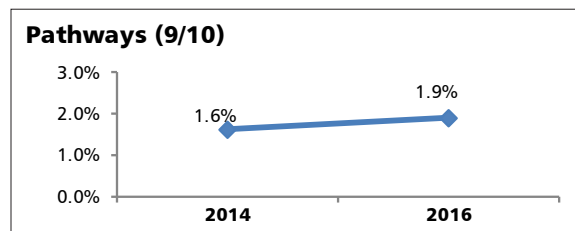
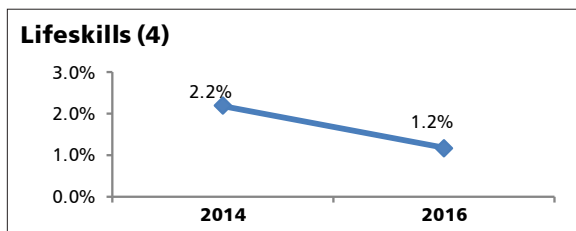
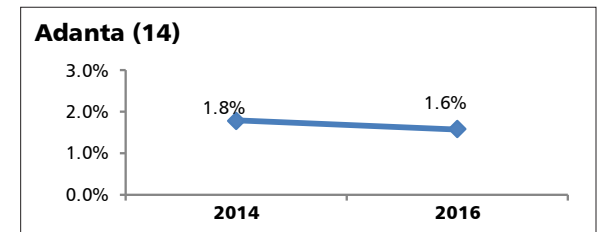
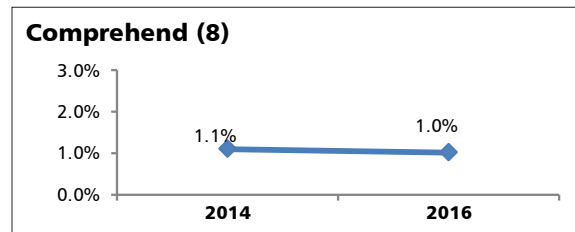
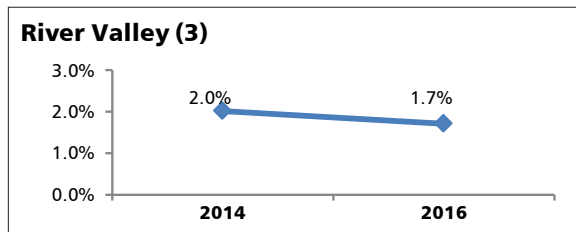
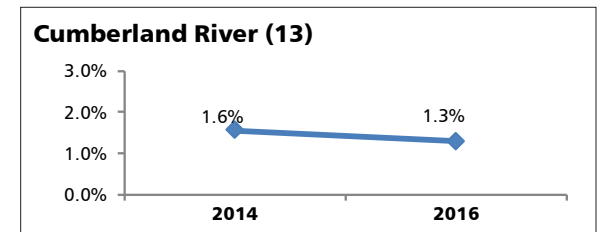
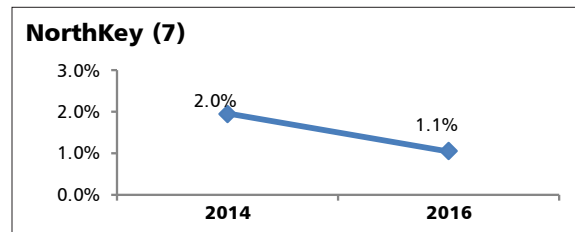
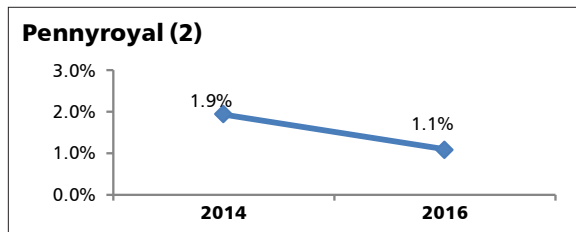
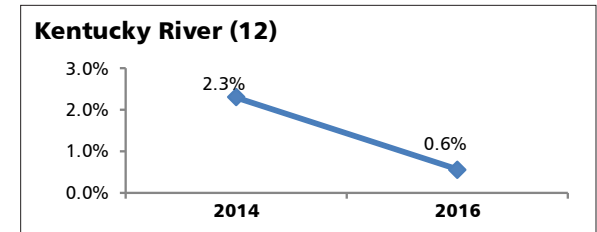
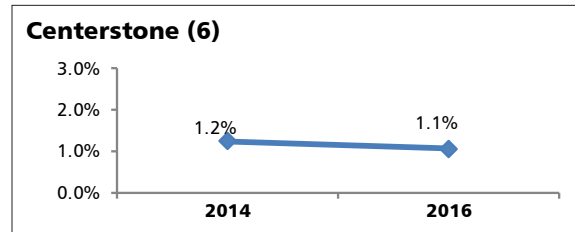
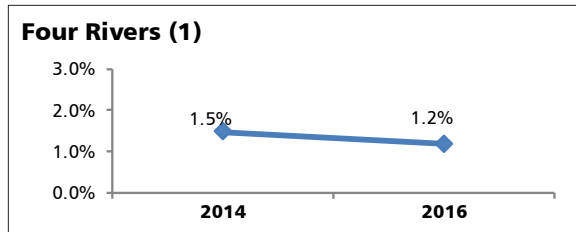
Min: 0.6% (KENTUCKY RIVER); Max: 1.9% (PATHWAYS)



**NON-PARTICIPATING DISTRICTS BY REGION:** FOUR RIVERS (Calloway County, Murray Independent), PENNYROYAL (Dawson Springs Independent), LIFESKILLS (Bowling Green Independent, Warren County), COMMUNICARE (Meade County), CENTERSTONE (Anchorage Independent, Eminence Independent, Jefferson County), NORTHKEY (Beechwood Independent, Bellevue Independent, Kenton County, Southgate Independent), PATHWAYS (Ashland Independent, Morgan County), MOUNTAIN (Martin County, Paintsville Independent), CUMBERLAND RIVER (East Bernstadt Independent, Laurel County), BLUEGRASS (Fayette County).

Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.

Regional Trends—**Dissolvable Tobacco Products, 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance on at least one day in the past 30 days)



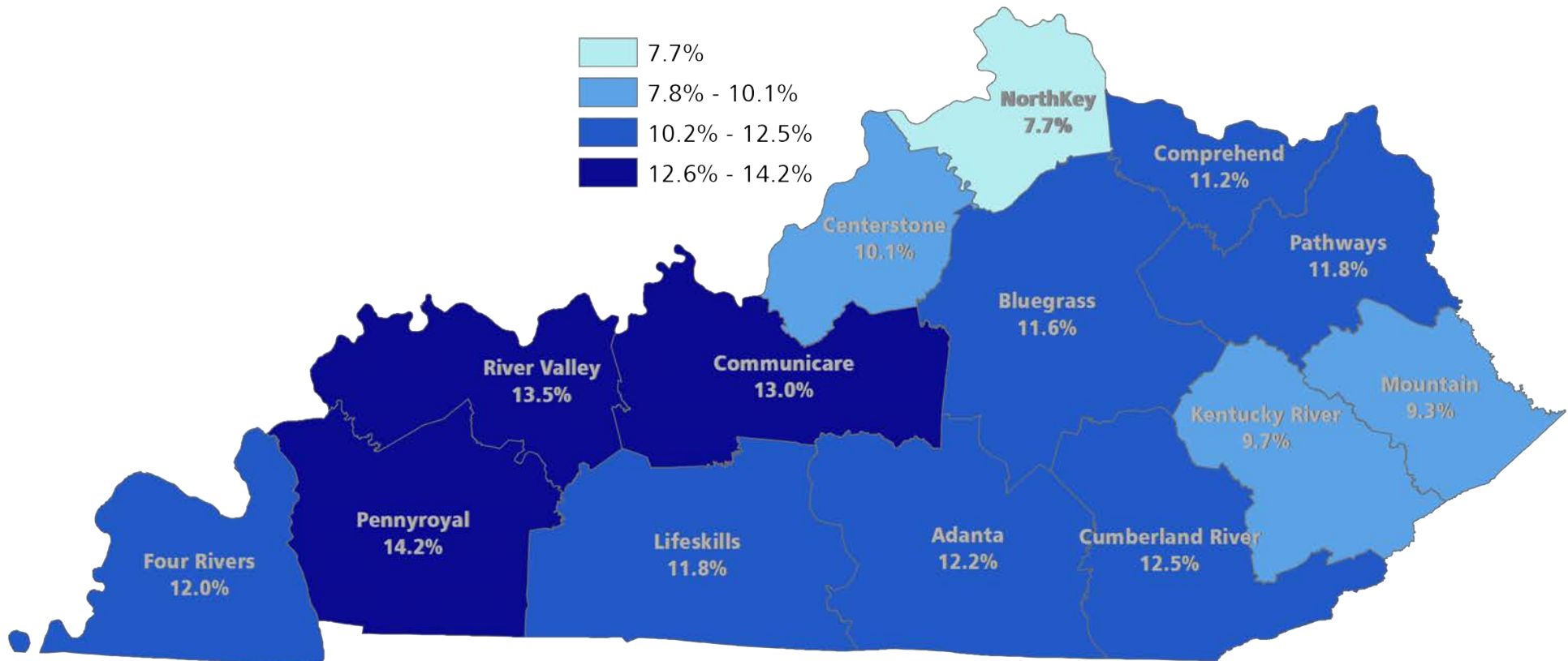
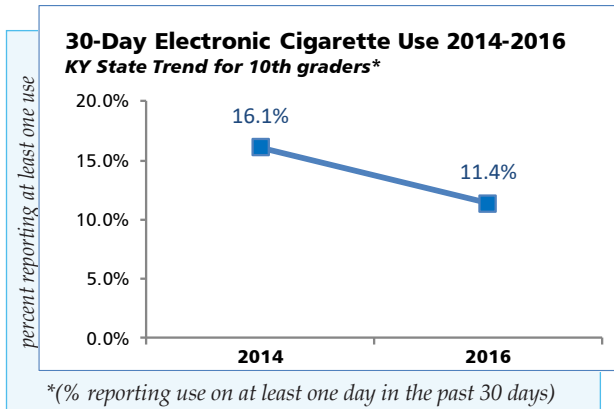
# Grade 10 - Electronic Cigarettes or E-cigarettes,\* 30-Day Use, 2016

\*for ex. NJOY, V2, Bull Smoke, Halo

(% responding that they had used the substance on at least one day in the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 7.7% (NORTHKEY); Max: 14.2% (PENNYROYAL)

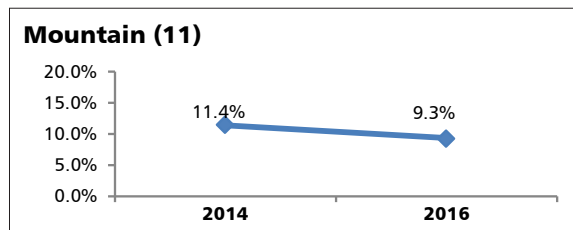
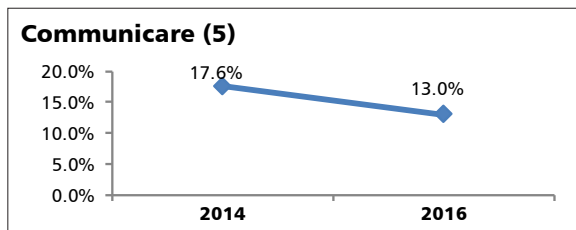
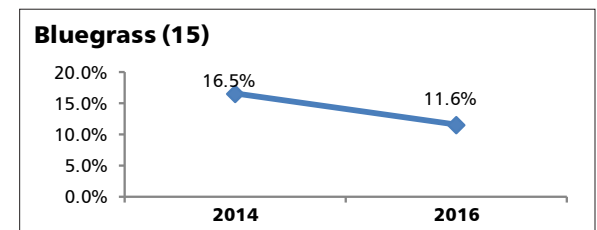
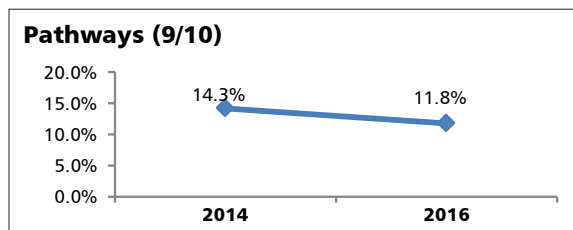
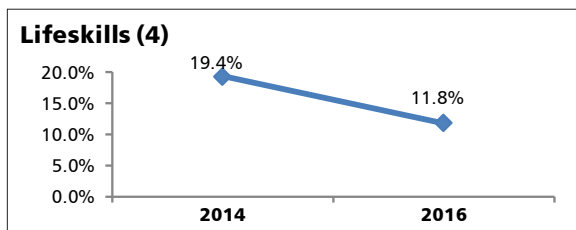
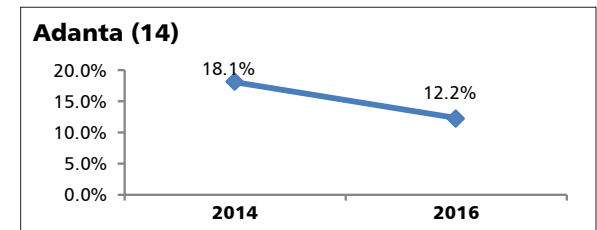
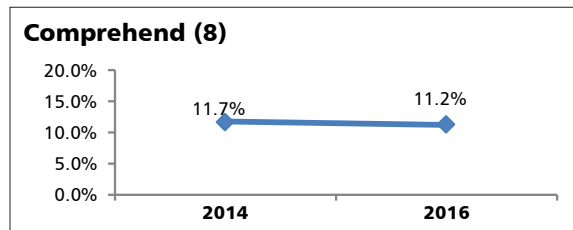
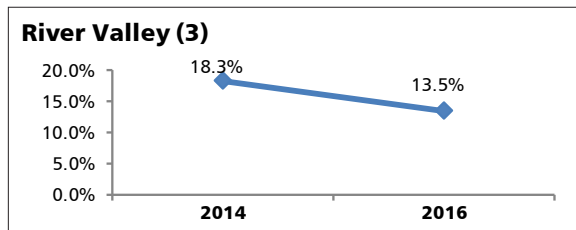
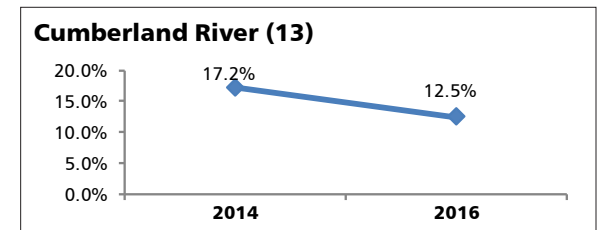
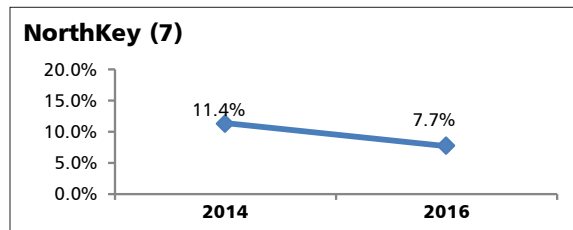
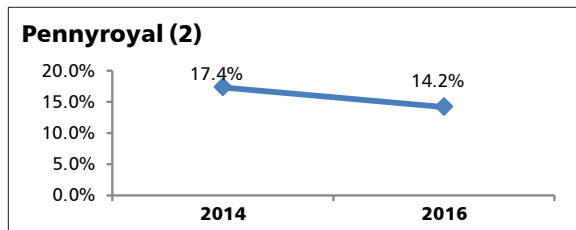
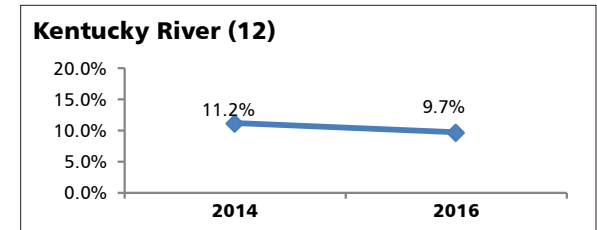
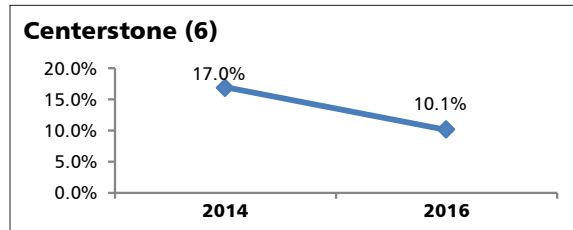
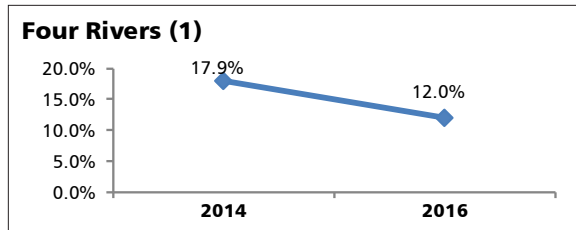


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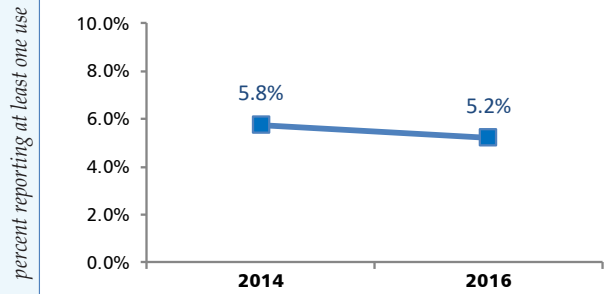
Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.



Regional Trends—**Electronic Cigarettes, 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance on at least one day in the past 30 days)



**30-Day Other Tobacco Product Use 2014-2016**  
**KY State Trend for 10th graders\***



\*(% reporting use on at least one day in the past 30 days)

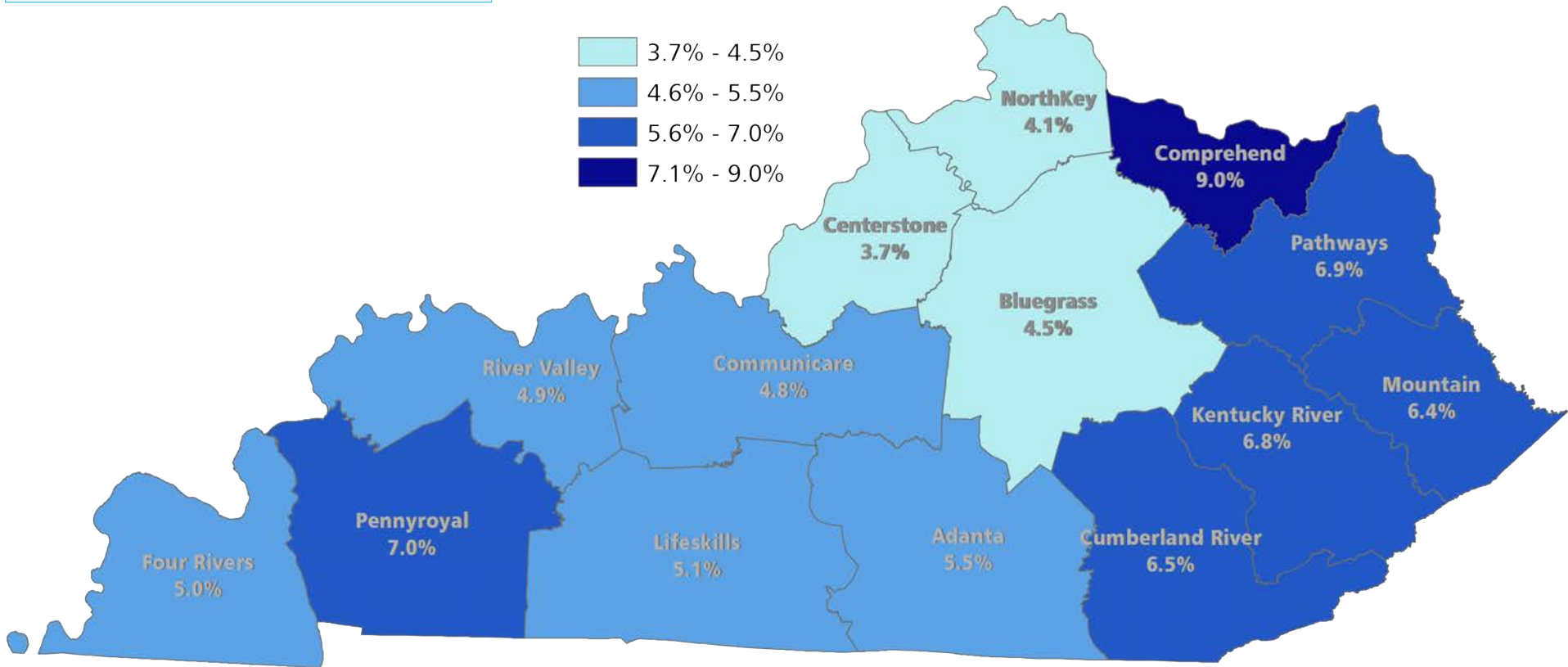
# Grade 10 - Other Tobacco Products,\* 30-Day Use, 2016

*\*other tobacco products not listed on previous pages*

*(% responding that they had used the substance on at least one day in the past 30 days)*

## PERCENTAGE OF 10TH GRADERS, 2016

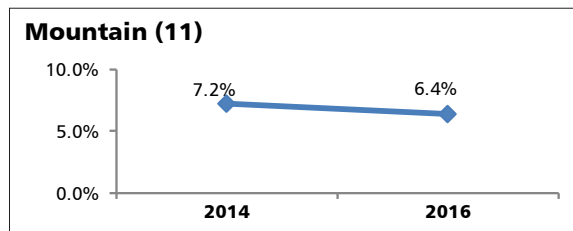
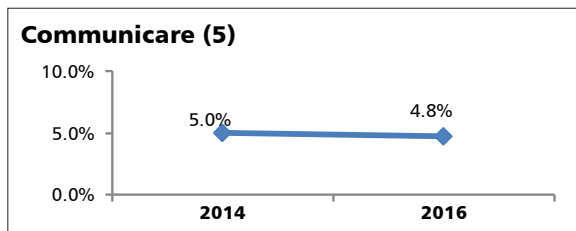
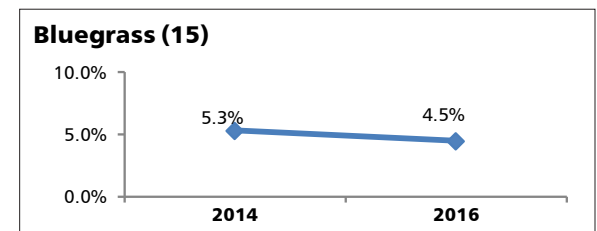
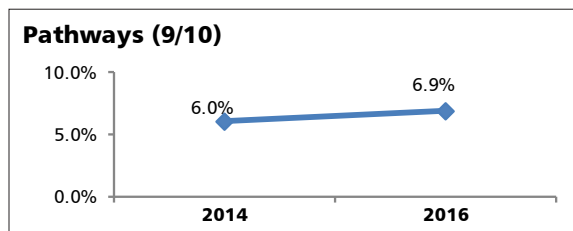
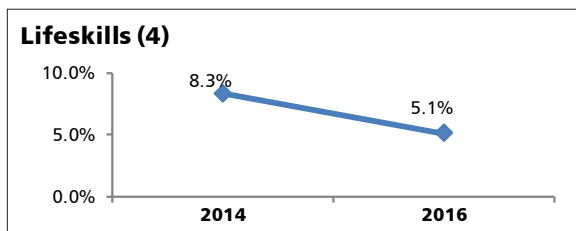
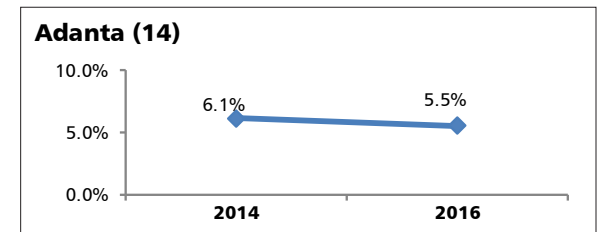
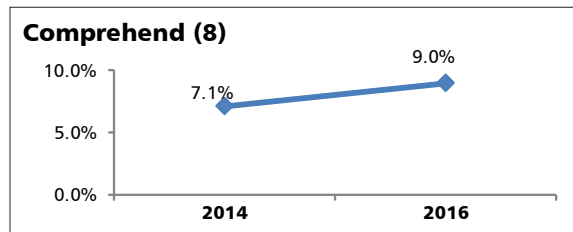
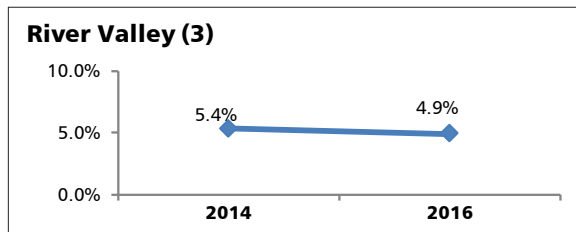
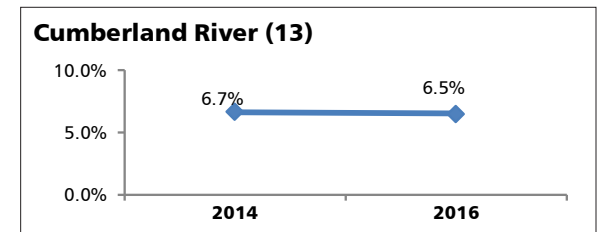
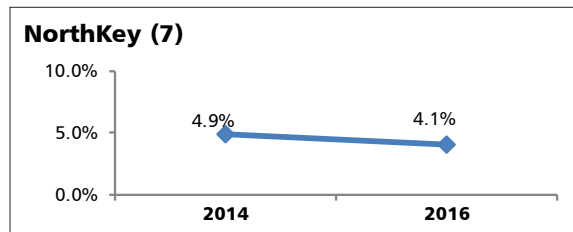
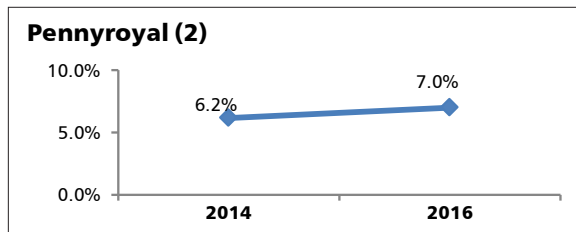
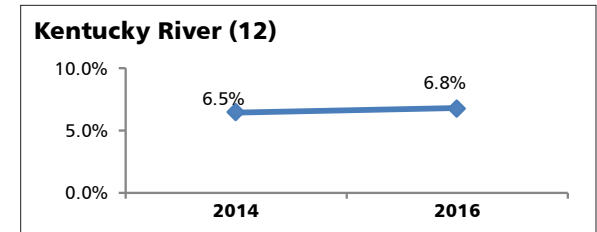
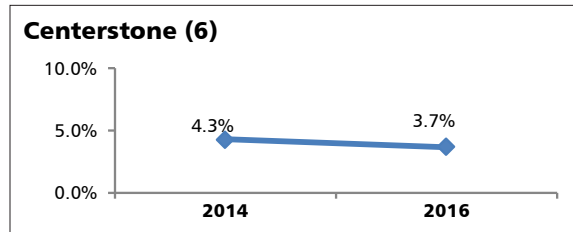
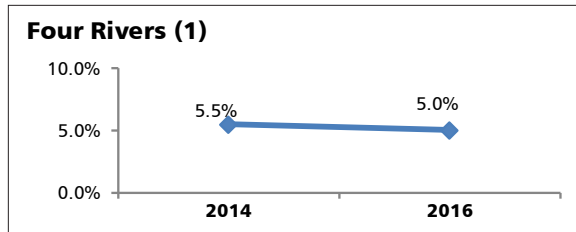
Min: 3.7% (CENTERSTONE); Max: 9.0% (COMPREHEND)



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Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.

Regional Trends—**Other Tobacco Products, 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance on at least one day in the past 30 days)

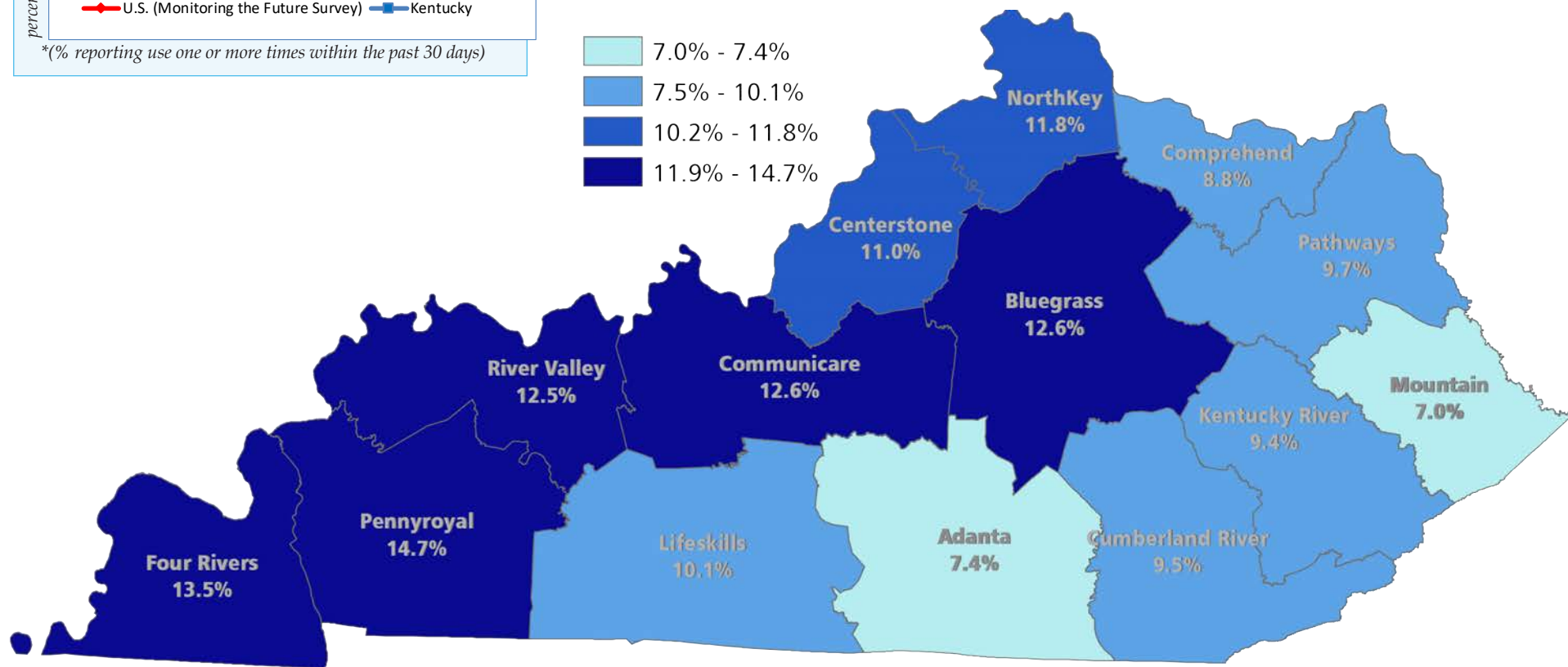
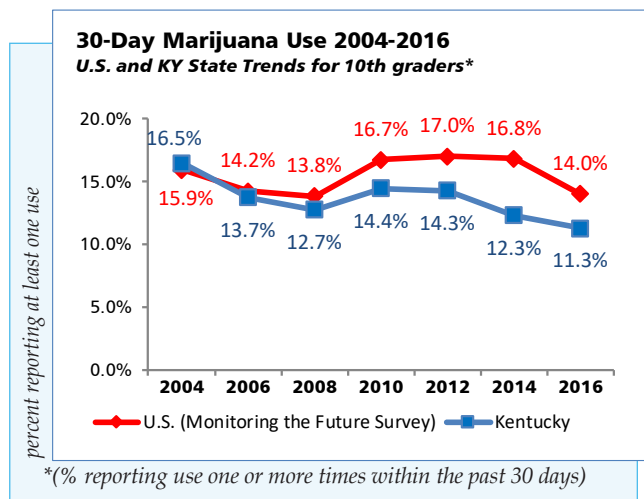


# Grade 10 - Marijuana, 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

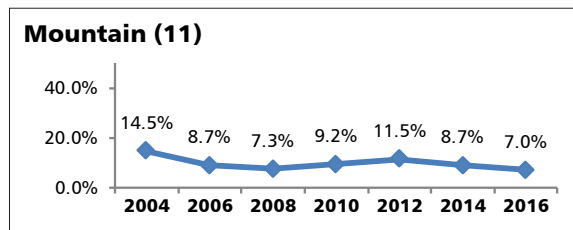
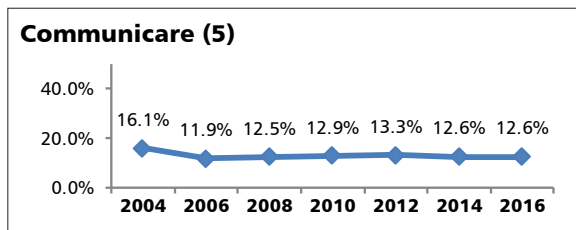
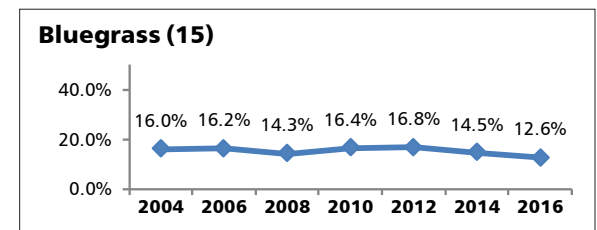
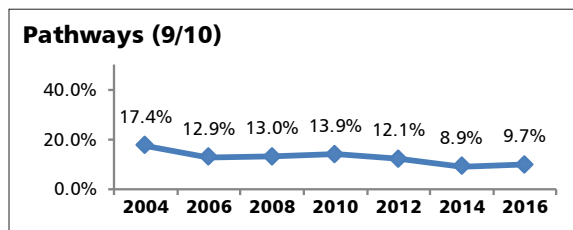
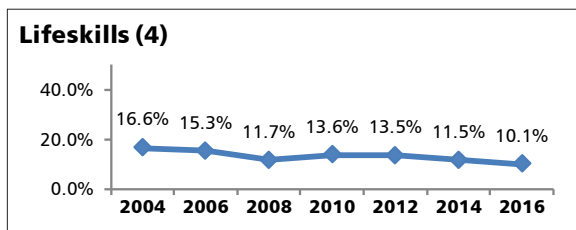
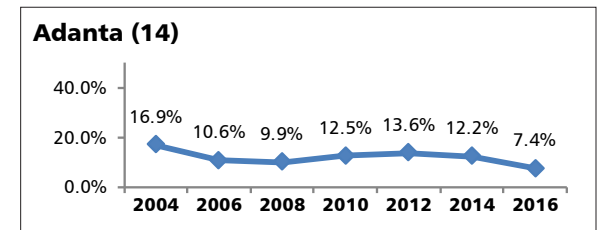
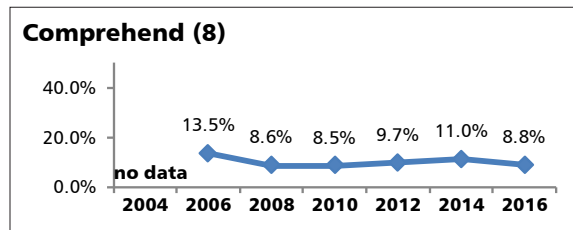
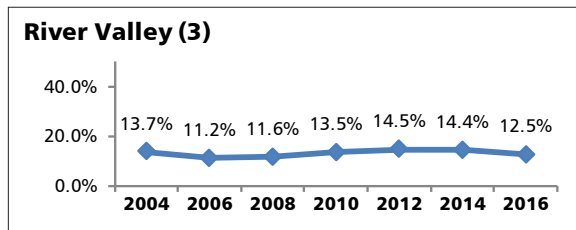
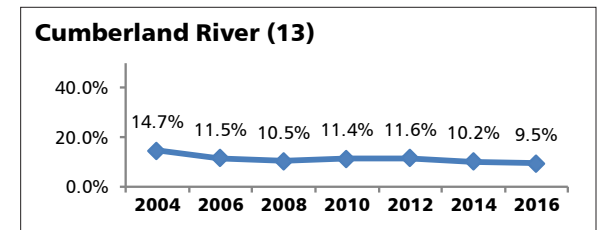
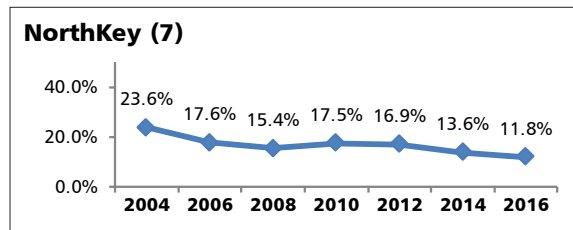
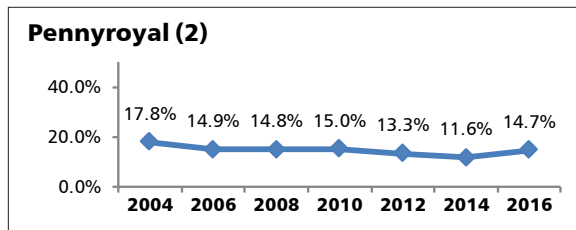
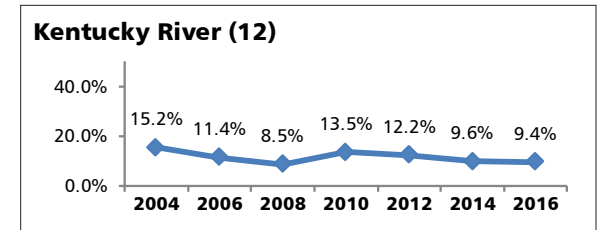
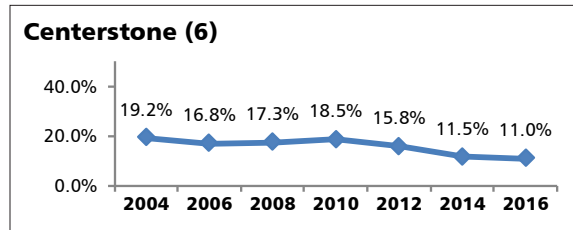
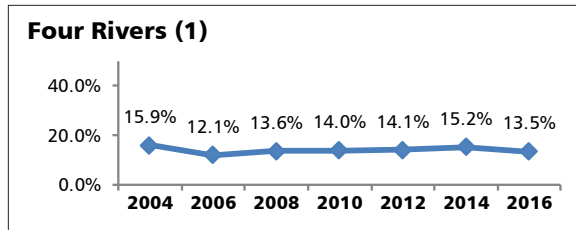
Min: 7.0% (MOUNTAIN); Max: 14.7% (PENNYROYAL)



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Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.

## Regional Trends—**Marijuana, 30-Day Use** by 10th Graders, 2004-2016 (% responding that they had used the substance one or more times within the past 30 days)



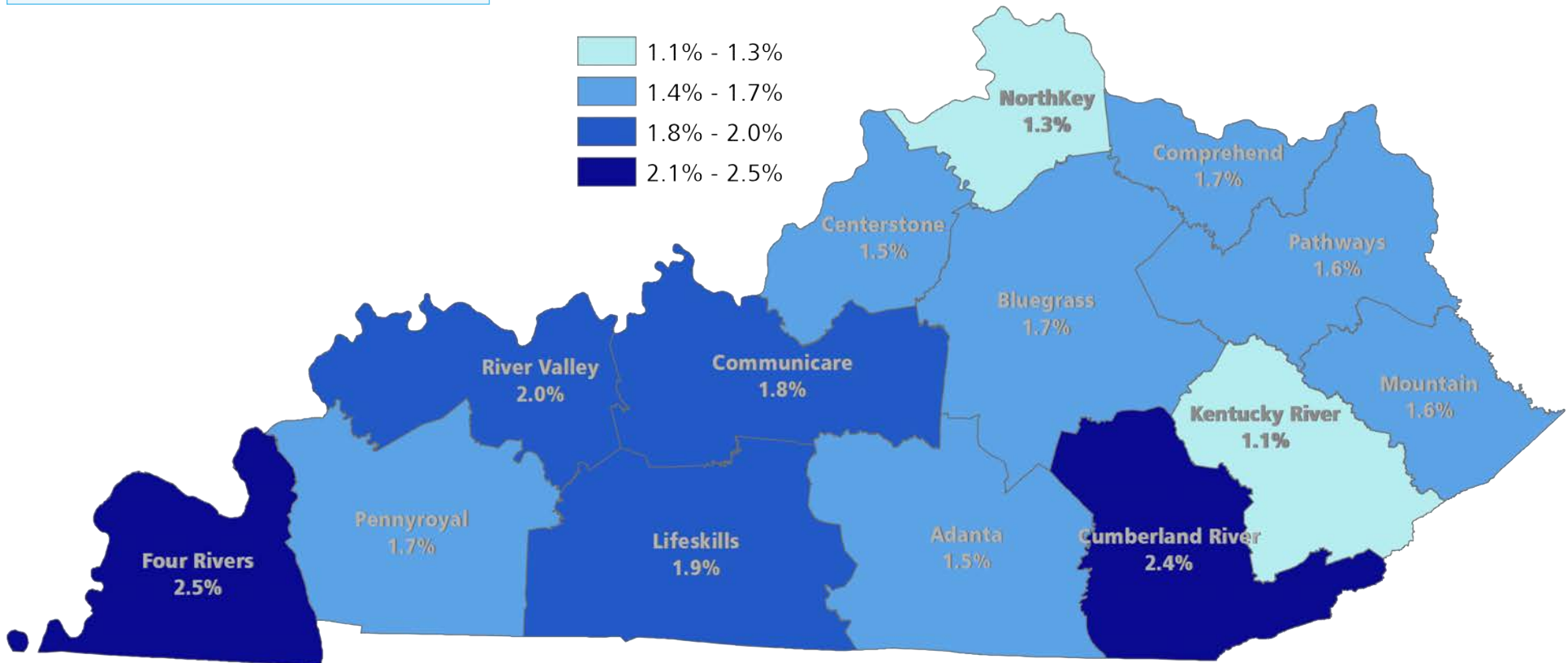
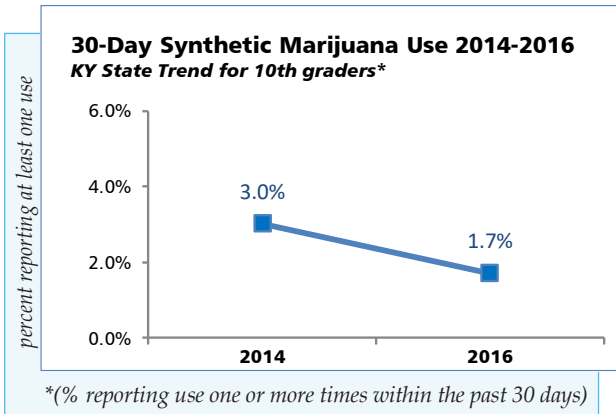
# Grade 10 - Synthetic Marijuana,\* 30-Day Use, 2016

*\*also called K2 or Spice*

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

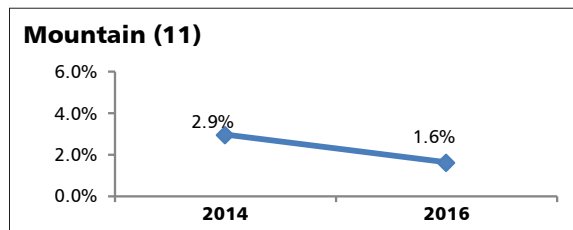
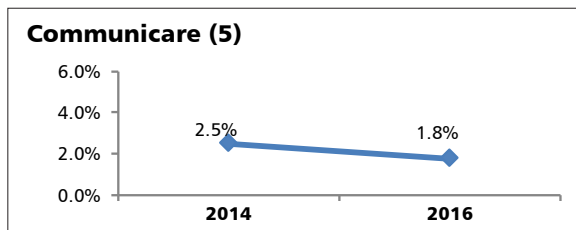
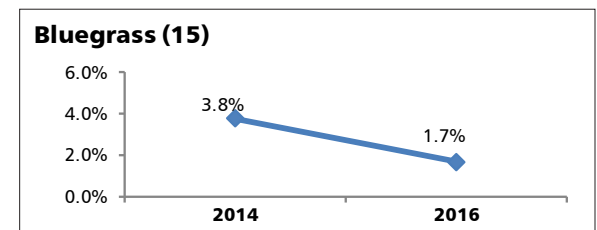
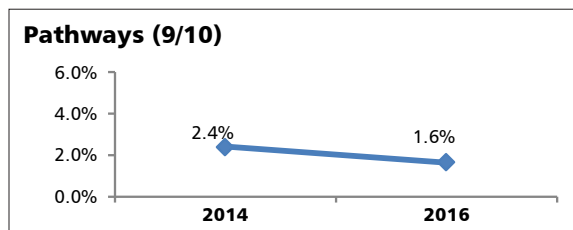
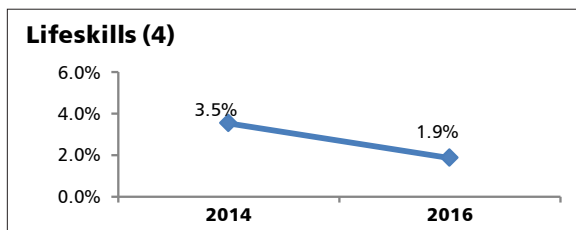
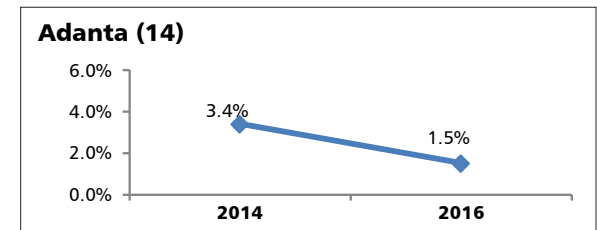
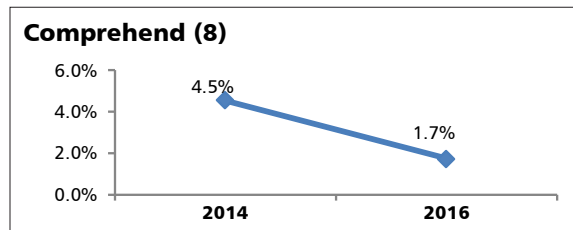
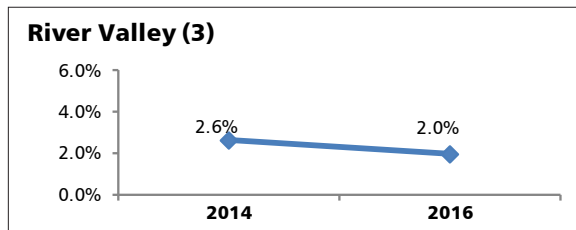
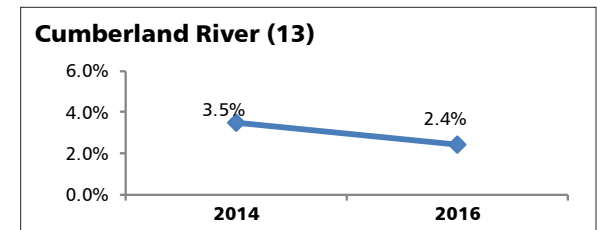
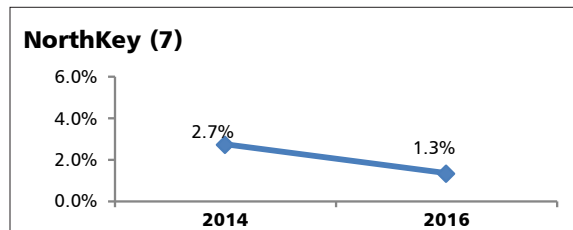
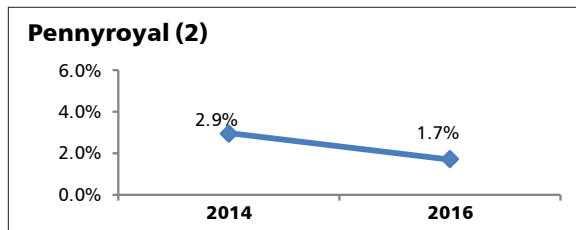
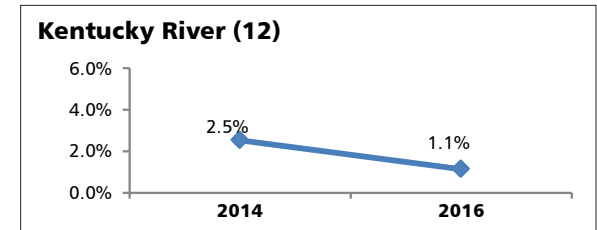
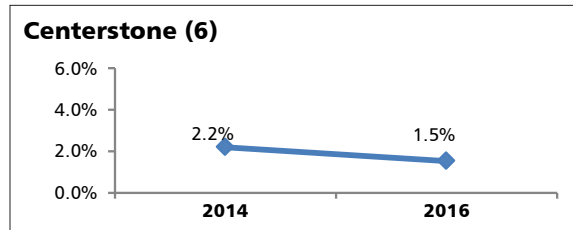
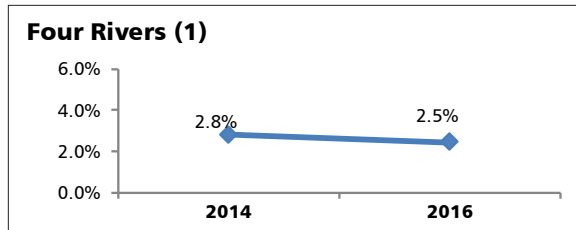
Min: 1.1% (KENTUCKY RIVER); Max: 2.5% (FOUR RIVERS)



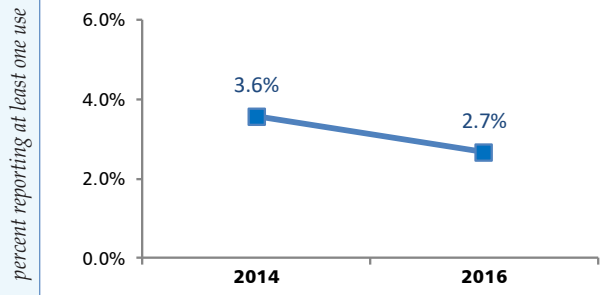
**NON-PARTICIPATING DISTRICTS BY REGION:** FOUR RIVERS (Calloway County, Murray Independent), PENNYROYAL (Dawson Springs Independent), LIFESKILLS (Bowling Green Independent, Warren County), COMMUNICARE (Meade County), CENTERSTONE (Anchorage Independent, Eminence Independent, Jefferson County), NORTHKEY (Beechwood Independent, Bellevue Independent, Kenton County, Southgate Independent), PATHWAYS (Ashland Independent, Morgan County), MOUNTAIN (Martin County, Paintsville Independent), CUMBERLAND RIVER (East Bernstadt Independent, Laurel County), BLUEGRASS (Fayette County).

Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.

Regional Trends—**Synthetic Marijuana,\* 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance one or more times within the past 30 days)  
 \*also called K2 or Spice



**30-Day Narcotics or Prescription Drug Use  
2014-2016 - KY State Trend for 10th graders\***



\*(% reporting use one or more times within the past 30 days)

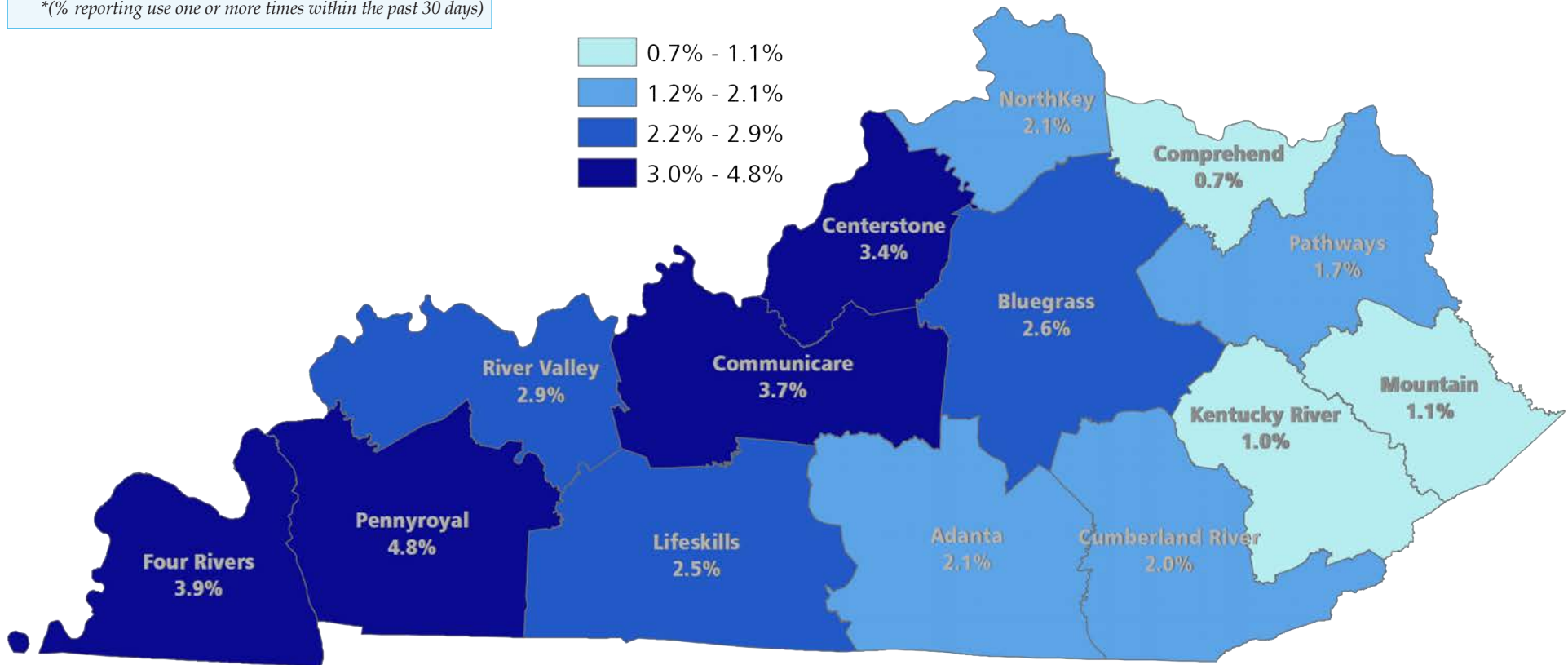
# Grade 10 - Narcotics/Prescription Drugs,\* 30-Day Use, 2016

*\*without a doctor's prescription*

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: .7% (COMPREHEND); Max: 4.8% (PENNYROYAL)

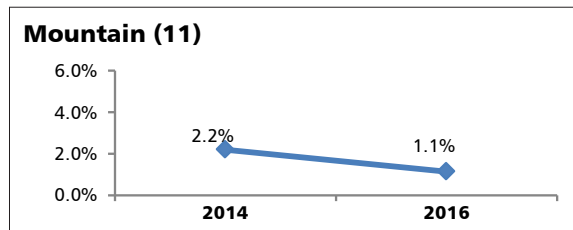
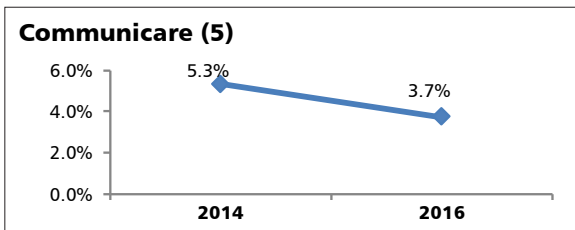
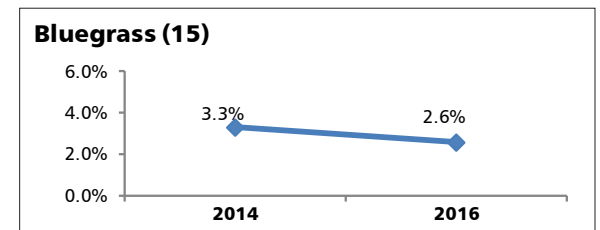
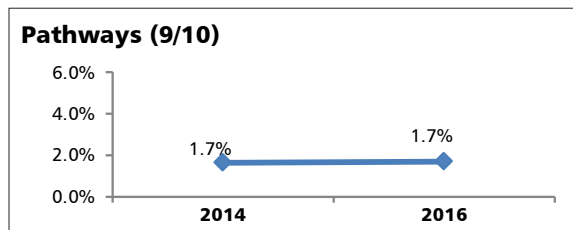
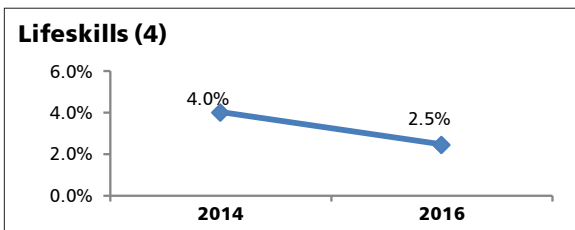
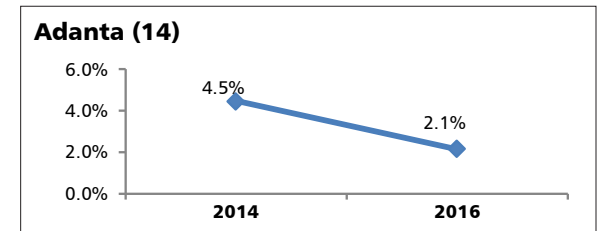
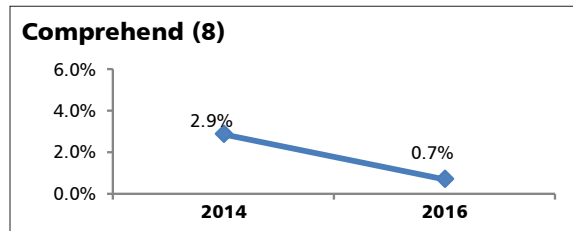
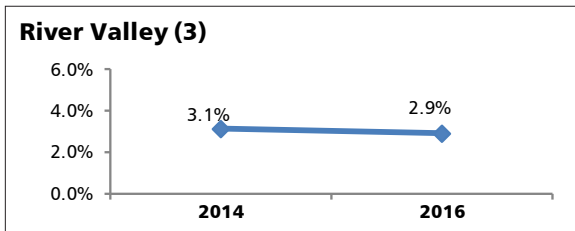
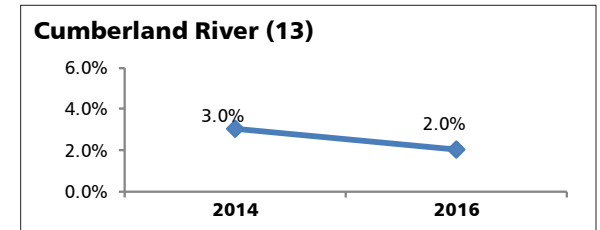
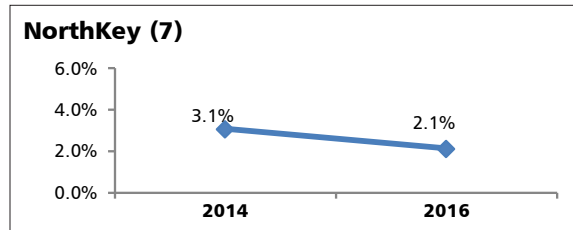
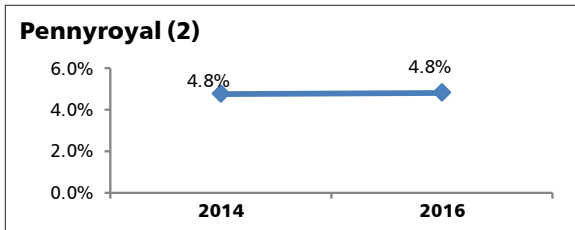
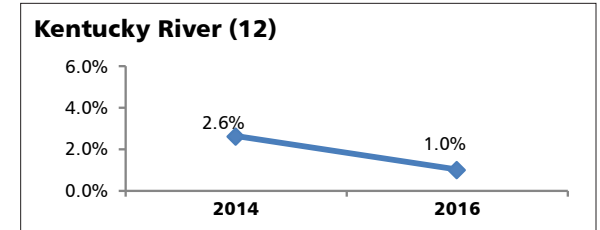
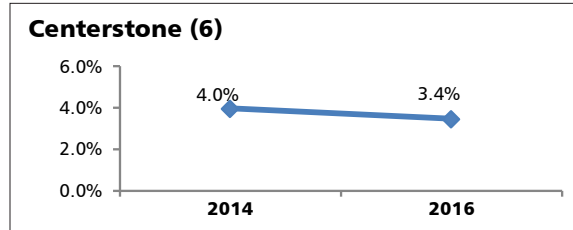
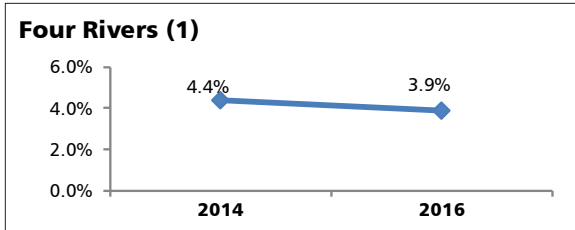


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Regional Trends—**Narcotics/Prescription Drugs,\* 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance one or more times within the past 30 days)  
 \* without a doctor's prescription



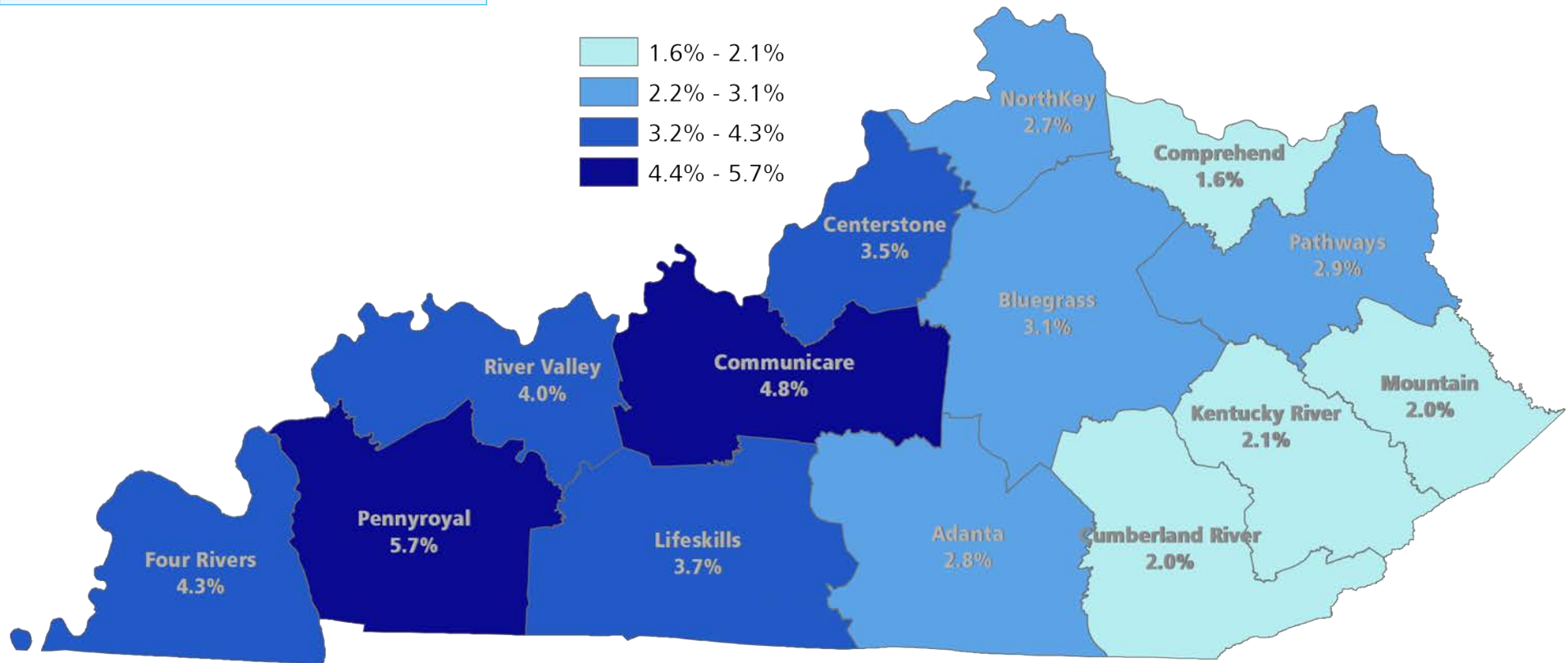
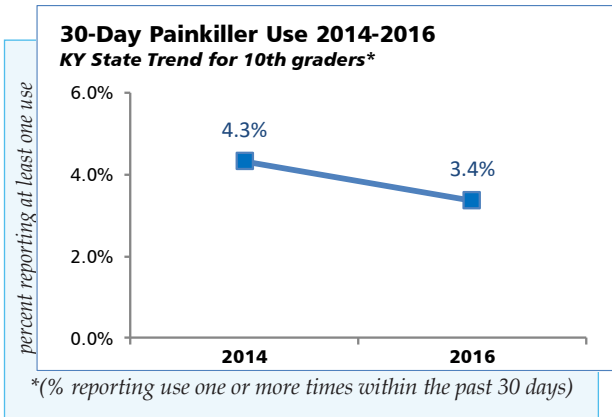
# Grade 10 - Painkillers,\* 30-Day Use, 2016

\*OxyContin, Percocet, Vicodin, Codeine - without a doctor's prescription

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 1.6% (COMPREHEND); Max: 5.7% (PENNYROYAL)



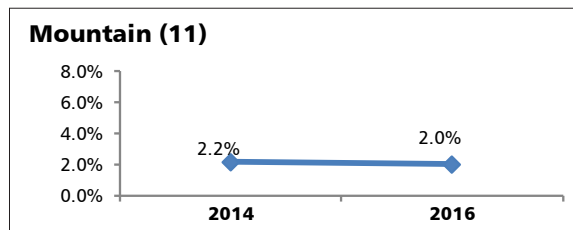
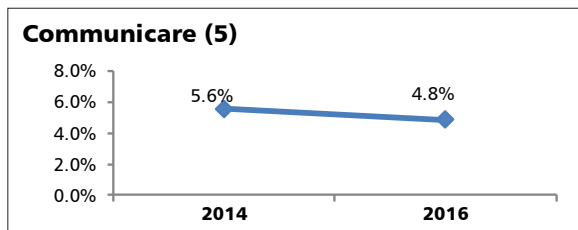
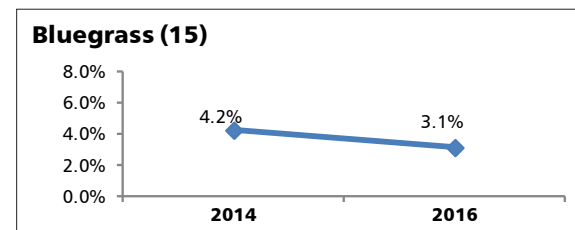
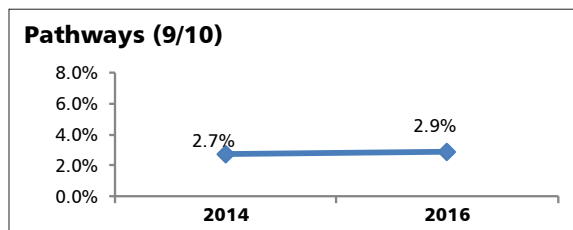
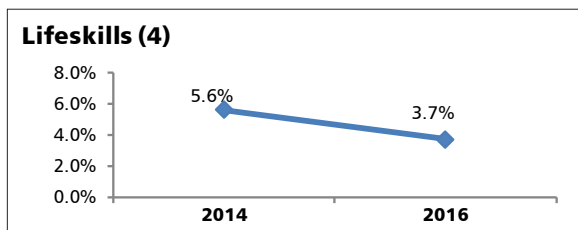
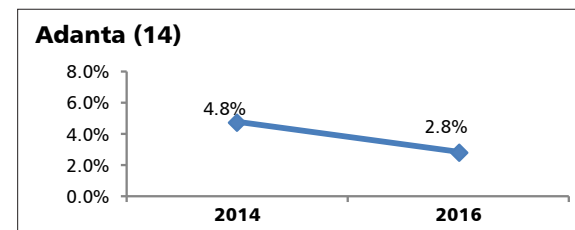
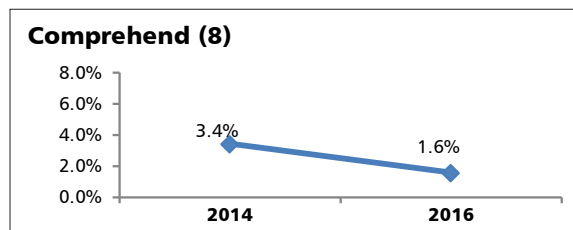
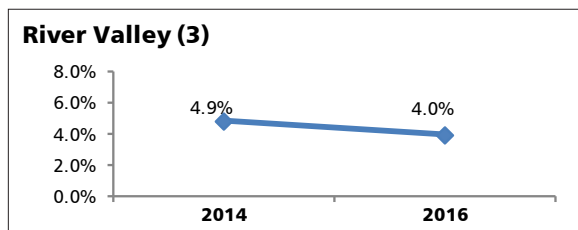
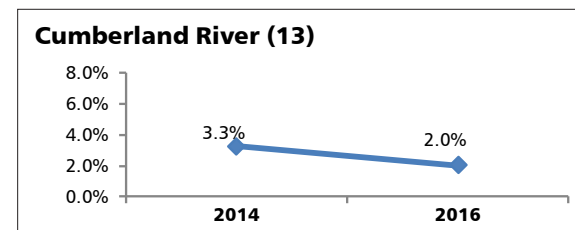
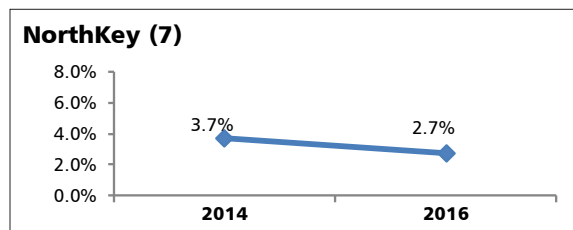
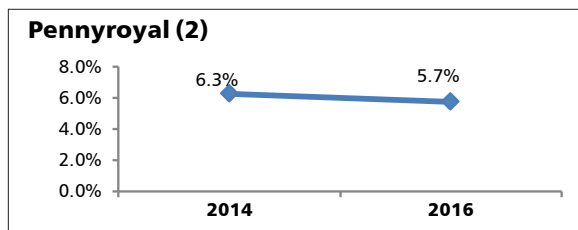
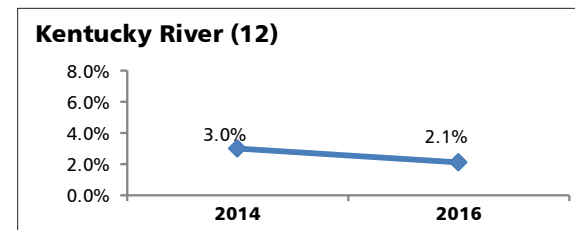
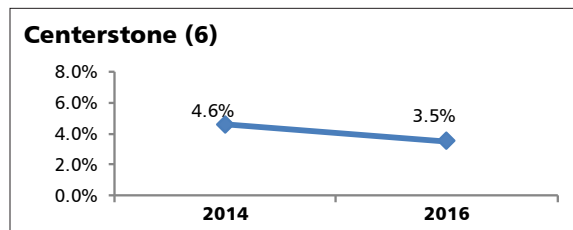
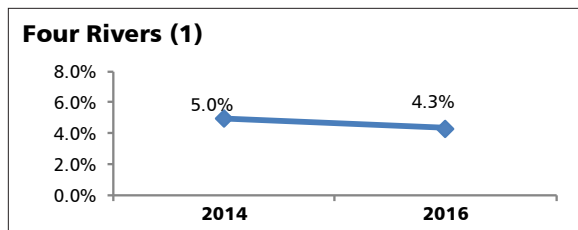
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## Regional Trends—Painkillers,\* 30-Day Use by 10th Graders, 2014-2016

(% responding that they had used the substance one or more times within the past 30 days)

\* OxyContin, Percocet, Vicodin, Codeine - without a doctor's prescription



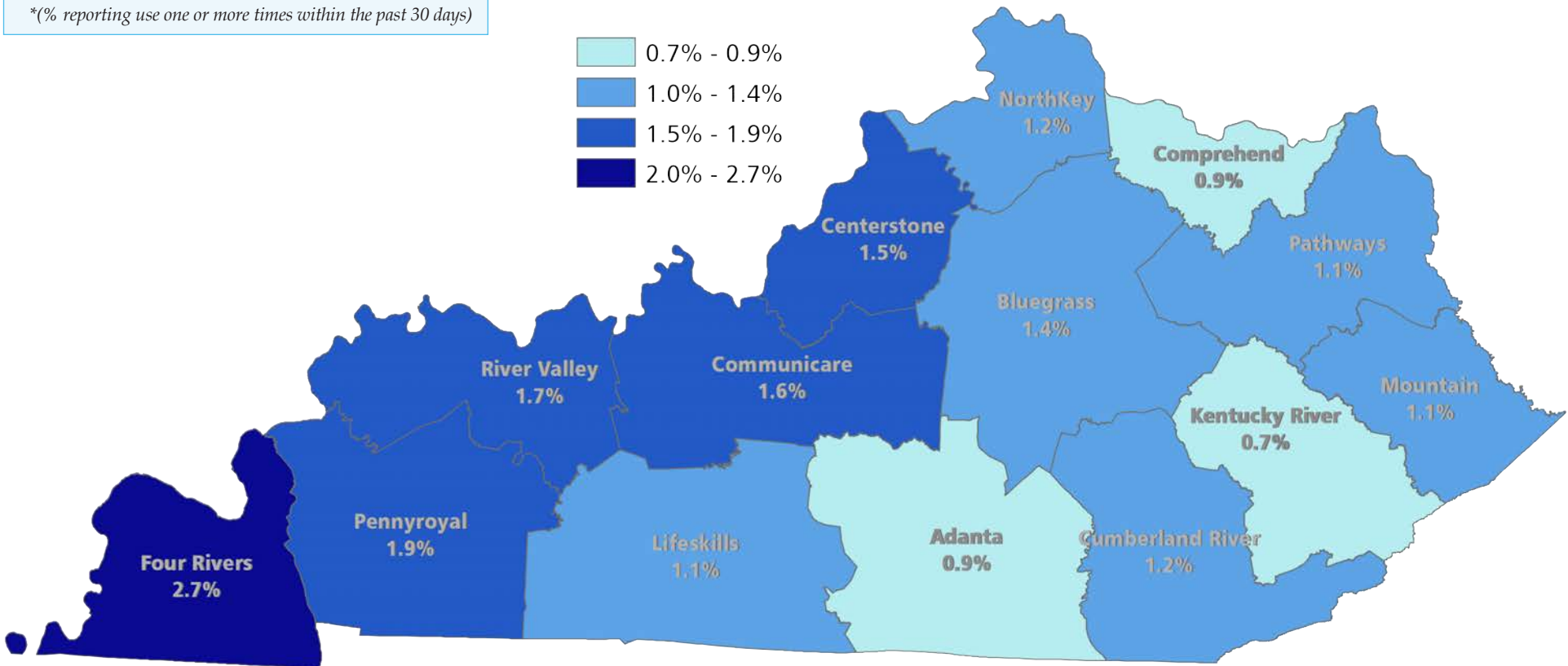
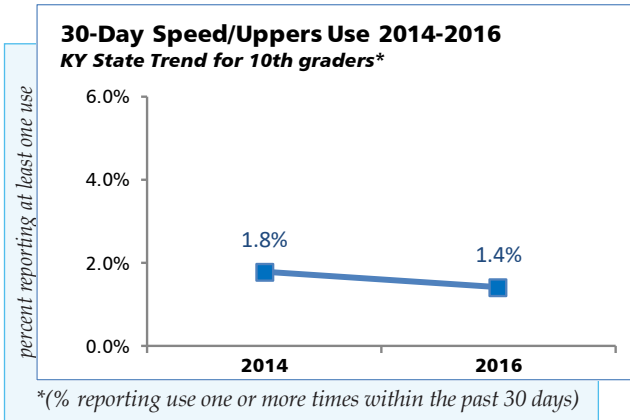
# Grade 10 - Speed/Uppers,\* 30-Day Use, 2016

\*Adderall, Ritalin - without a doctor's prescription

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 0.7% (KENTUCKY RIVER); Max: 2.7% (FOUR RIVERS)

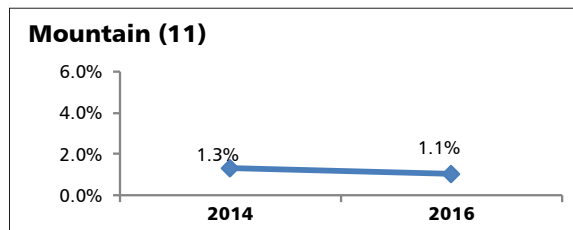
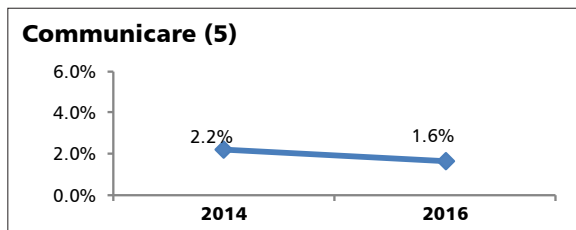
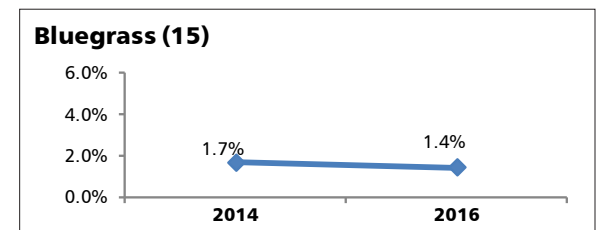
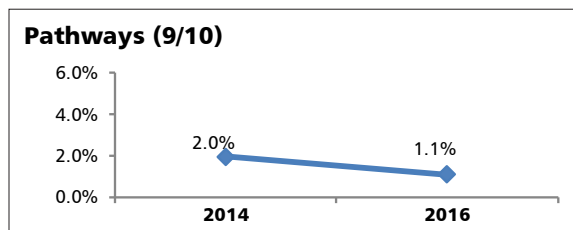
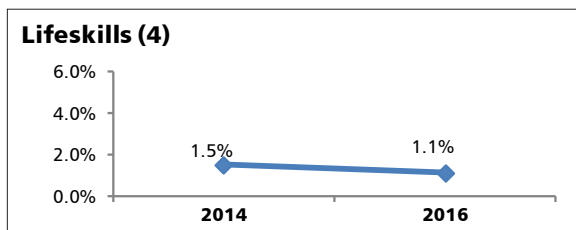
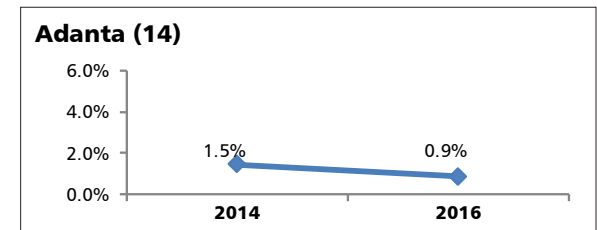
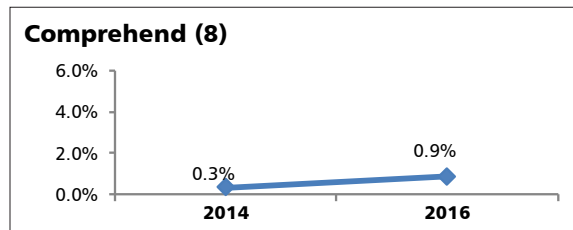
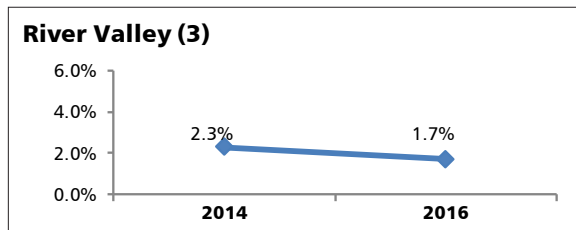
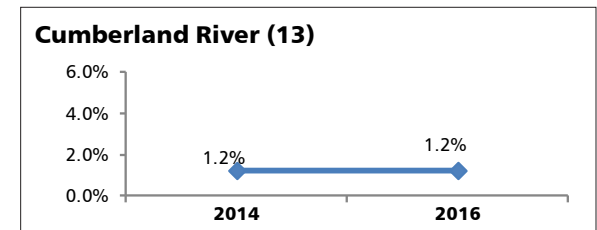
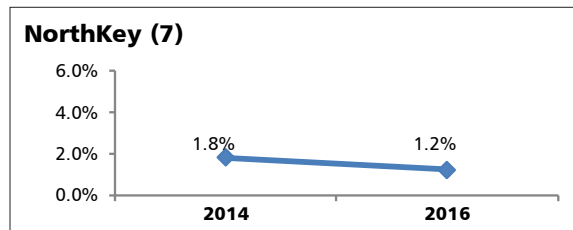
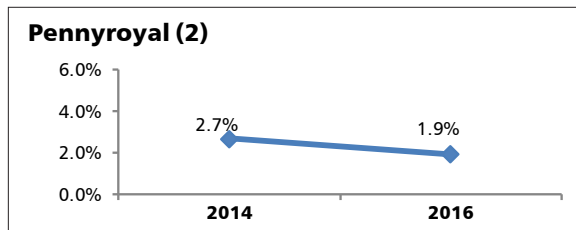
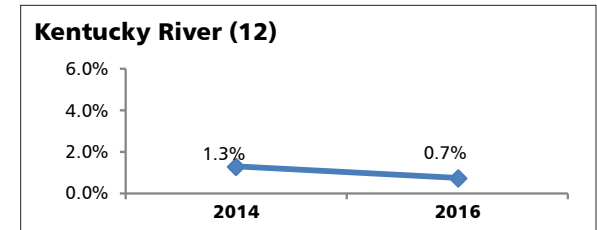
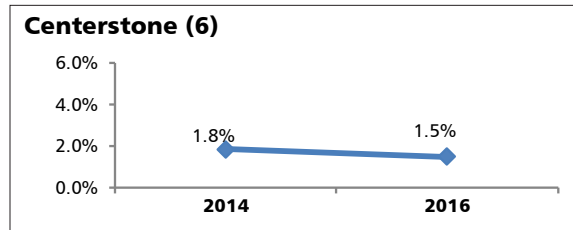
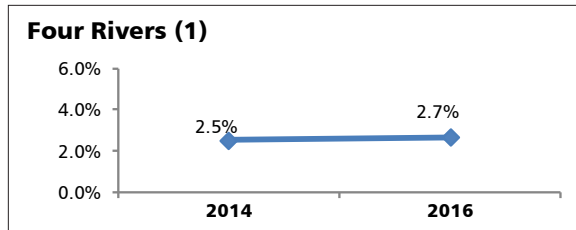


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## Regional Trends—**Speed/Uppers,\* 30-Day Use** by 10th Graders, 2014-2016 (% responding that they had used the substance one or more times within the past 30 days)

\* *Adderall, Ritalin - without a doctor's prescription*



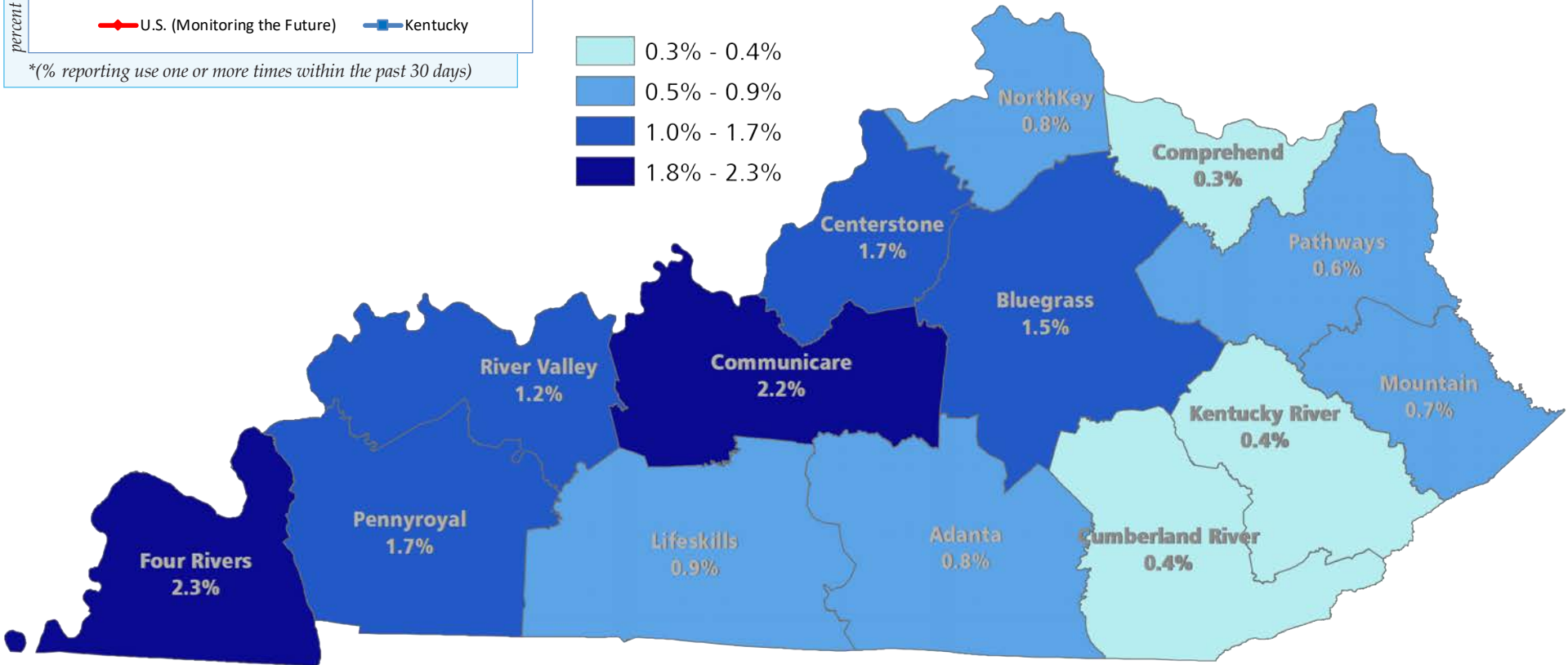
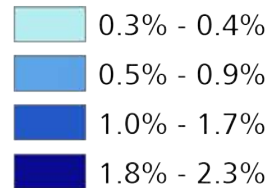
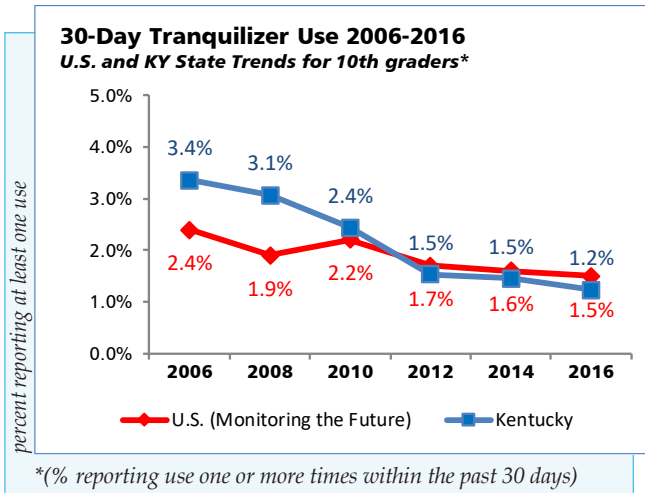
# Grade 10 - Tranquilizers,\* 30-Day Use, 2016

\*Valium, Xanax, Librium, Ativan, etc.

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: .3% (COMPREHEND); Max: 2.3% (FOUR RIVERS)

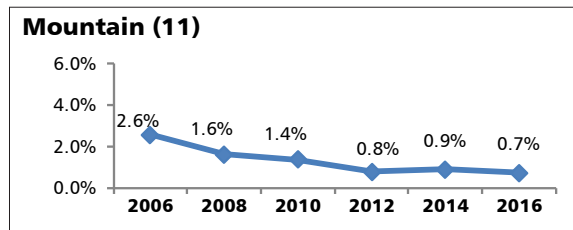
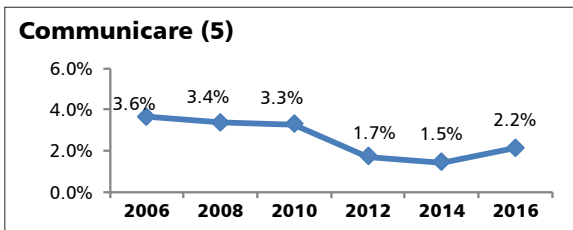
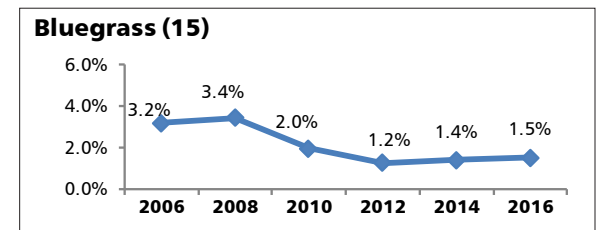
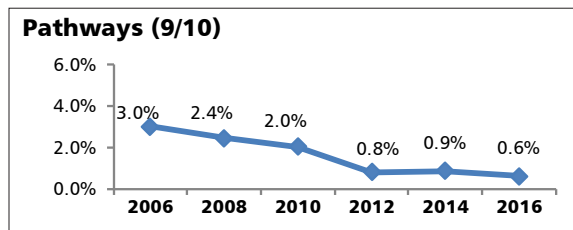
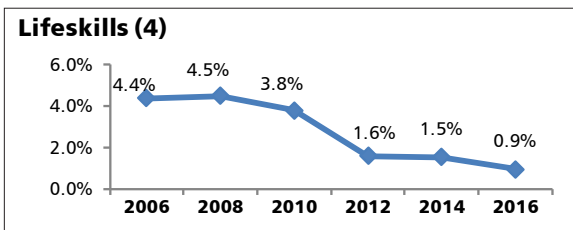
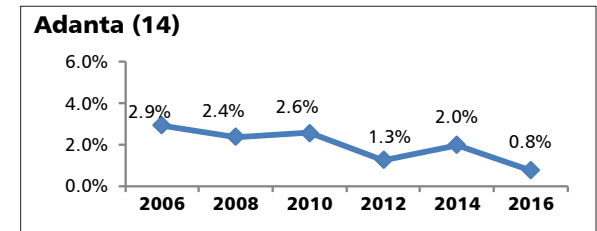
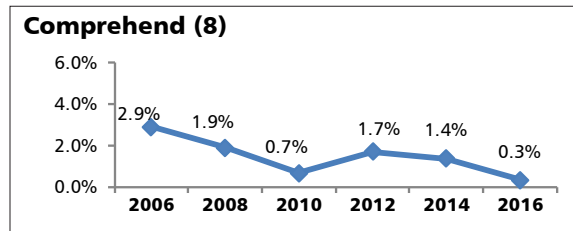
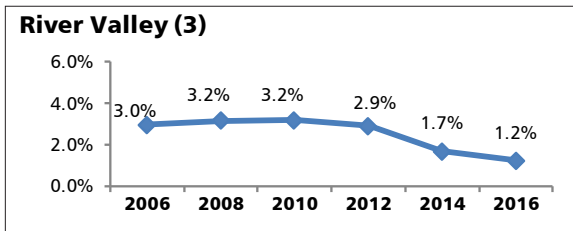
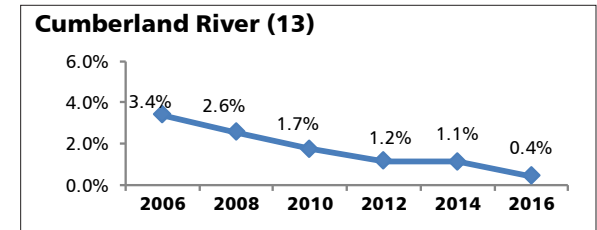
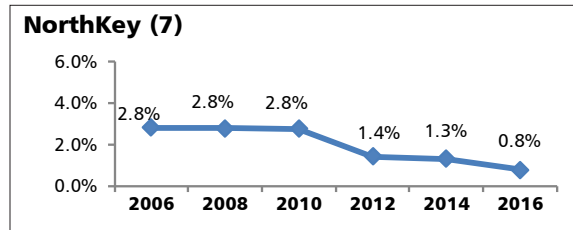
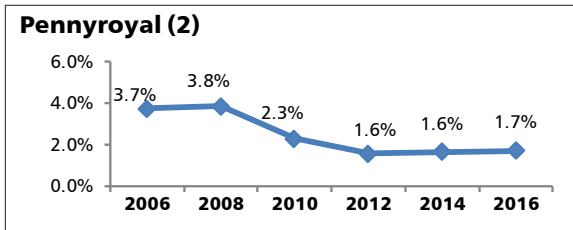
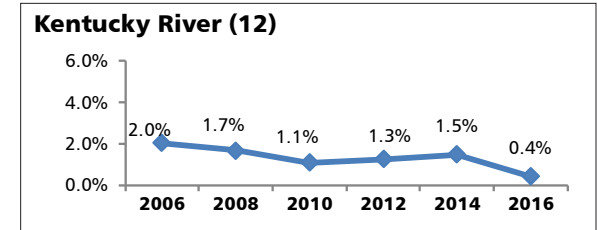
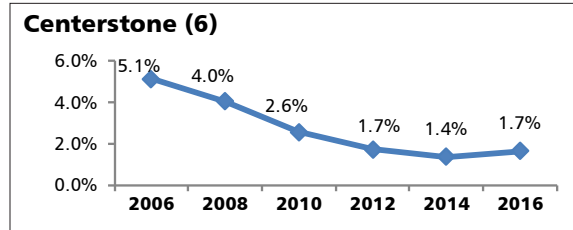
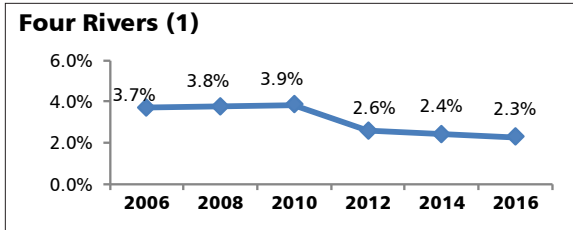


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# Regional Trends—**Tranquilizers (Valium, Xanax, etc.), 30-Day Use** by 10th Graders, 2006-2016

(% responding that they had used the substance one or more times within the past 30 days)



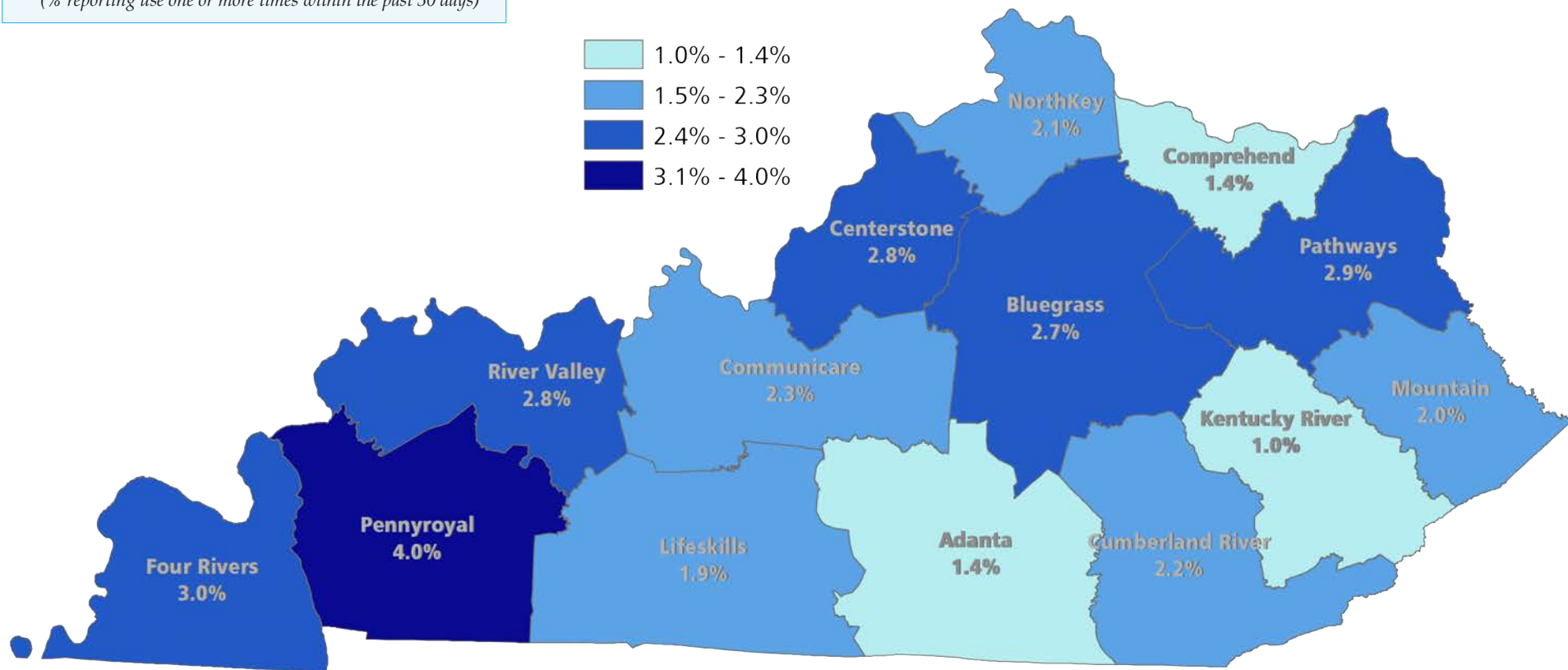
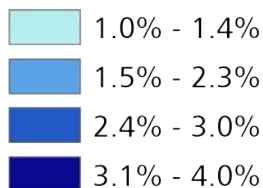
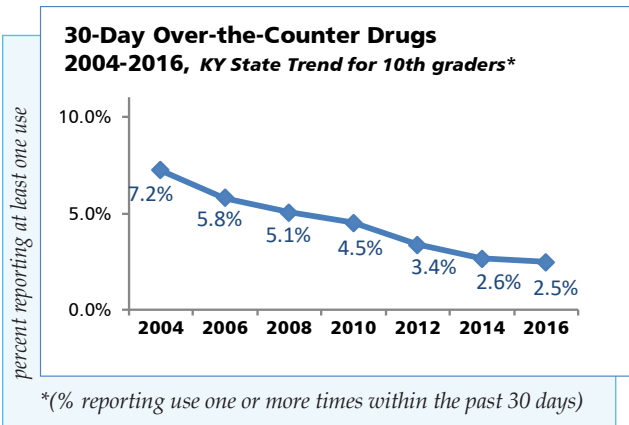
# Grade 10 - Over-the-Counter Drugs,\* 30-Day Use, 2016

\*stay-awake pills, cough syrup, etc.

(% responding that they had misused OTC drugs one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 1.0% (KENTUCKY RIVER); Max: 4.0% (PENNYROYAL)

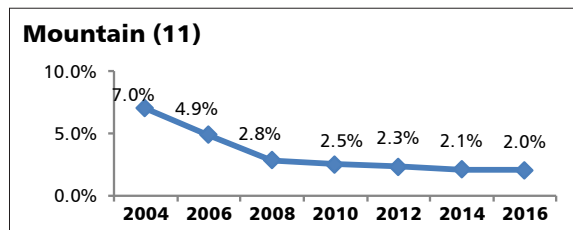
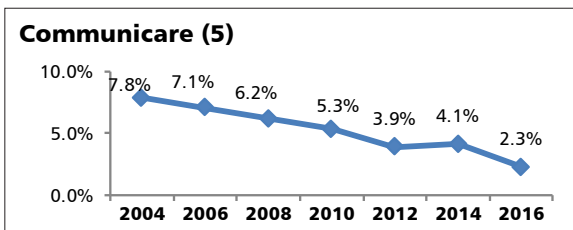
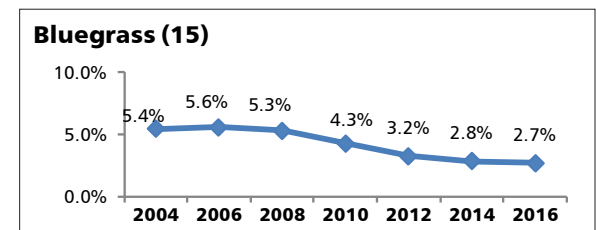
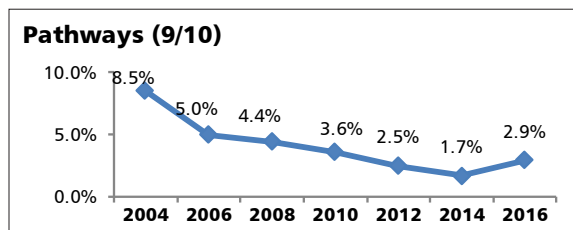
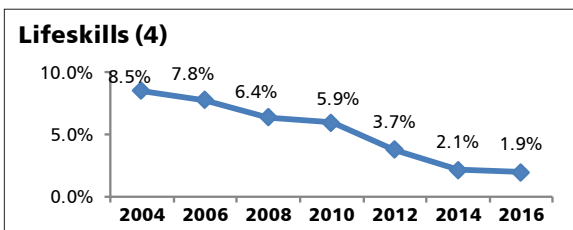
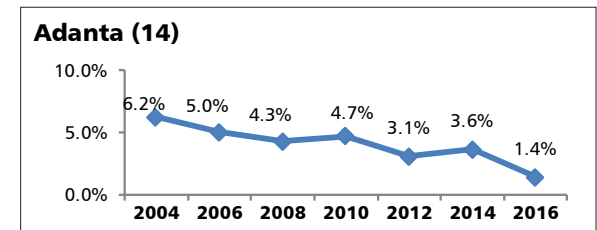
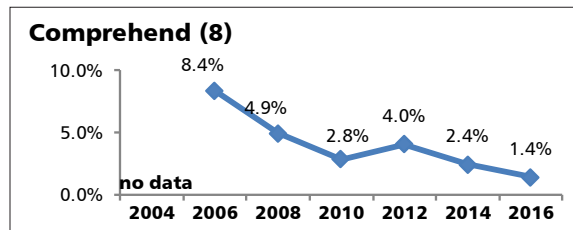
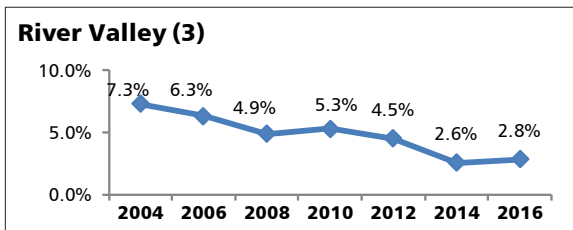
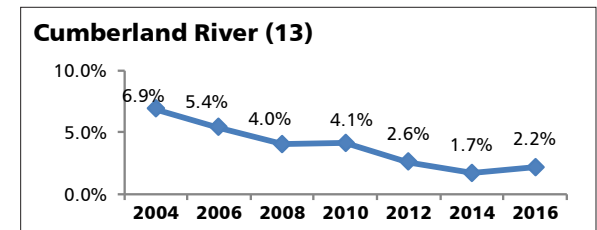
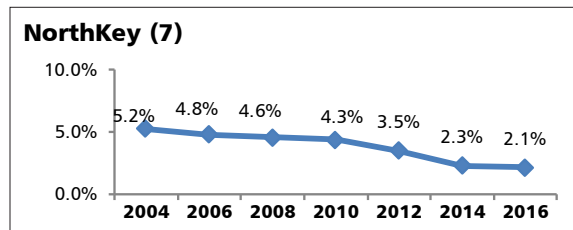
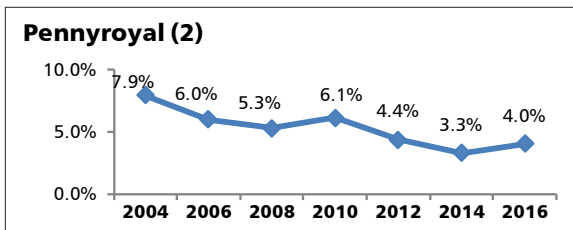
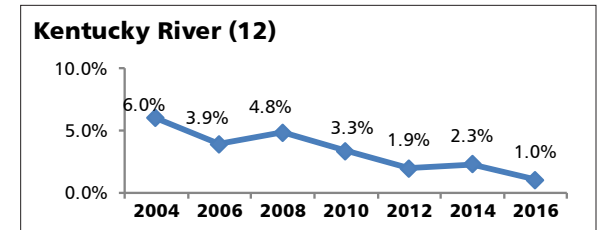
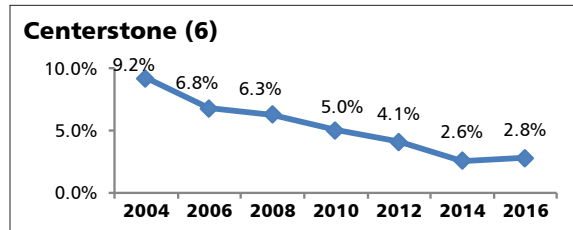
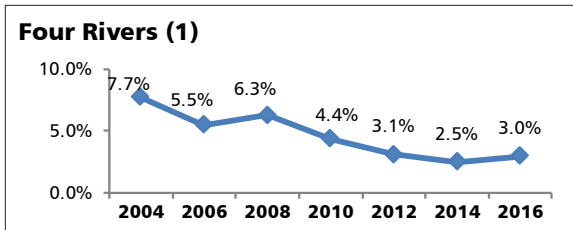


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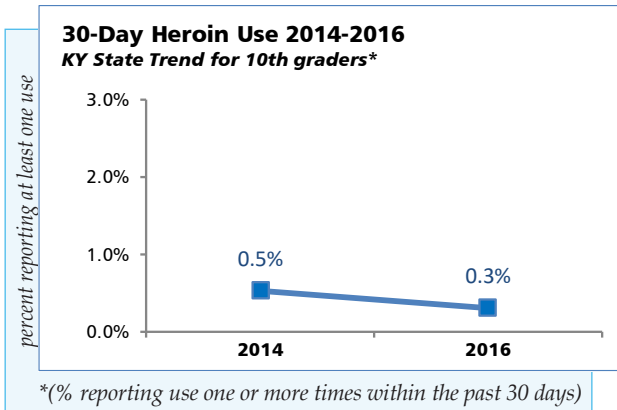


Regional Trends—**Over-the Counter Drugs,\* 30-Day Use** by 10th Graders, 2004-2016  
 (% responding that they had misused OTC drugs one or more times within the past 30 days)  
 \*stay-awake pills, cough syrup, etc.



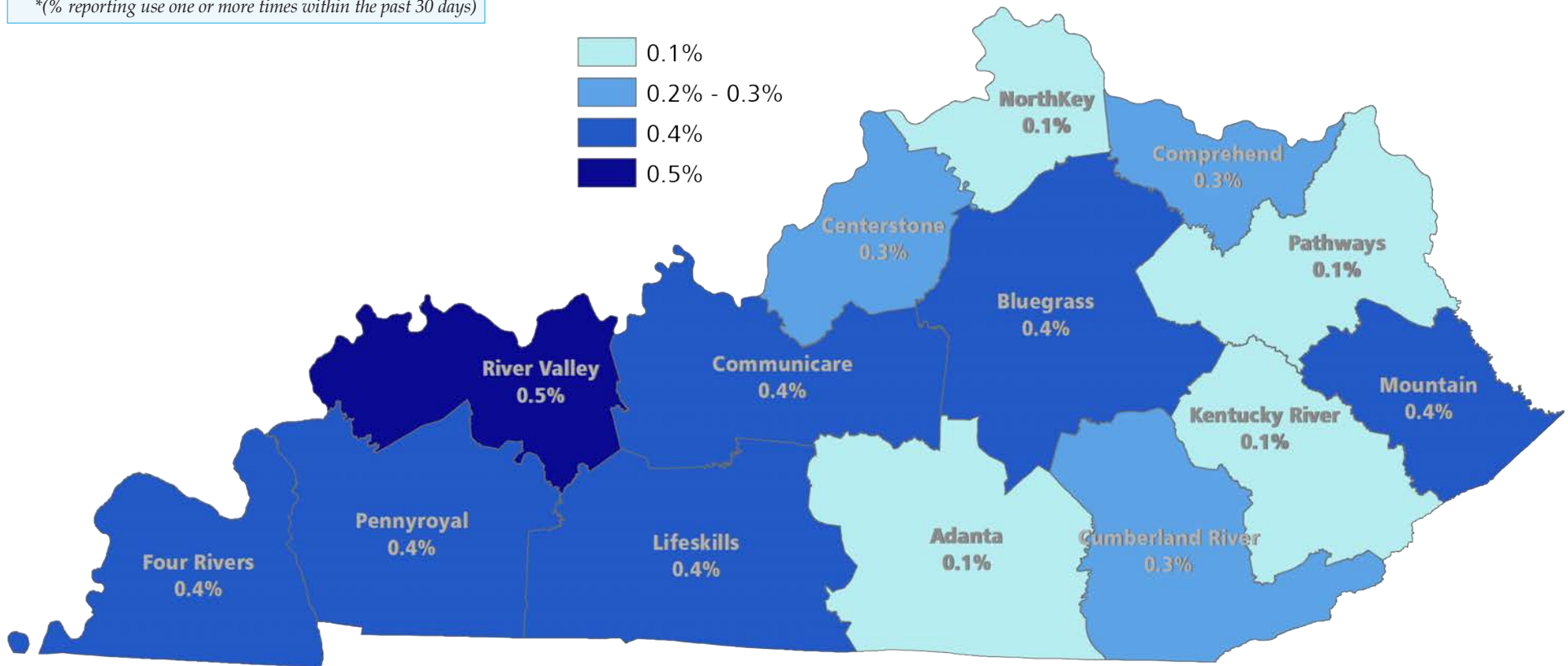
# Grade 10 - Heroin, 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)



## PERCENTAGE OF 10TH GRADERS, 2016

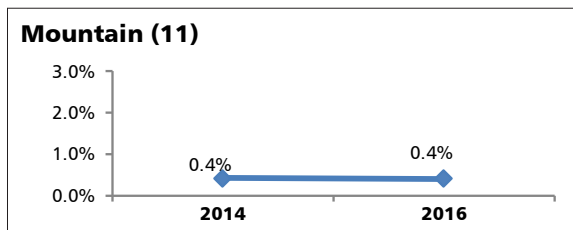
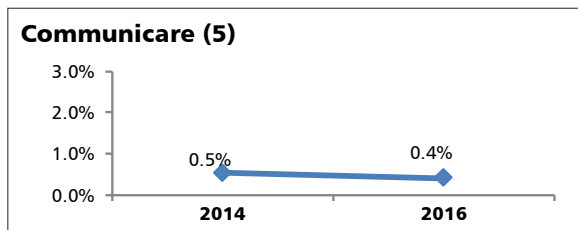
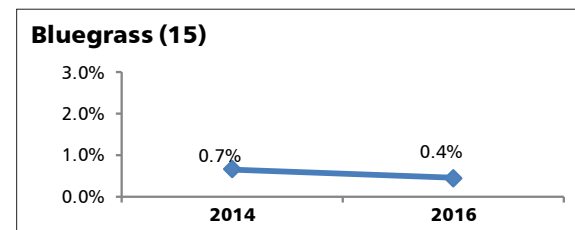
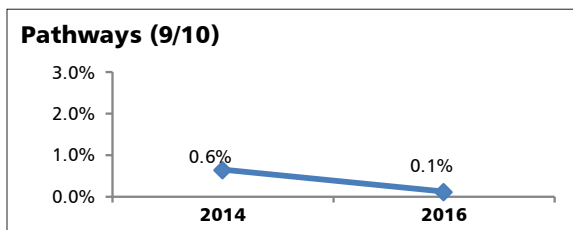
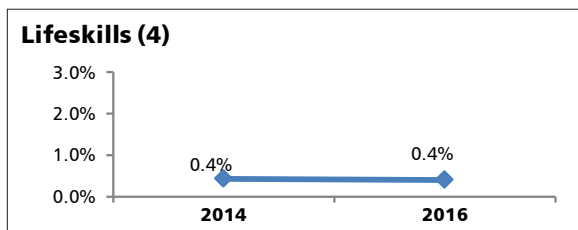
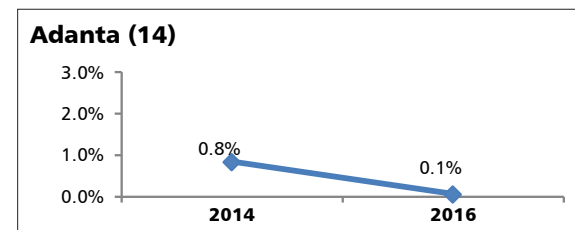
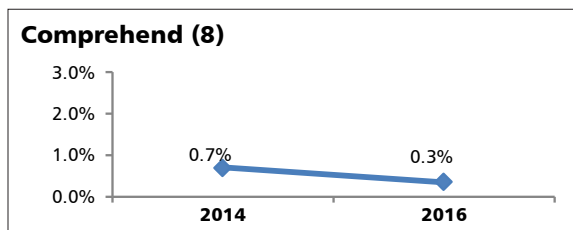
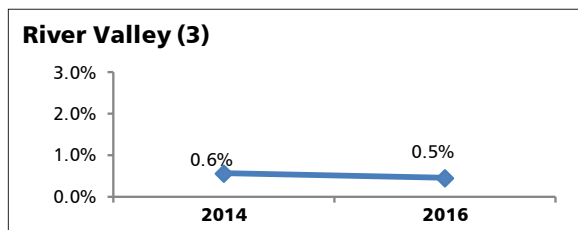
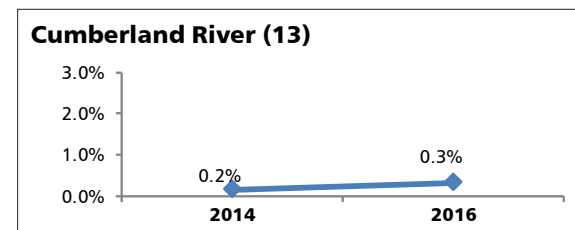
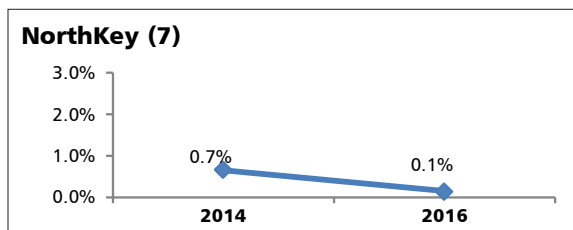
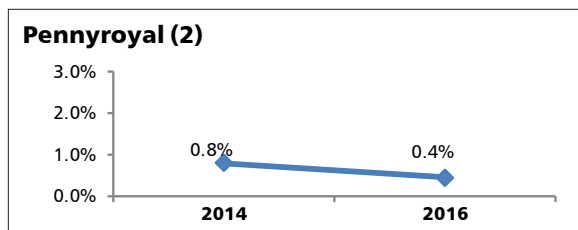
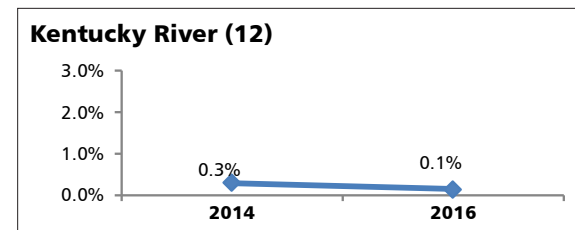
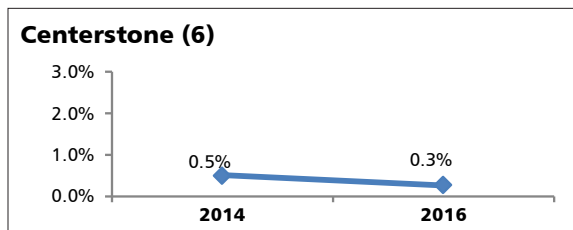
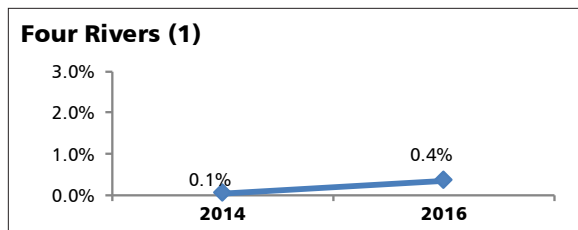
Min: .1% (ADANTA/KENTUCKY RIVER/NORTHKEY/PATHWAYS); Max: .5% (RIVER VALLEY)



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Regional Trends—**Heroin,\* 30-Day Use** by 10th Graders, 2014-2016  
 (% responding that they had used the substance one or more times within the past 30 days)

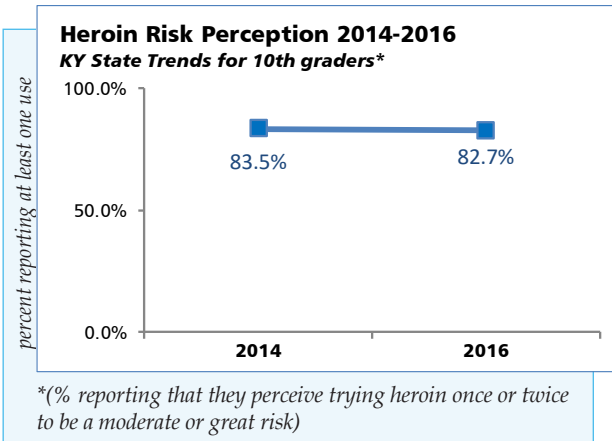


# Grade 10 - Heroin, Risk Perception, 2016

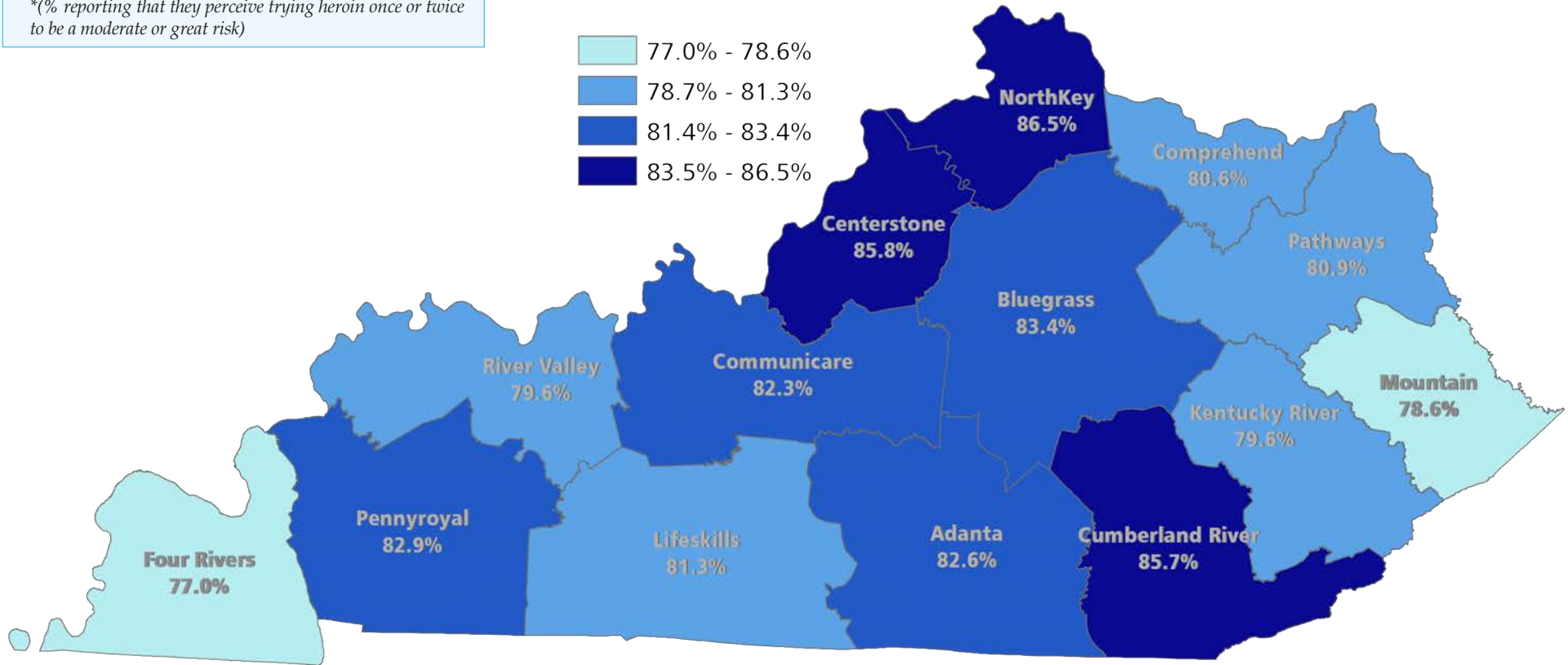
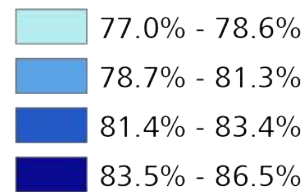
(% responding that they perceive trying heroin once or twice to be a moderate or great risk)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 77.0% (FOUR RIVERS); Max: 86.5% (NORTHKEY)



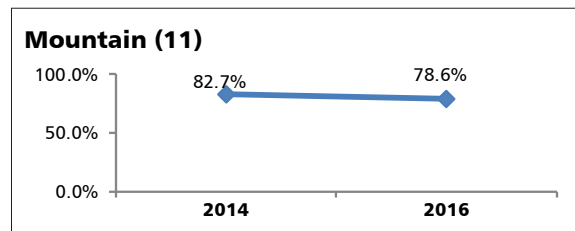
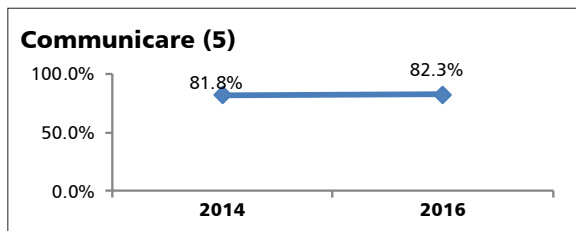
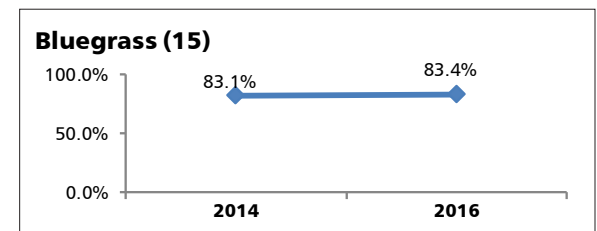
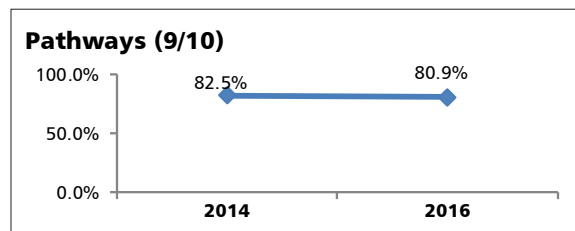
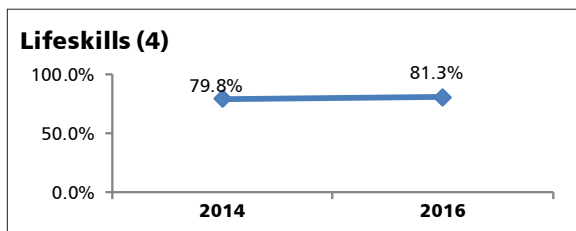
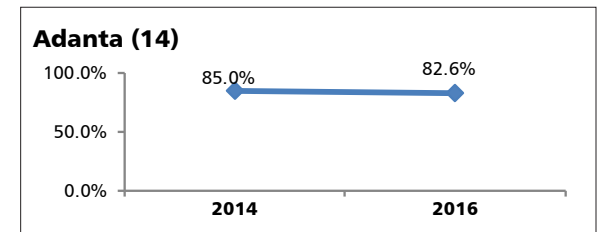
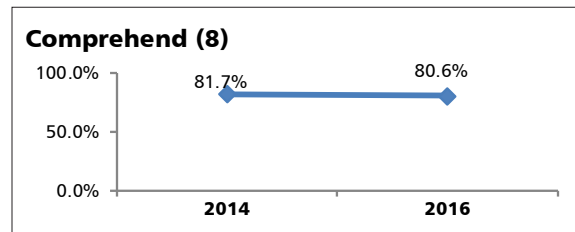
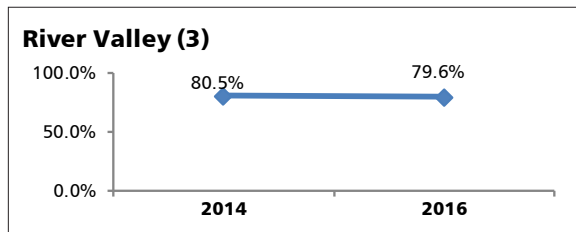
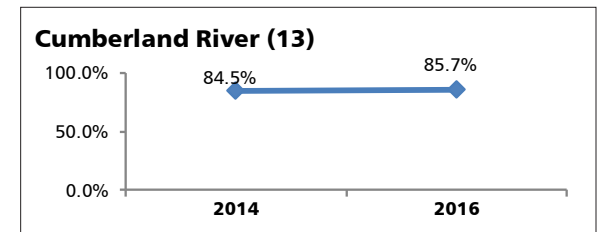
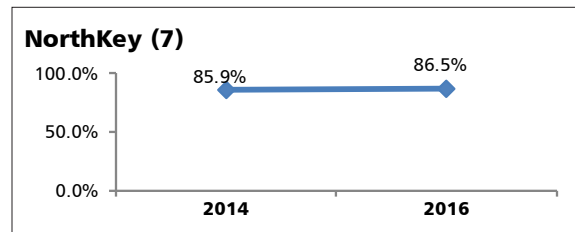
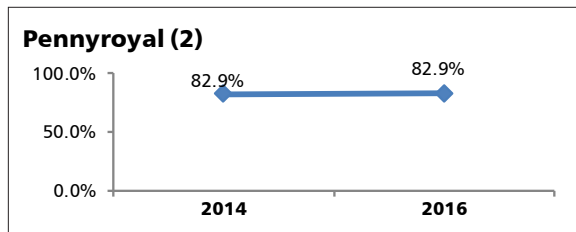
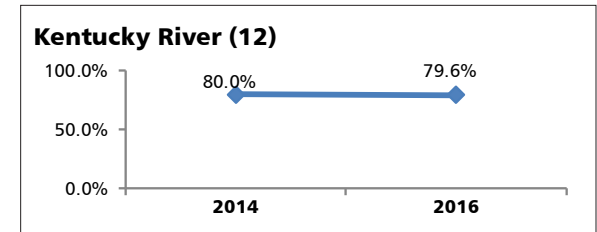
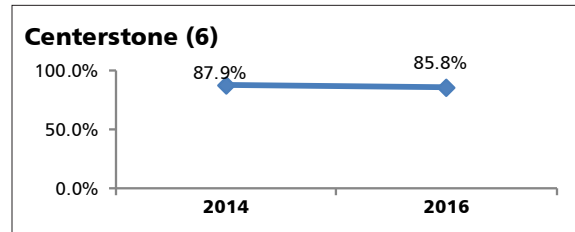
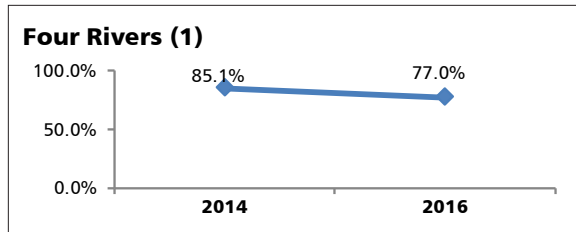
\*(% reporting that they perceive trying heroin once or twice to be a moderate or great risk)



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Regional Trends—**Heroin, Risk Perception** by 10th Graders, 2014-2016  
 (% responding that they perceive trying heroin once or twice to be a moderate or great risk)

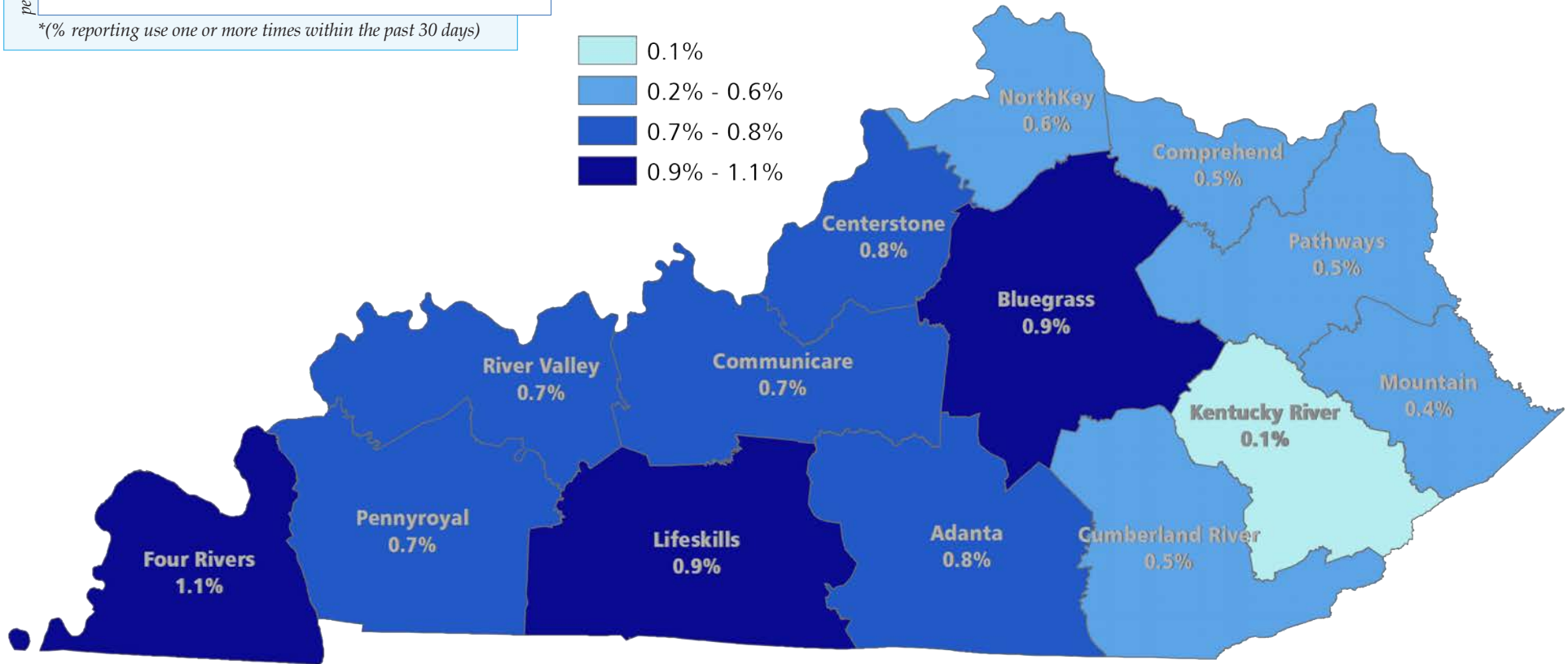
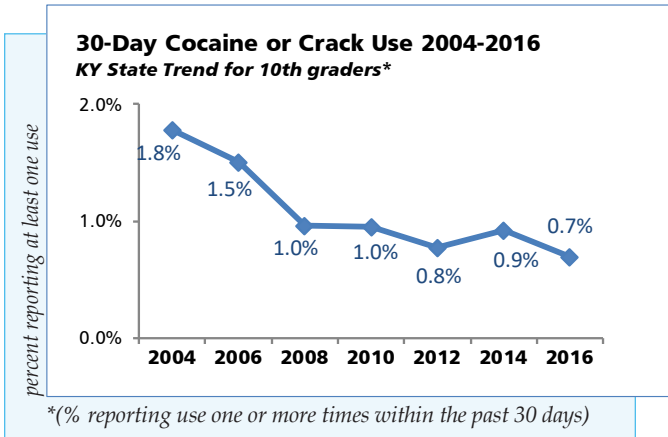


# Grade 10 - Cocaine or Crack, 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 0.1% (KENTUCKY RIVER); Max: 1.1% (FOUR RIVERS)

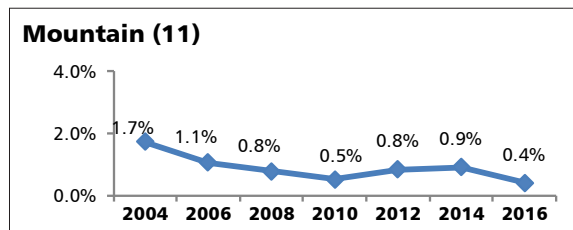
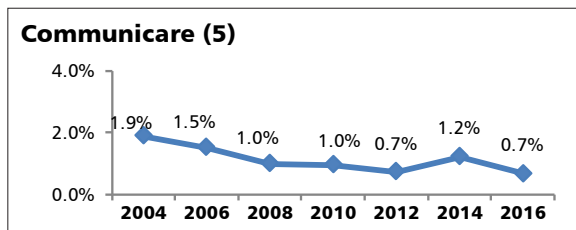
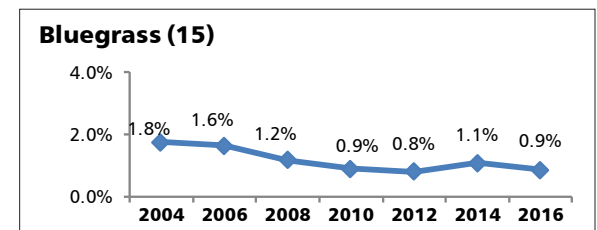
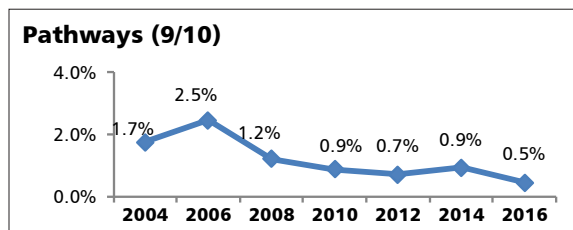
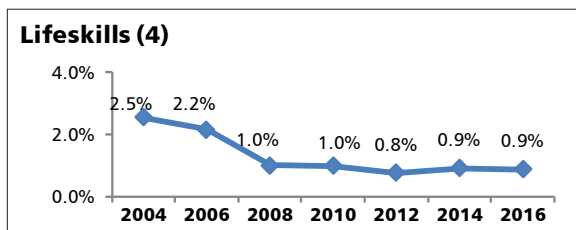
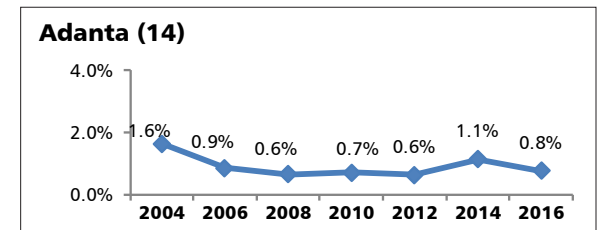
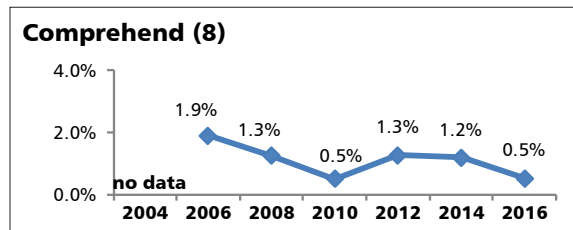
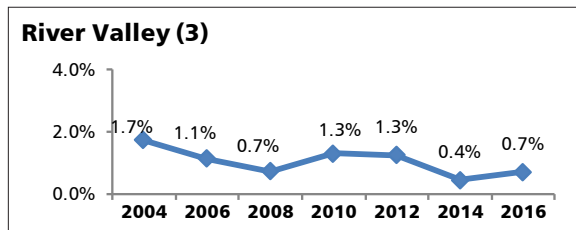
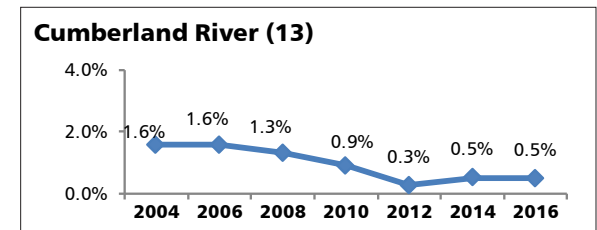
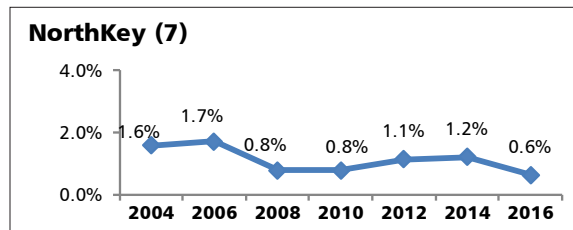
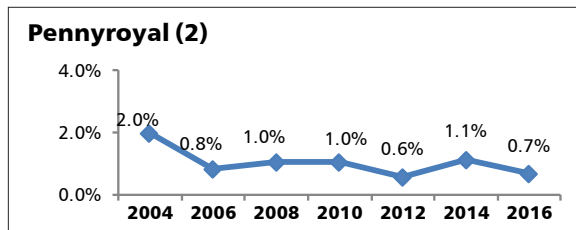
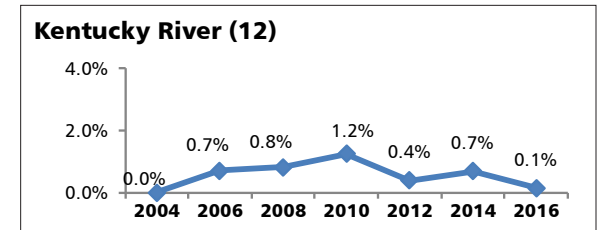
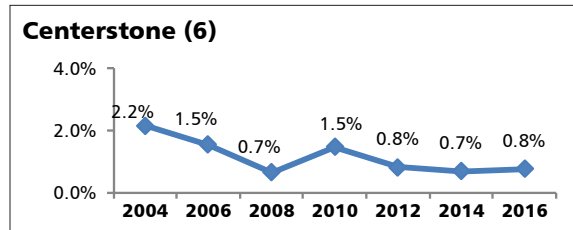
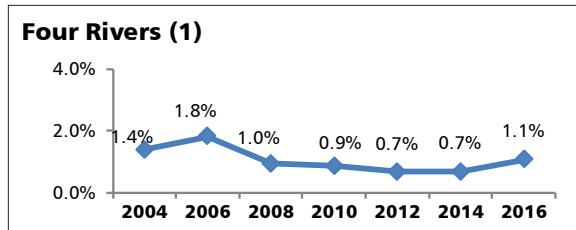


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## Regional Trends—**Cocaine or Crack, 30-Day Use** by 10th Graders, 2004-2016

(% responding that they had used the substance one or more times within the past 30 days)

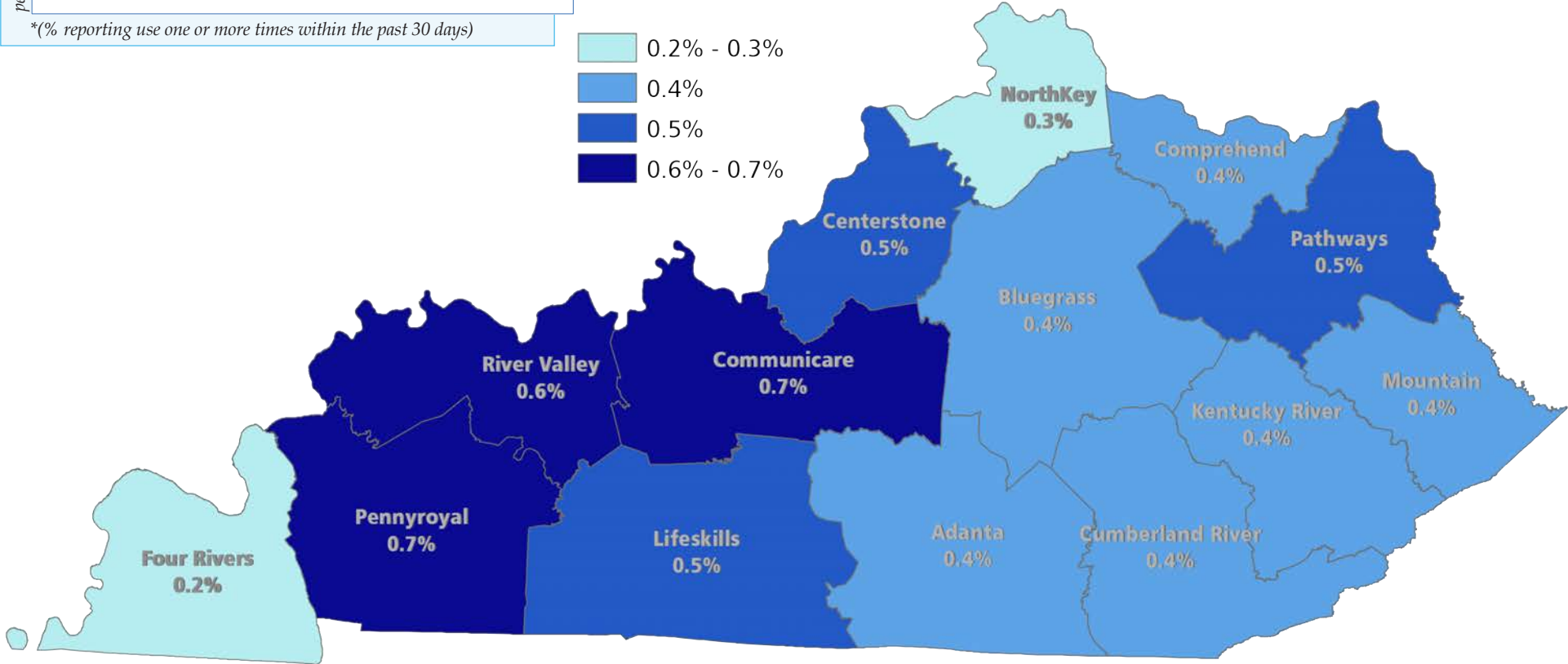
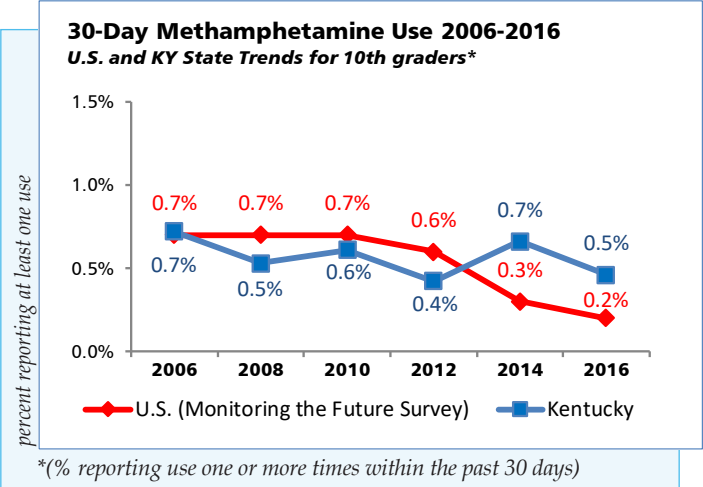


# Grade 10 - Methamphetamines, 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 0.2% (FOUR RIVERS); Max: 0.7% (COMMUNICARE/PENNYROYAL)



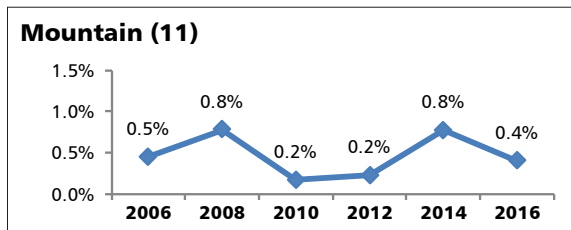
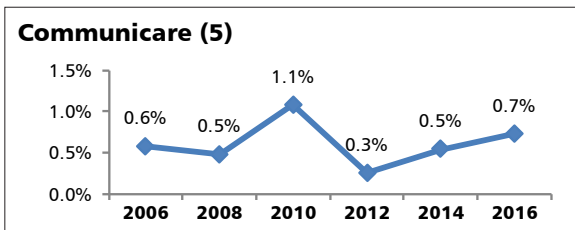
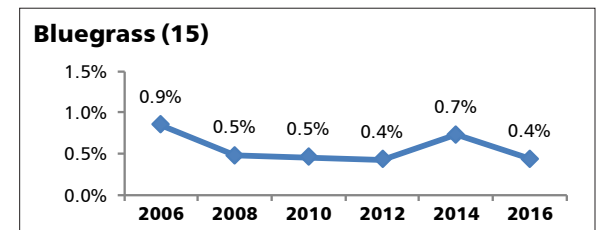
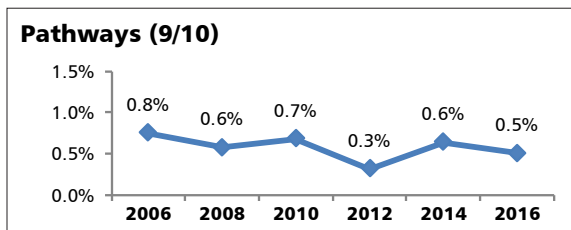
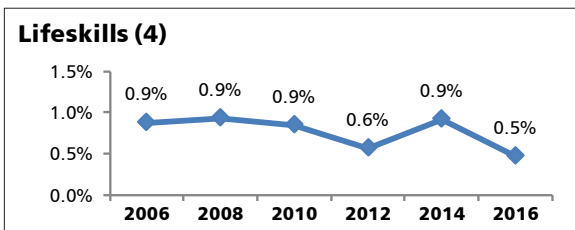
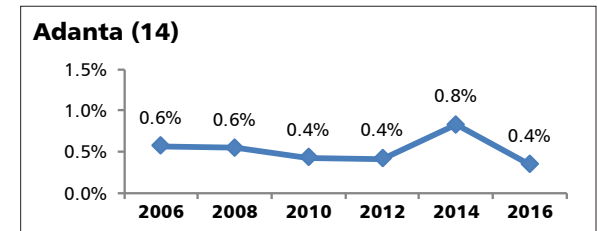
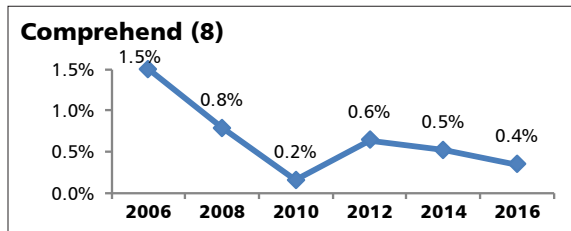
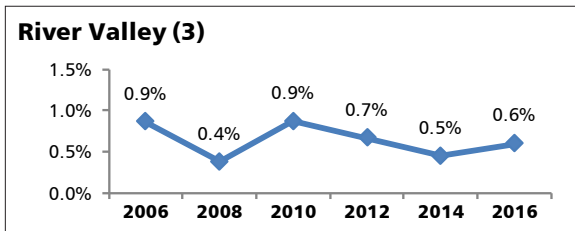
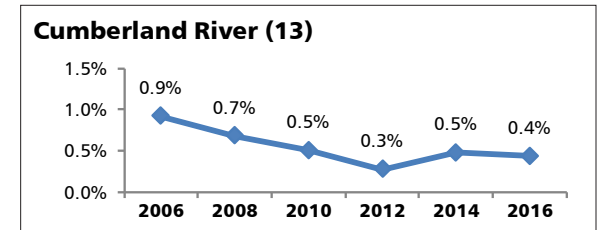
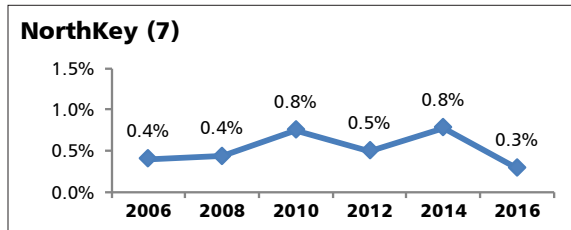
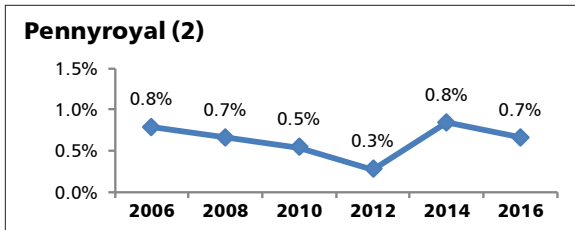
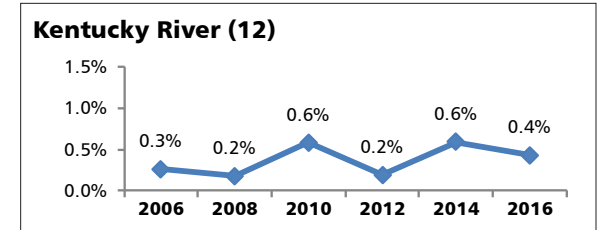
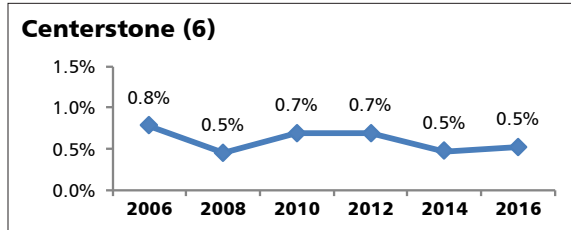
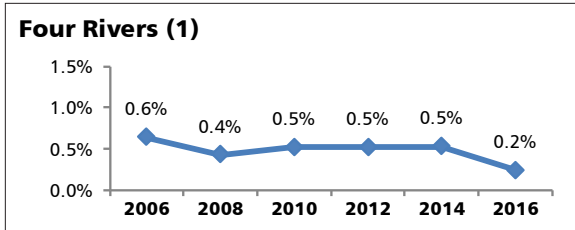
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## Regional Trends—**Methamphetamine, 30-Day Use** by 10th Graders, 2006-2016

(% responding that they had used the substance one or more times within the past 30 days)

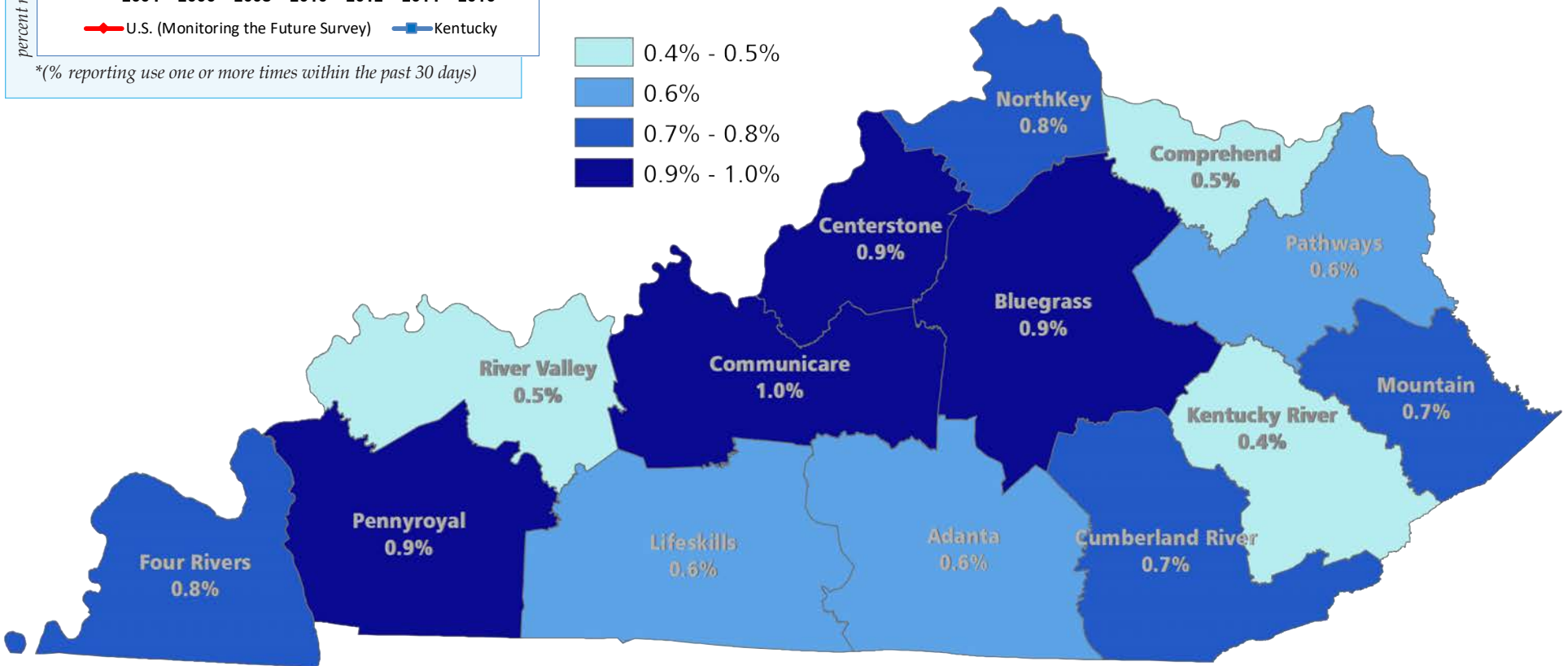
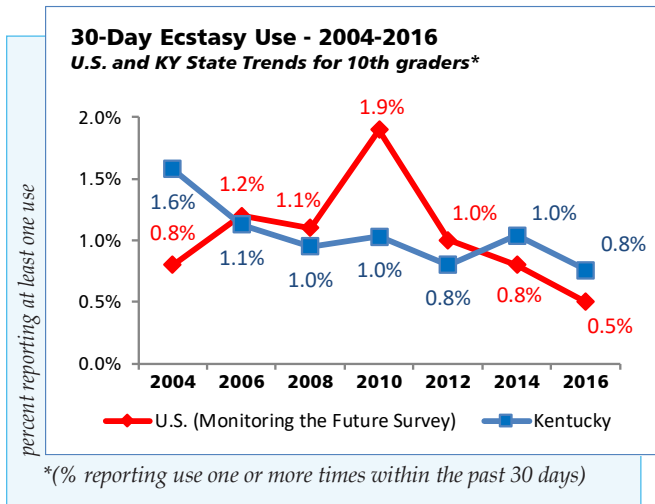


# Grade 10 - Ecstasy, 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 10TH GRADERS, 2016

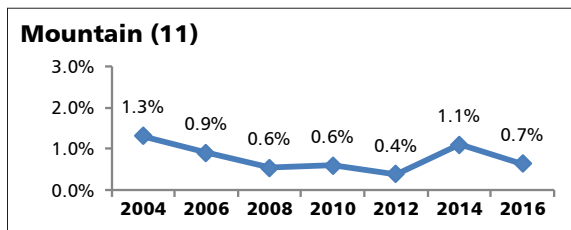
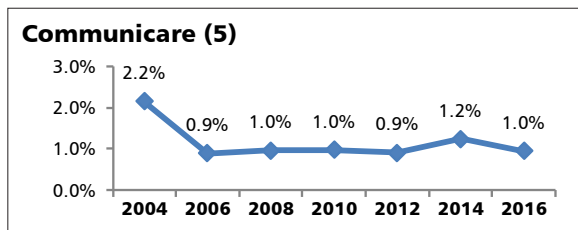
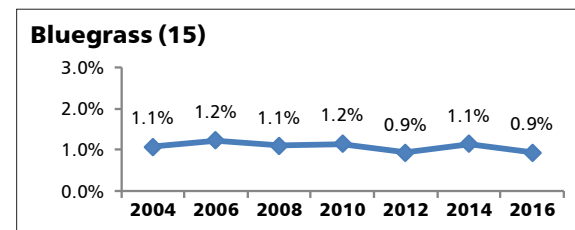
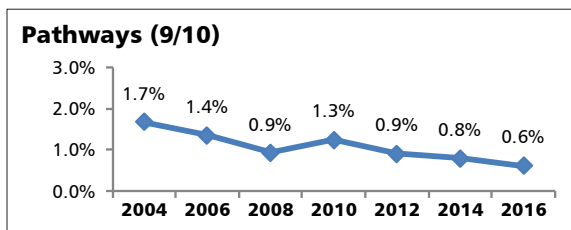
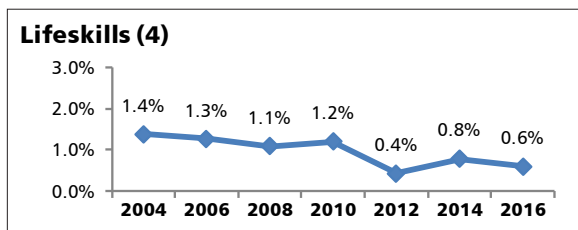
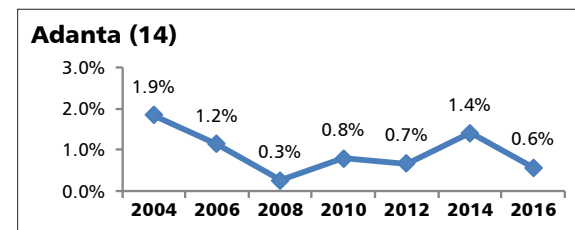
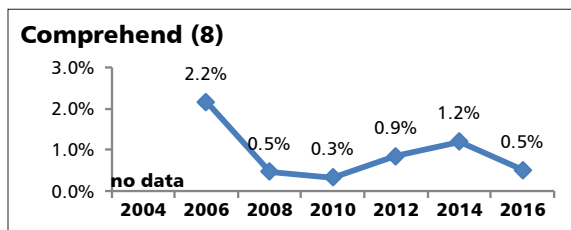
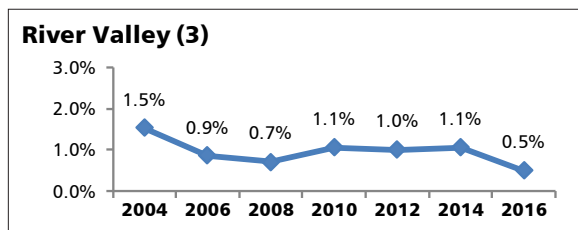
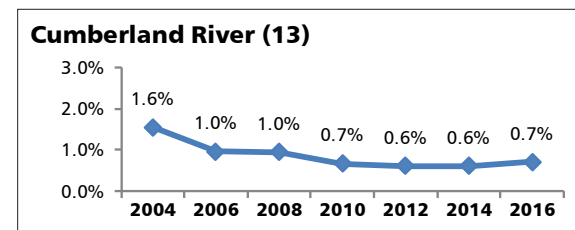
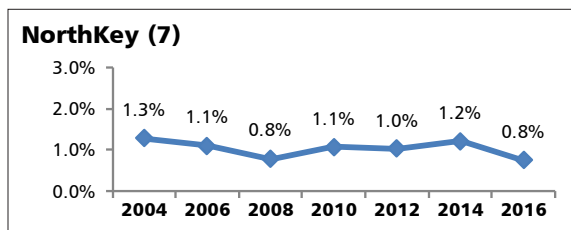
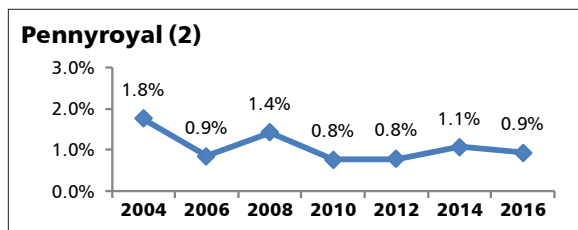
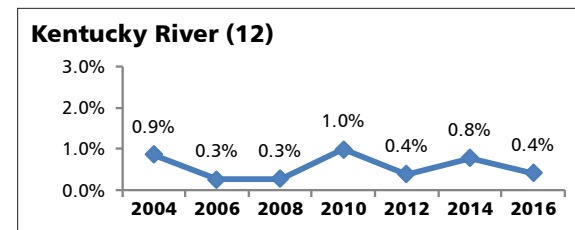
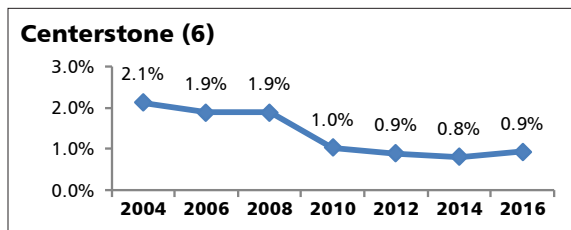
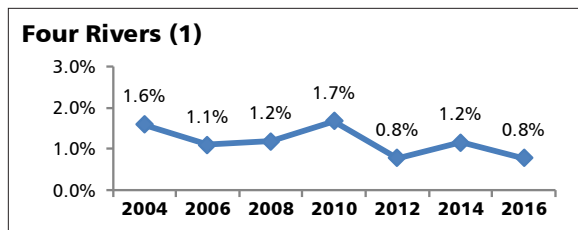
Min: 0.4% (KENTUCKY RIVER); Max: 1.0% (COMMUNICARE)



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## Regional Trends—**Ecstasy 30-Day Use** by 10th Graders, 2004-2016 (% responding that they had used the substance one or more times within the past 30 days)

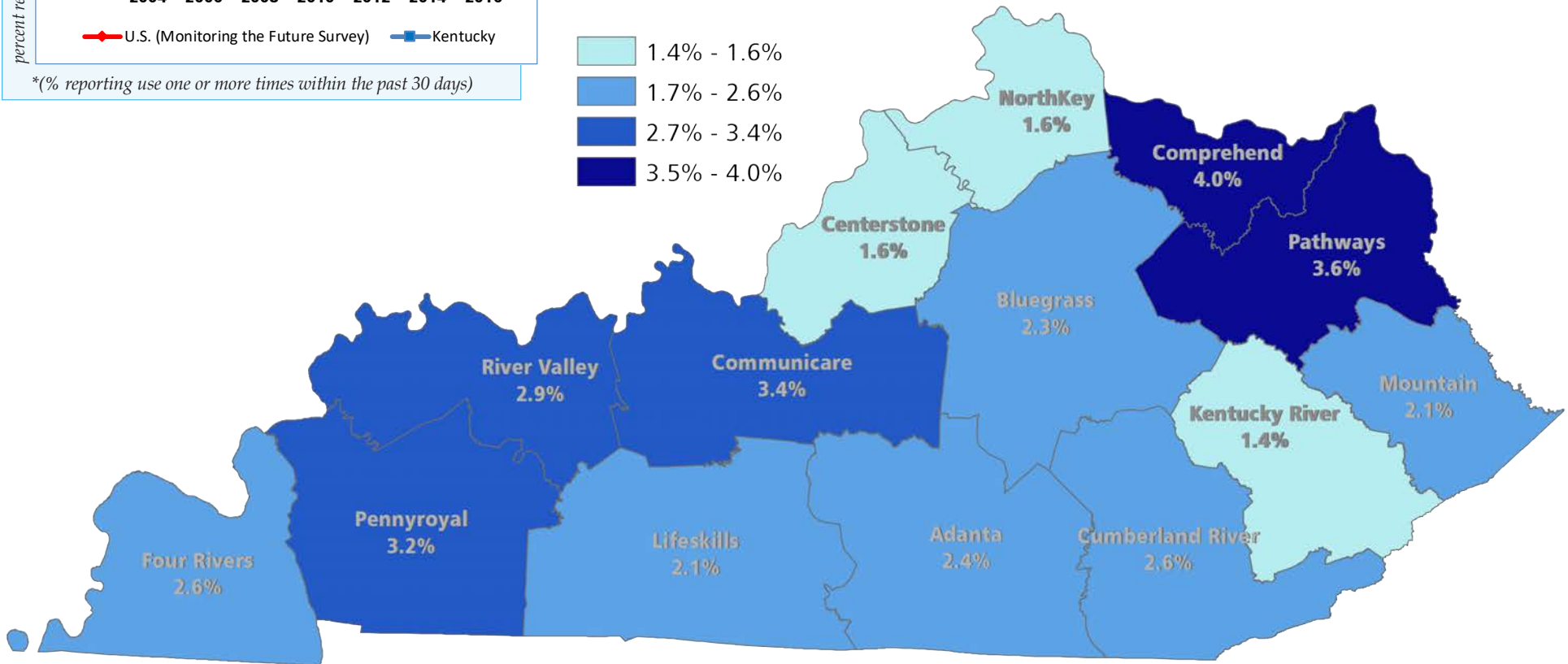
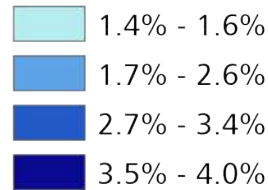
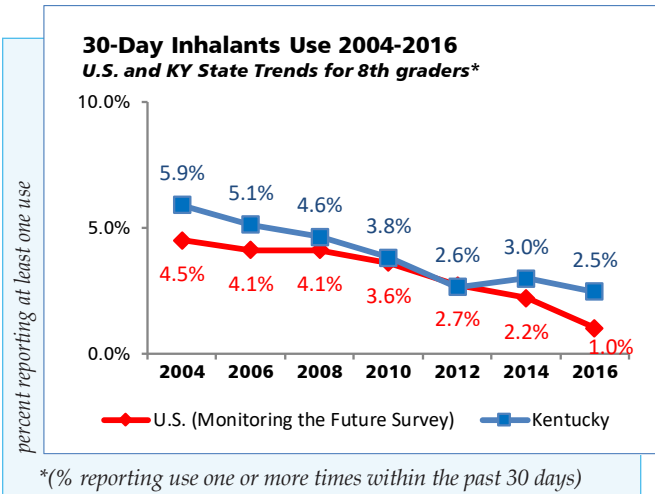


# Grade 8 - Inhalants, 30-Day Use, 2016

(% responding that they had used the substance one or more times within the past 30 days)

## PERCENTAGE OF 8TH GRADERS, 2016

Min: 1.4% (KENTUCKY RIVER); Max: 4.0% (COMPREHEND)

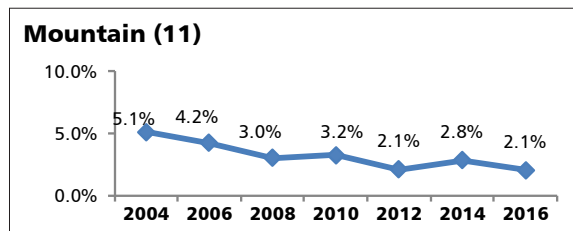
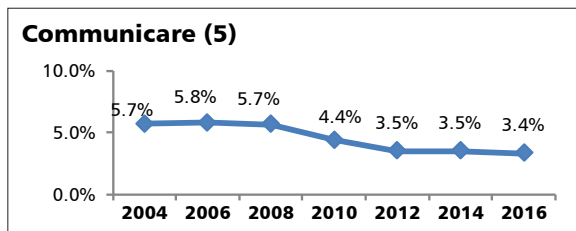
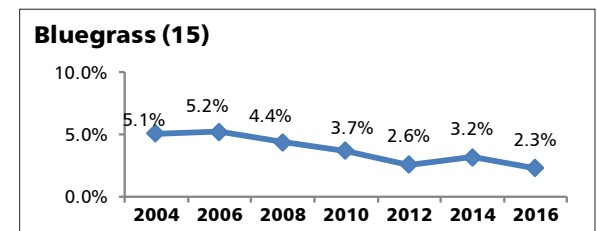
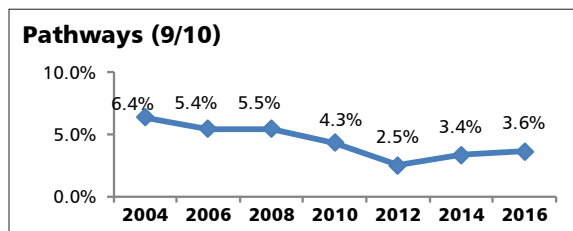
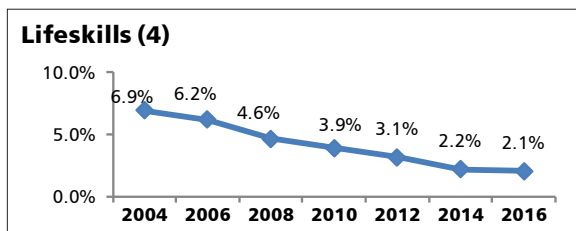
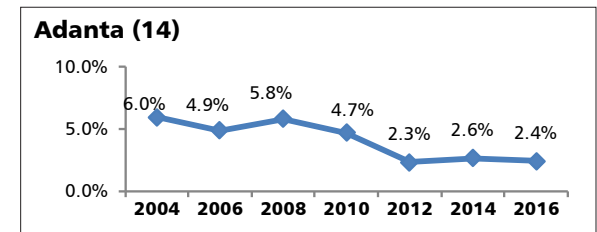
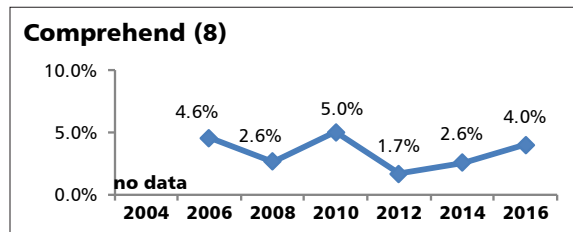
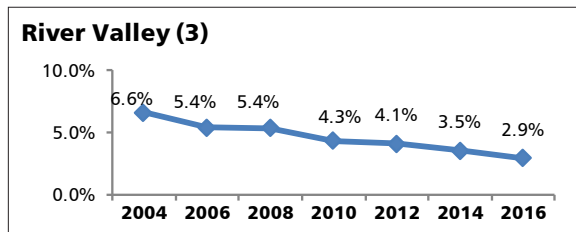
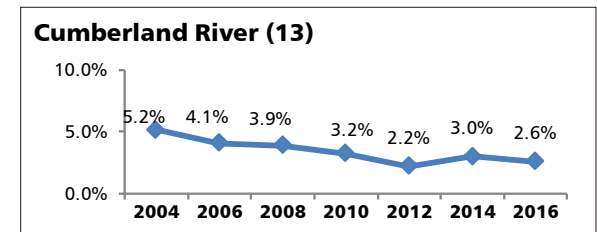
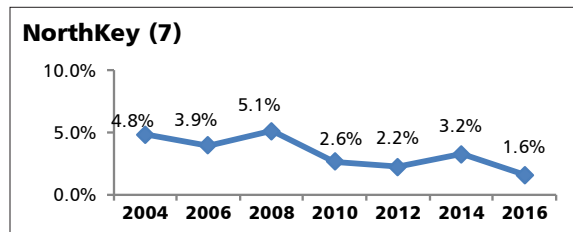
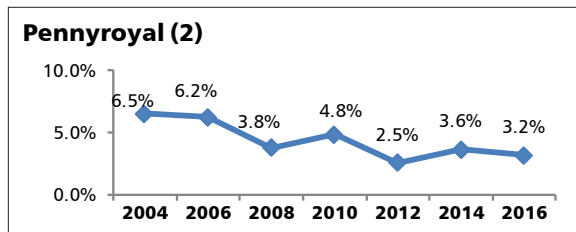
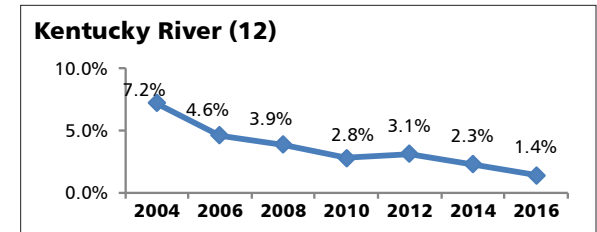
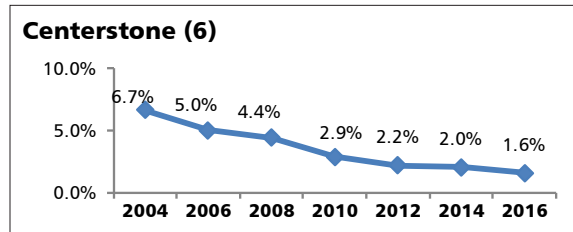
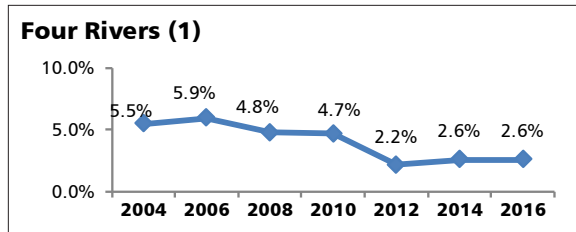


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## Regional Trends—**Inhalants, 30-Day Use** by 8th Graders, 2004-2016

(% responding that they had used the substance one or more times within the past 30 days)

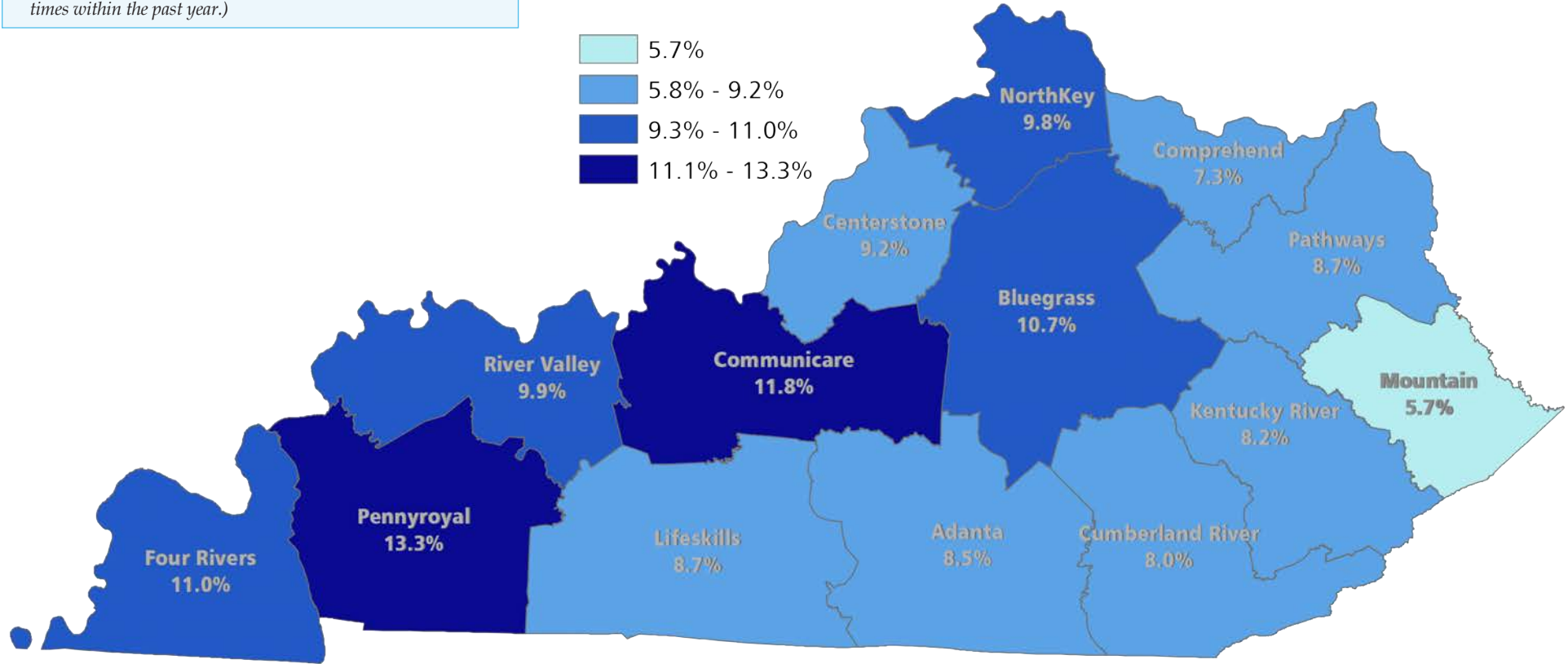
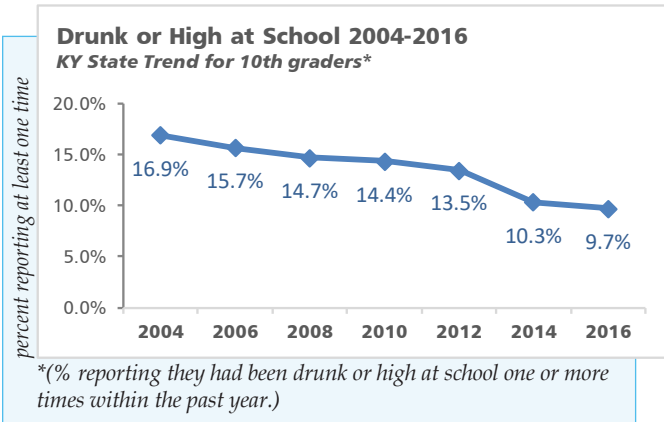


# Grade 10 - Drunk or High at School, 2016

(% responding that they had been drunk or high at school at least one time within the past year)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 5.7% (MOUNTAIN); Max: 13.3% (PENNYROYAL)

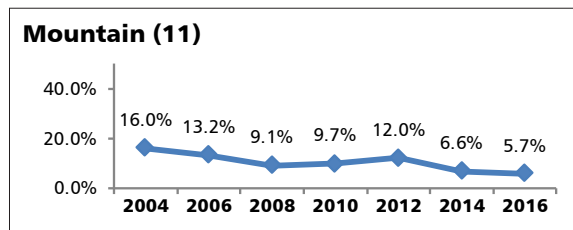
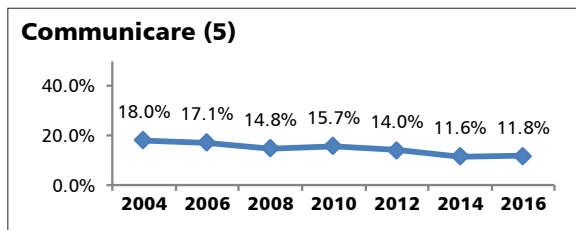
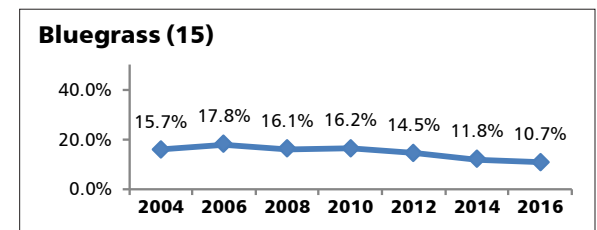
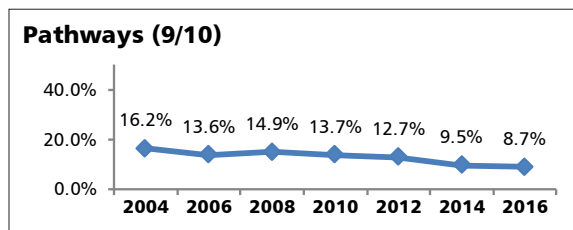
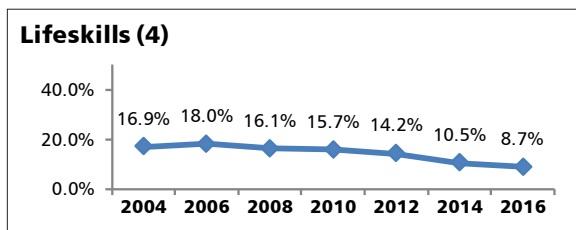
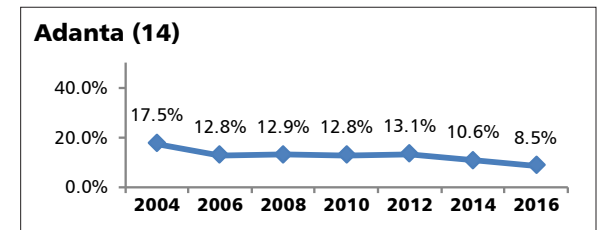
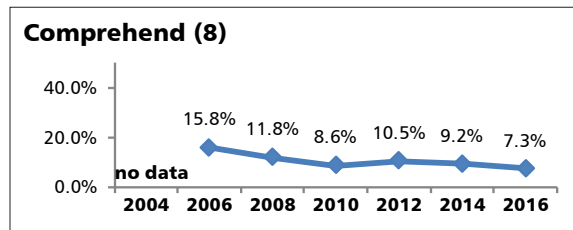
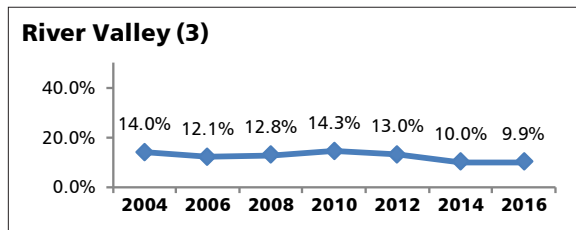
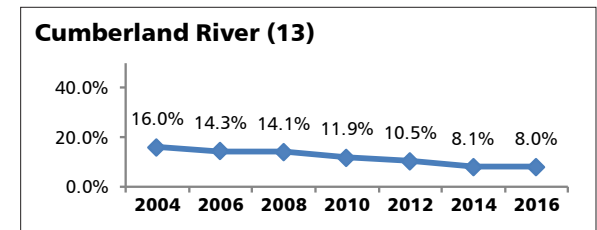
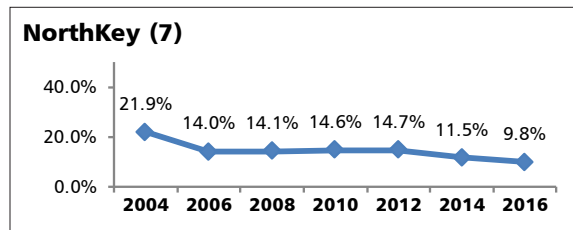
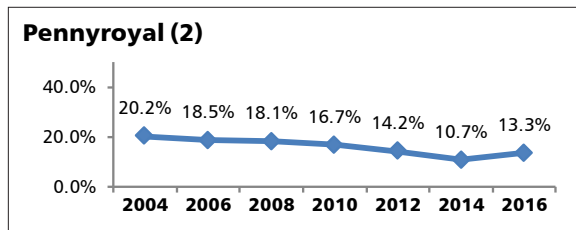
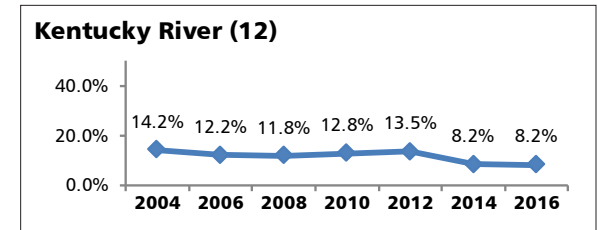
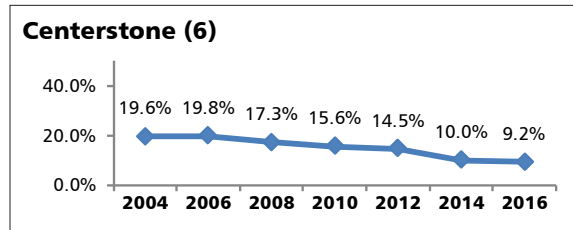
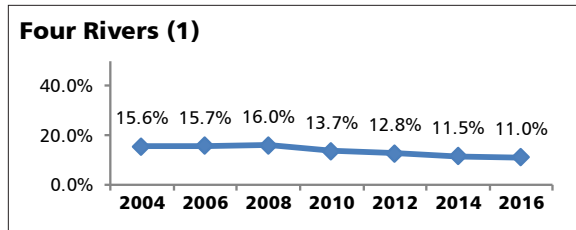


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## Regional Trends—**Drunk or High at School**, by 10th Graders, 2004-2016

(% responding that they had been drunk or high at school at least one time within the past year)

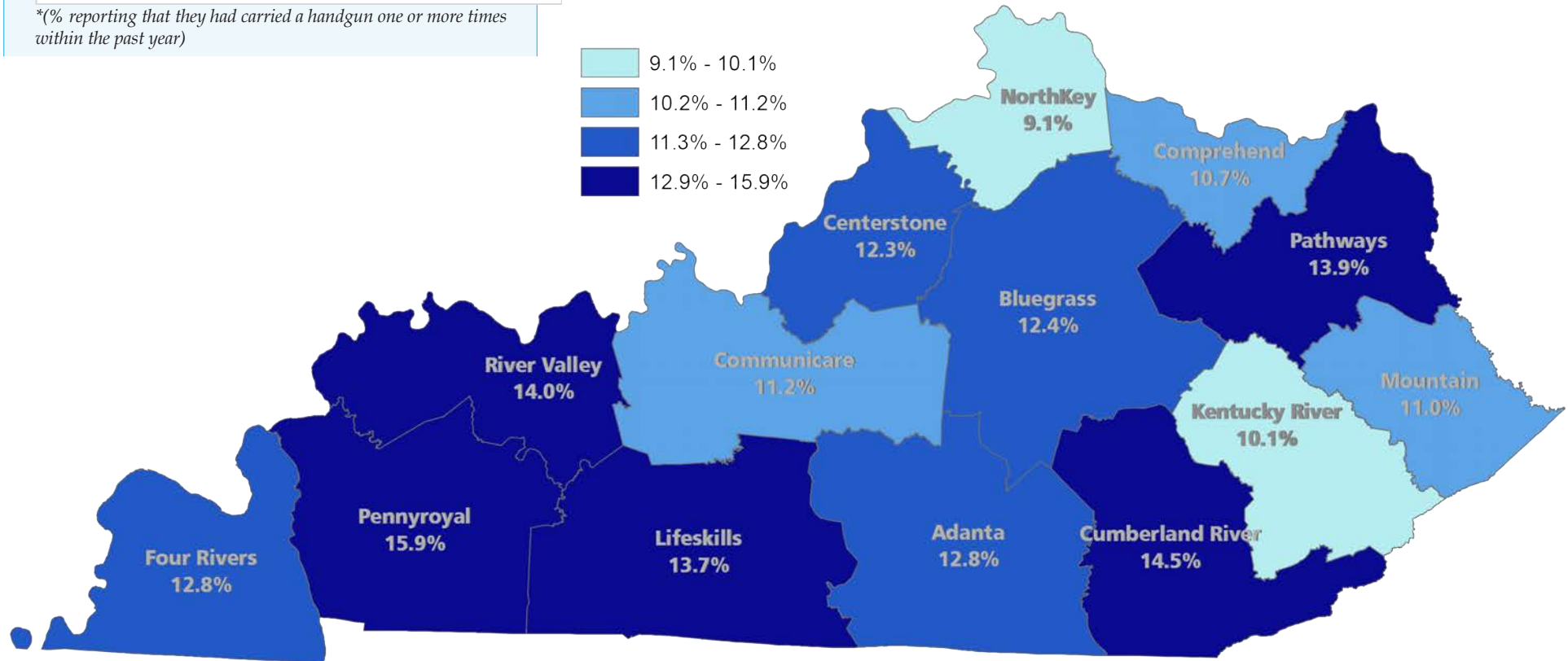
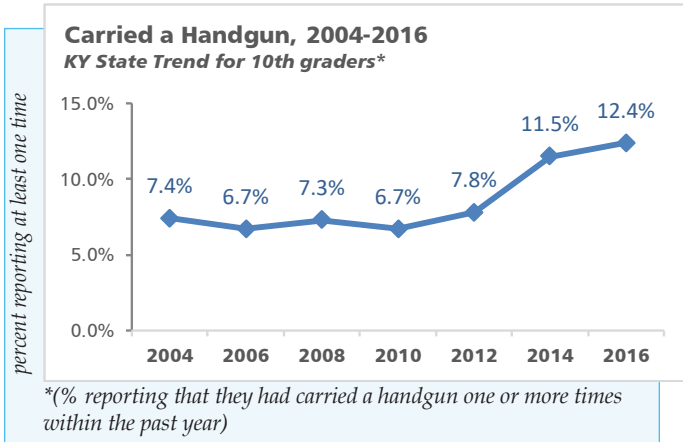


# Grade 10 - Carried a Handgun, 2016

(% responding that they had carried a handgun at least one time within the past year)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 9.1% (NORTHKEY); Max: 15.9% (PENNYROYAL)



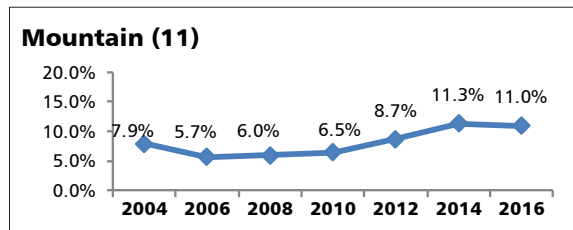
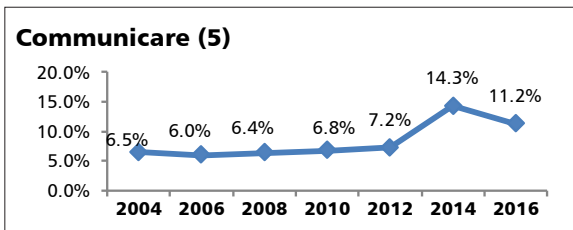
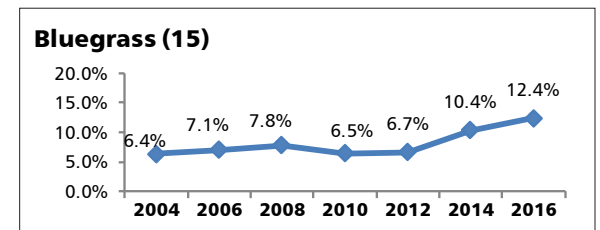
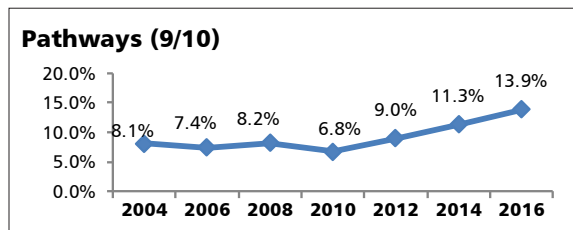
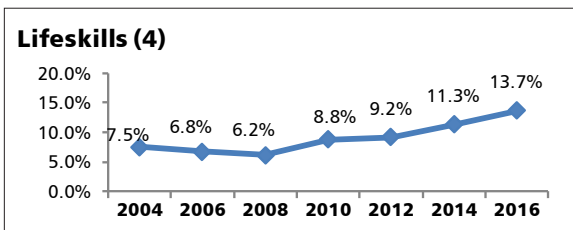
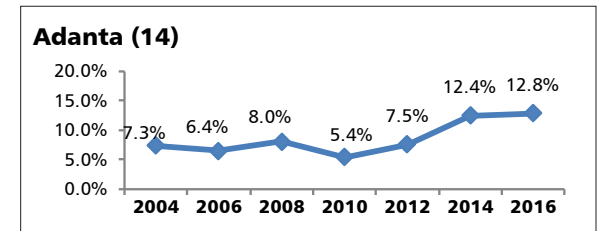
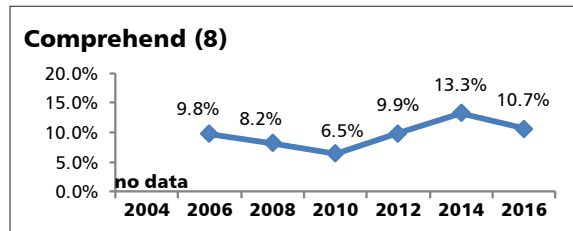
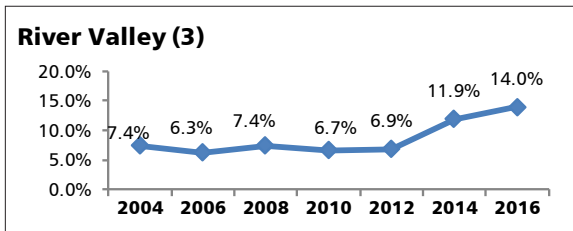
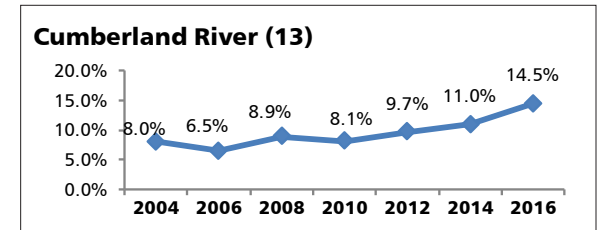
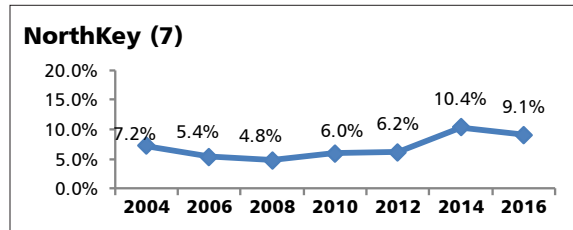
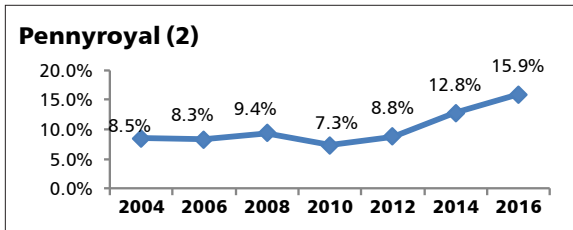
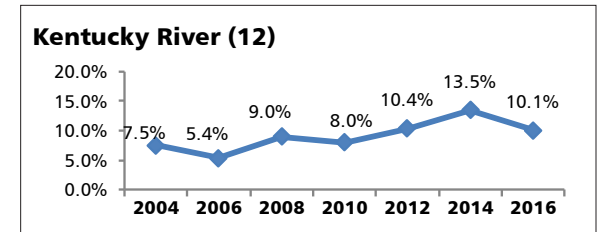
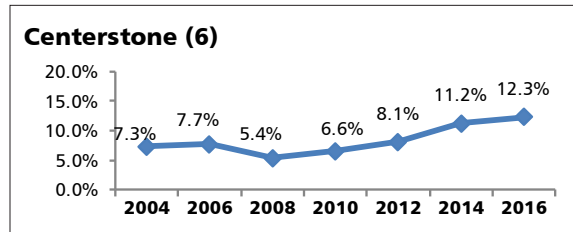
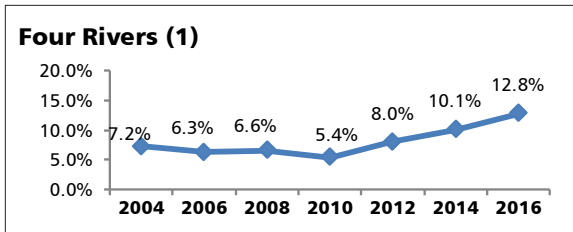
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## Regional Trends—**Carried a Handgun**, by 10th Graders, 2004-2016

(% responding that they had carried a handgun at least one time within the past year)

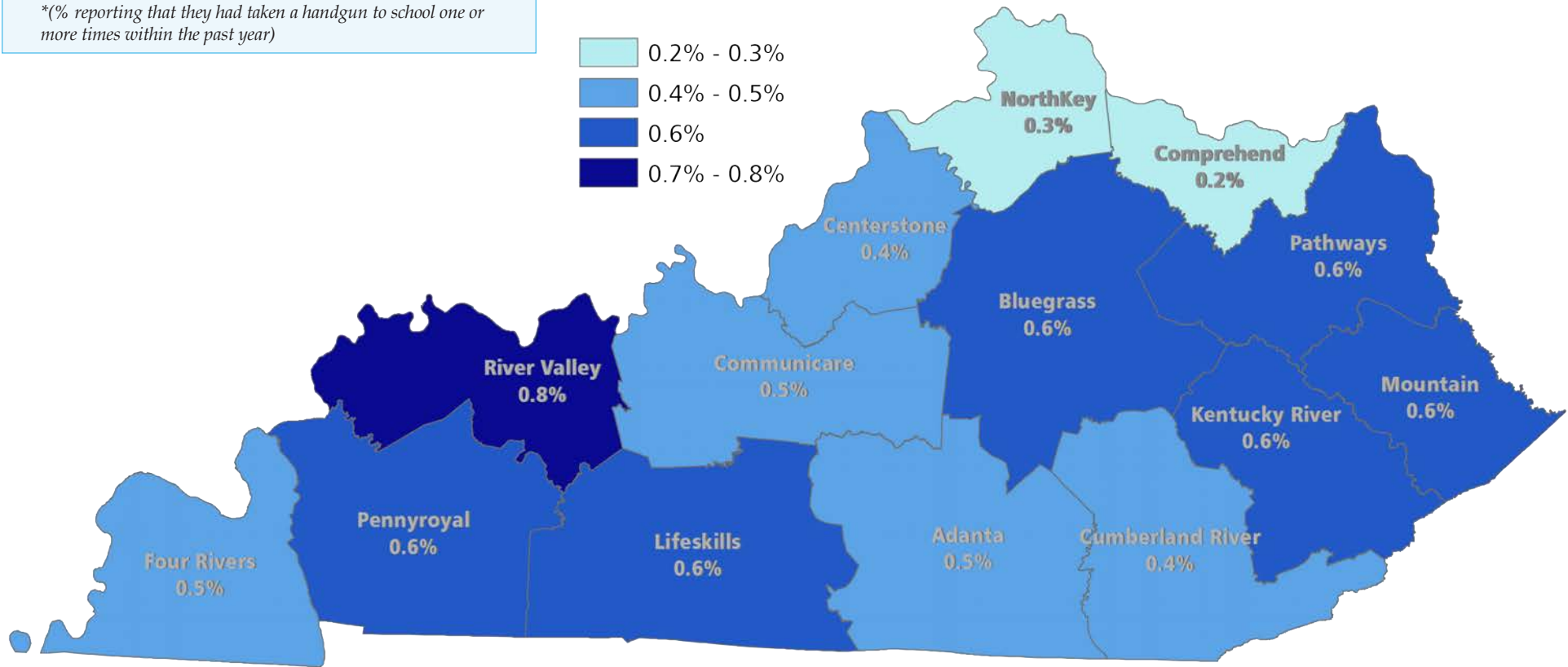
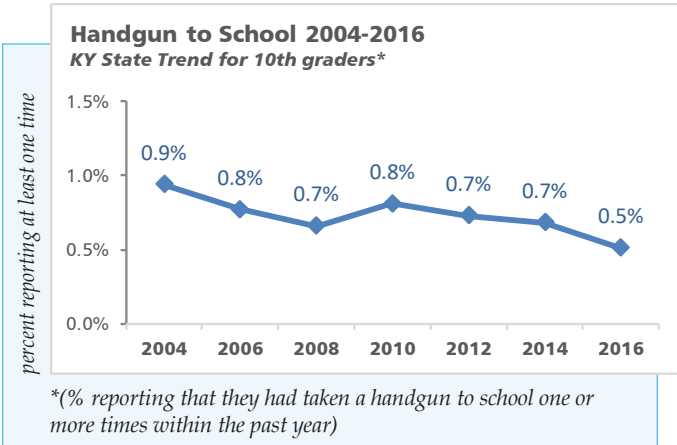


# Grade 10 - Handgun to School, 2016

(% responding that they had taken a handgun to school at least one time within the past year)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: .2% (COMPREHEND); Max: .8% (RIVER VALLEY)

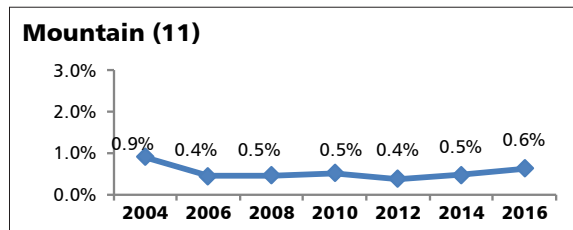
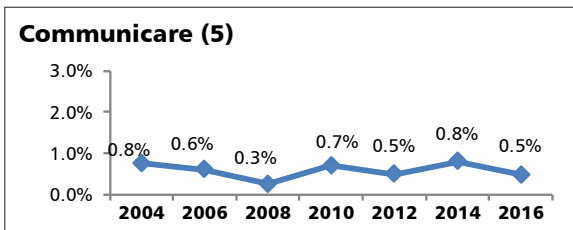
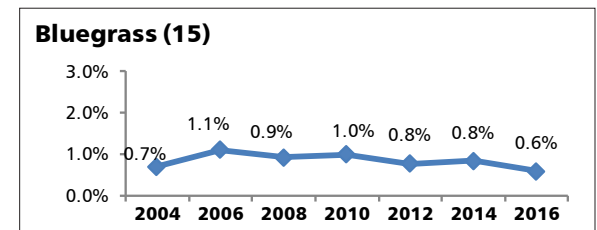
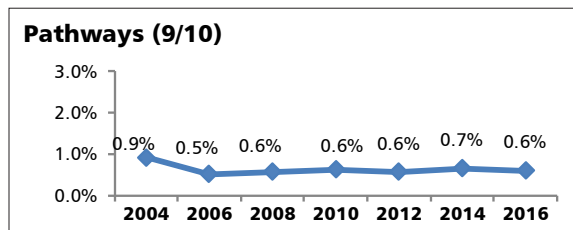
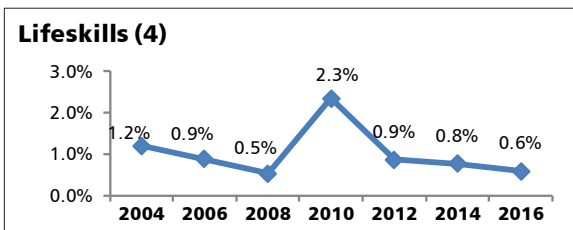
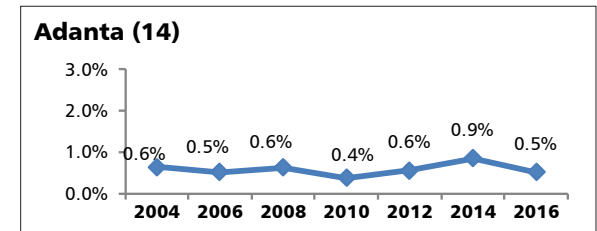
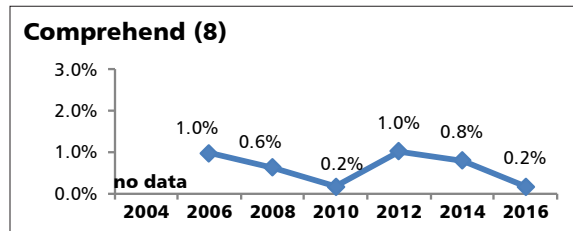
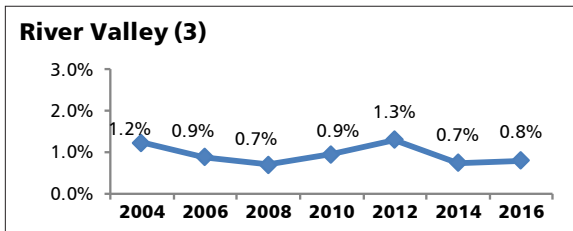
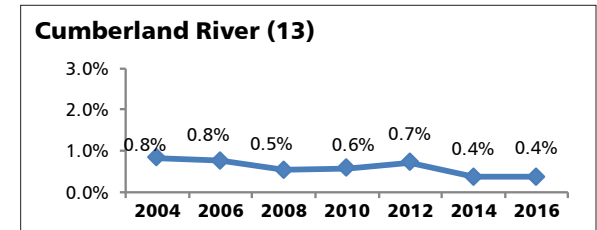
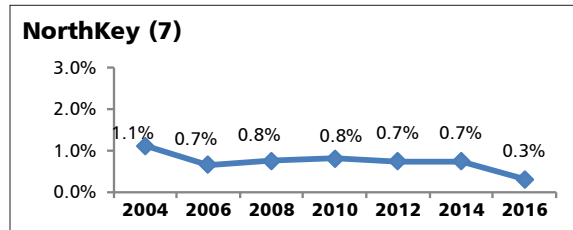
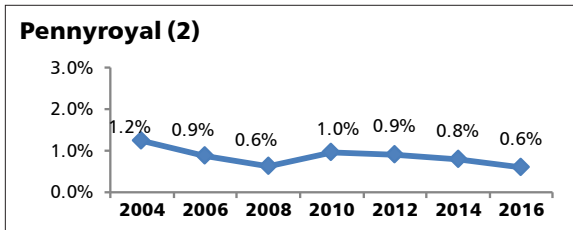
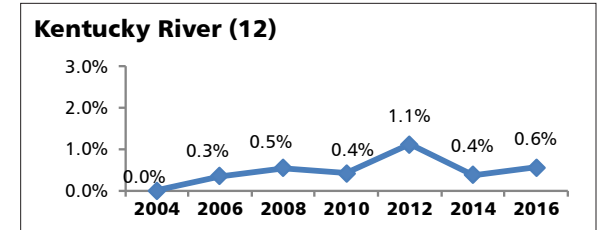
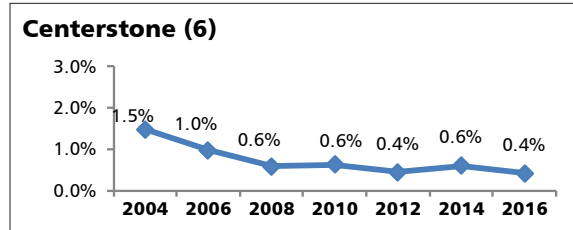
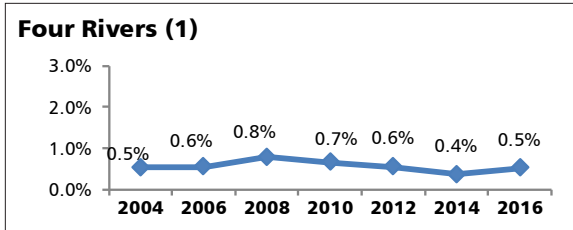


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## Regional Trends—**Handgun to School**, by 10th Graders, 2004-2016

(% responding that they had taken a handgun to school at least one time within the past year)

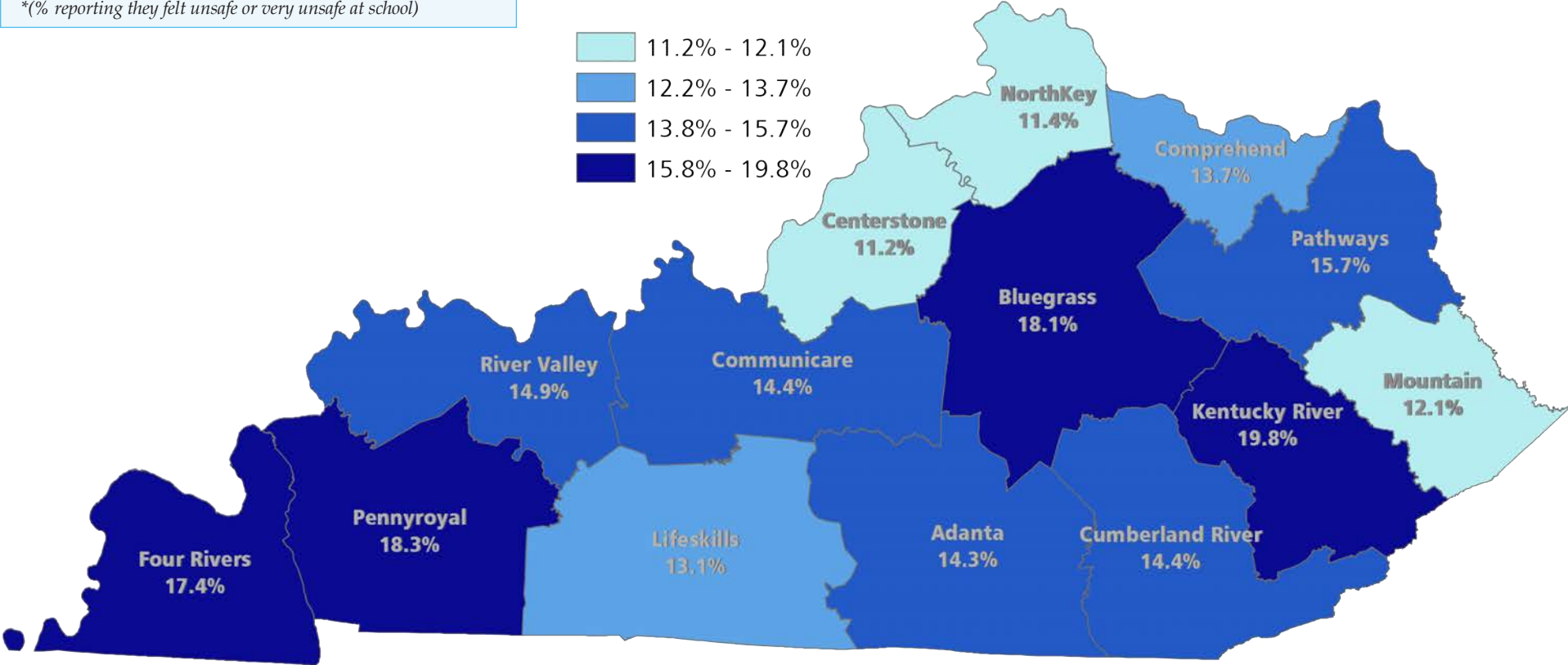
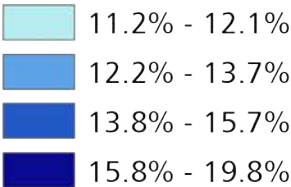
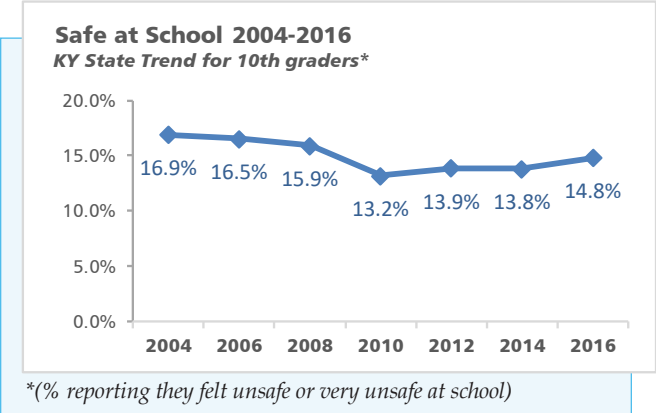


# Grade 10 - Safe at School, 2016

(% responding that they felt unsafe or very unsafe at school)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 11.2% (CENTERSTONE); Max: 19.8% (KENTUCKY RIVER)

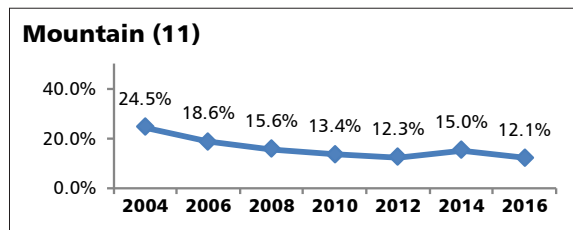
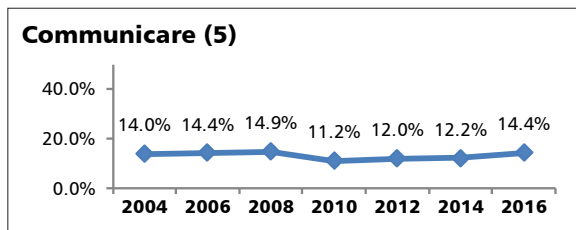
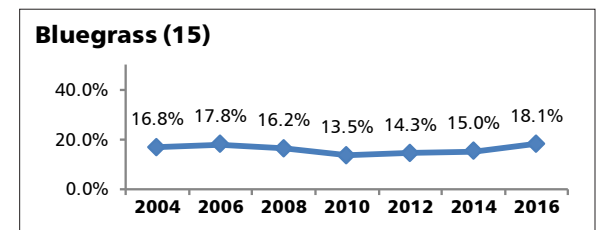
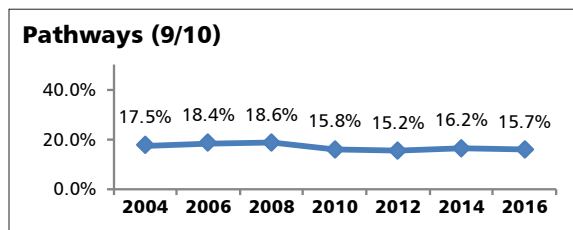
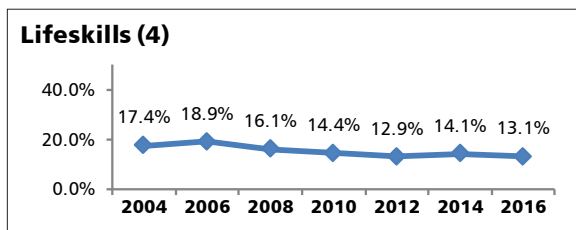
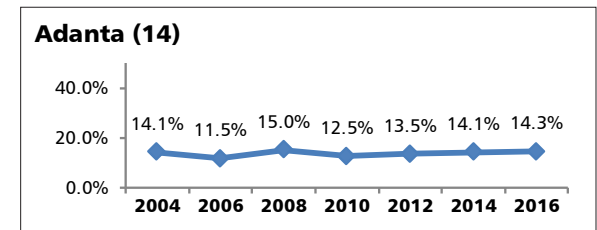
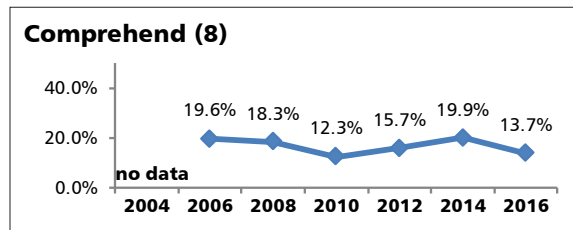
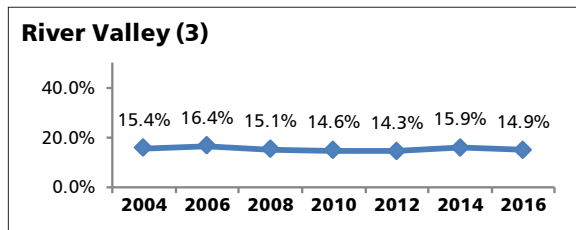
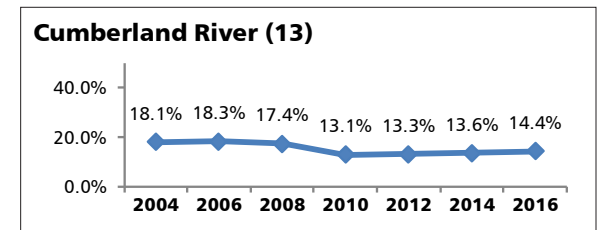
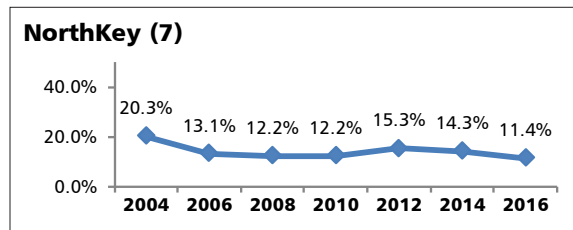
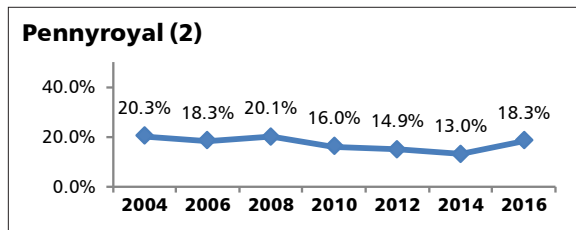
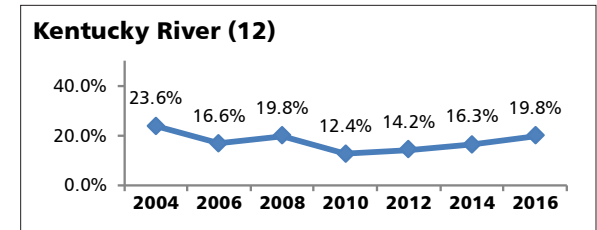
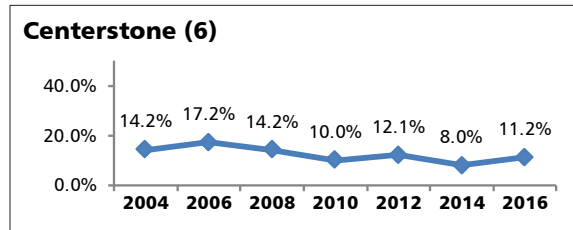
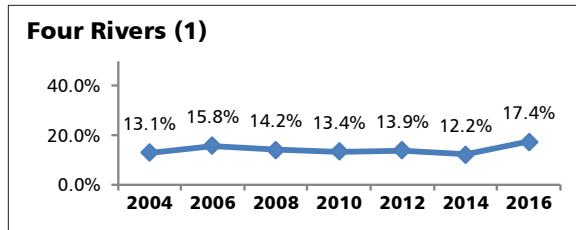


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## Regional Trends—**Safe at School**, by 10th Graders, 2004-2016

(% responding that they felt unsafe or very unsafe at school)

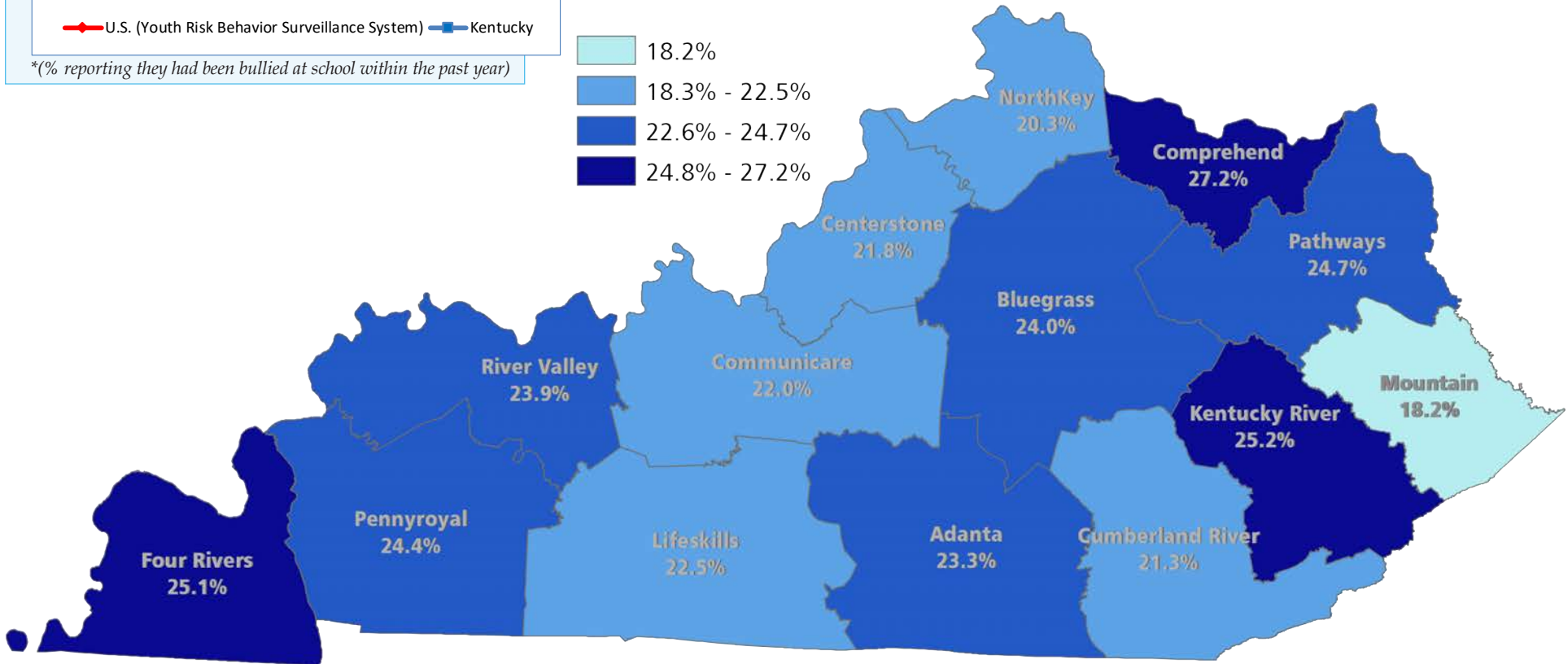
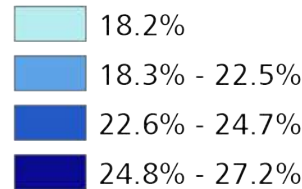
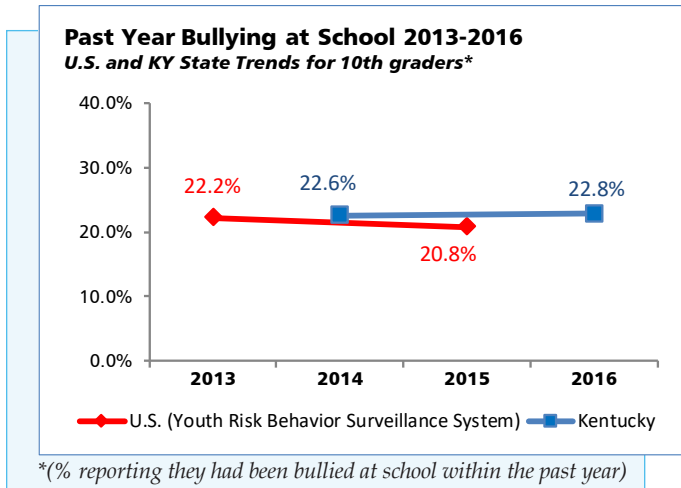


# Grade 10 - Bullying at School, 2016

(% responding that they had been bullied on school property within the past year)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 18.2% (MOUNTAIN); Max: 27.2% (COMPREHEND)

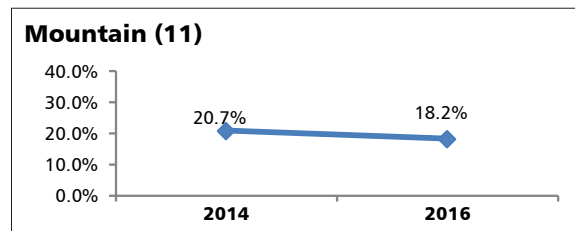
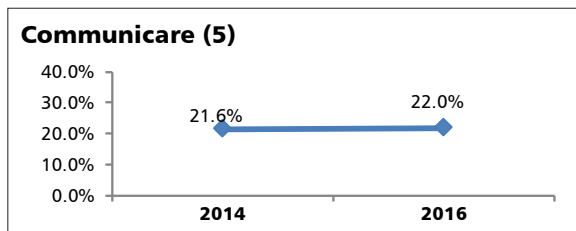
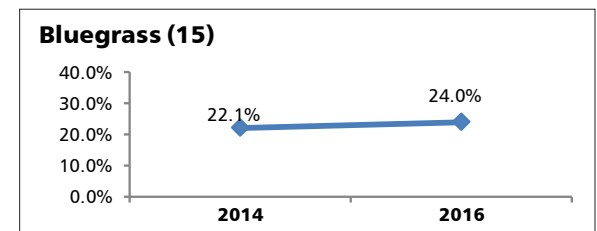
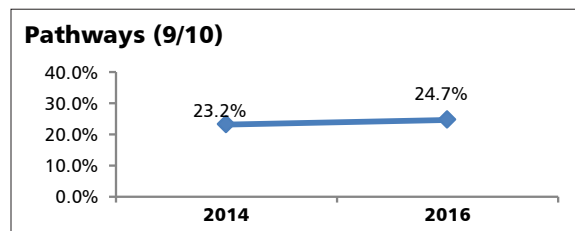
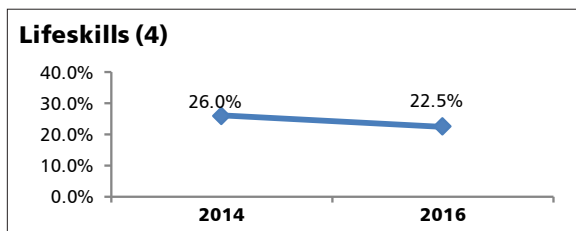
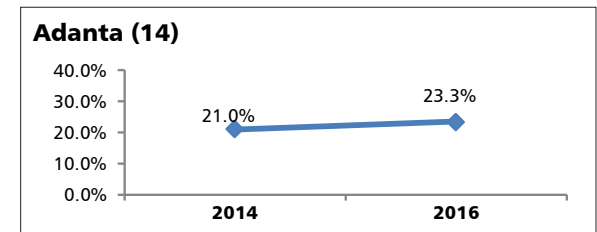
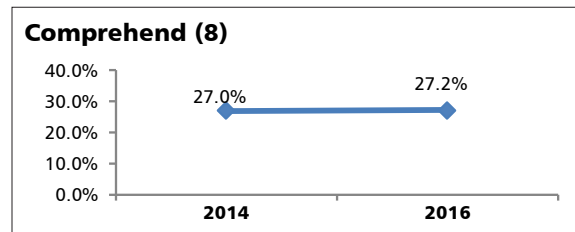
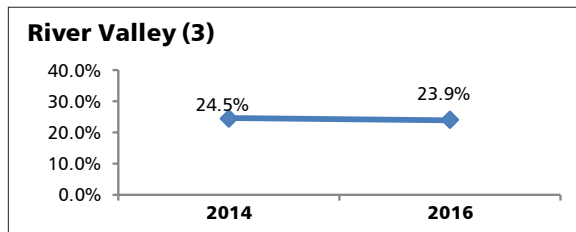
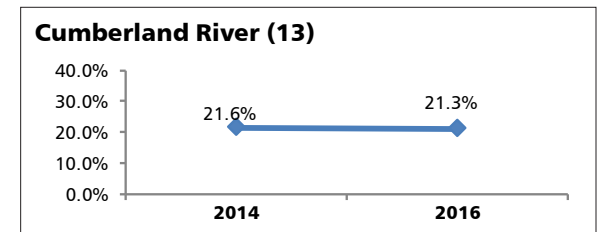
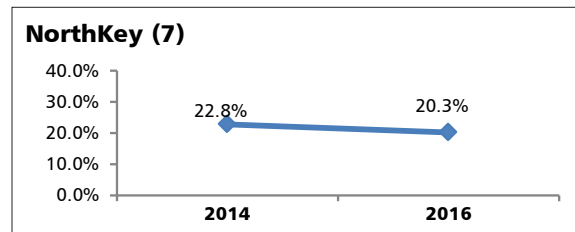
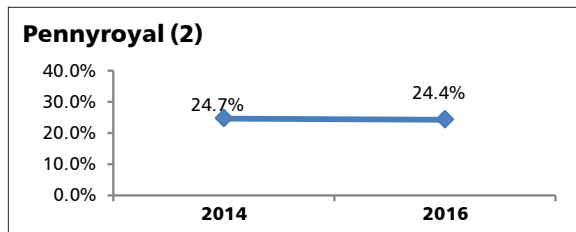
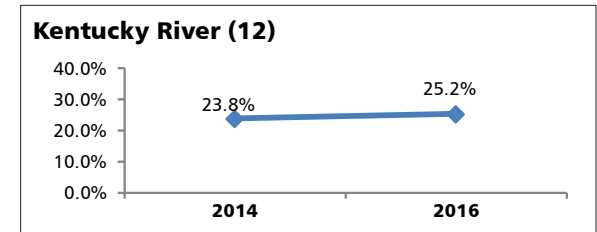
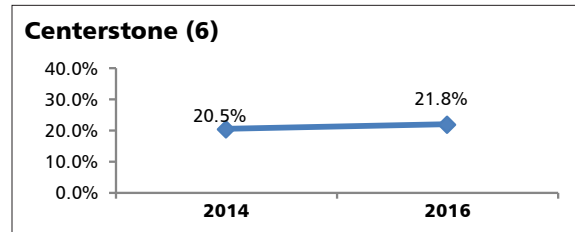
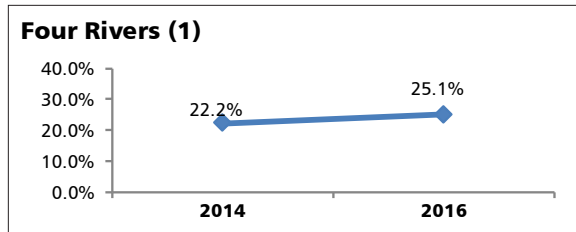


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## Regional Trends—**Bullying at School** by 10th Graders, 2014-2016

(% responding that they had been bullied on school property within the past year)



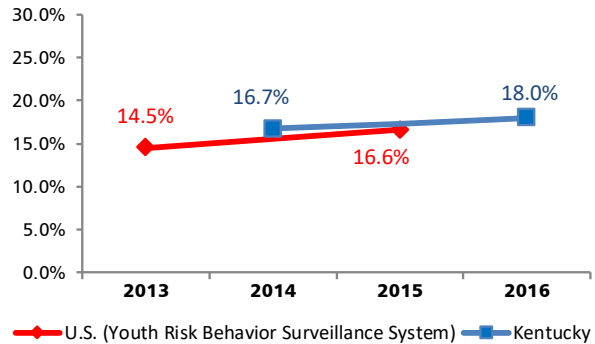
# Grade 10 - Cyberbullying, 2016

(% responding that they had been electronically bullied within the past year, including bullying through email, chat rooms, instant messaging, websites, social networks, or texting)

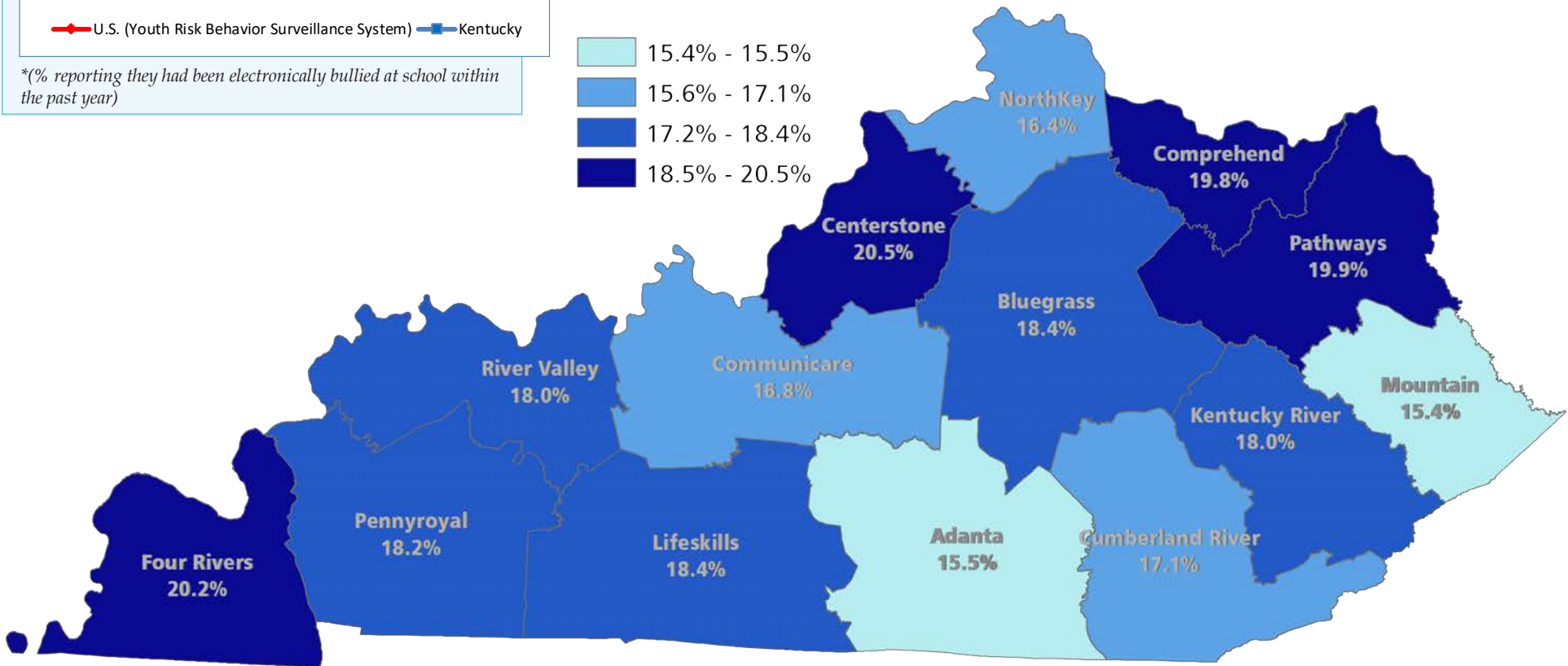
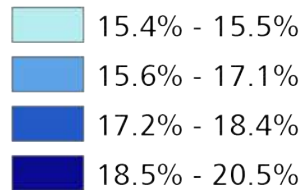
## PERCENTAGE OF 10TH GRADERS, 2016

Min: 15.4% (MOUNTAIN); Max: 20.5% (CENTERSTONE)

**Past Year Cyberbullying at School 2013-2016**  
U.S. and KY State Trends for 10th graders\*



\*(% reporting they had been electronically bullied at school within the past year)

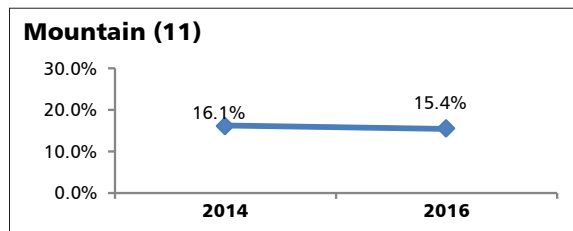
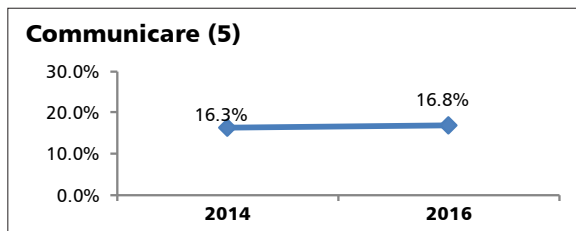
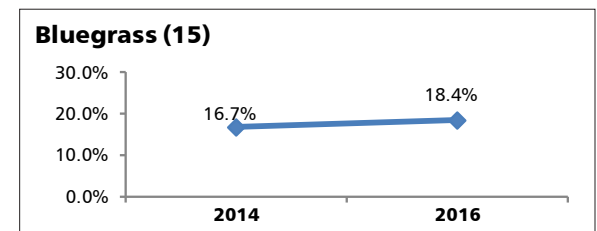
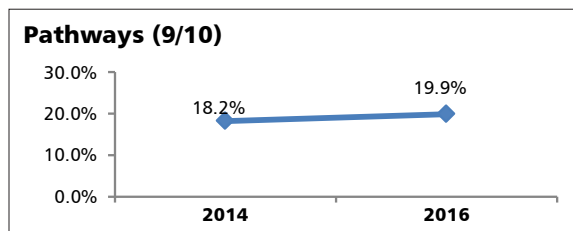
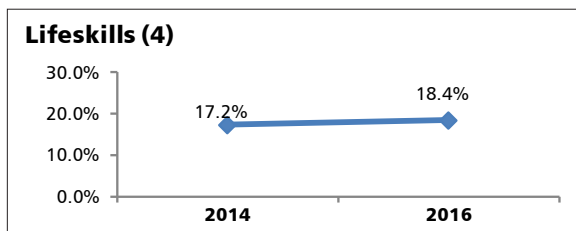
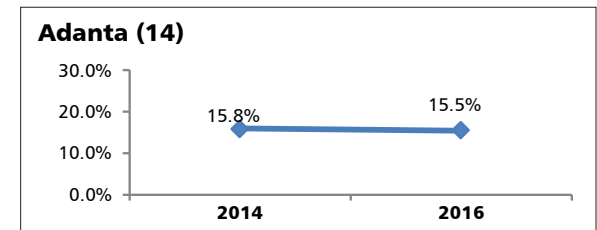
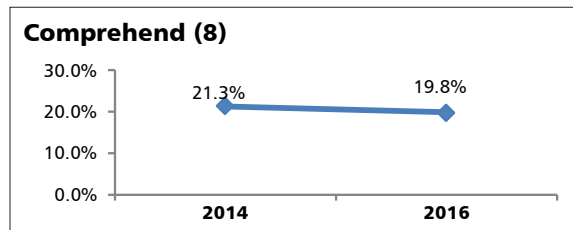
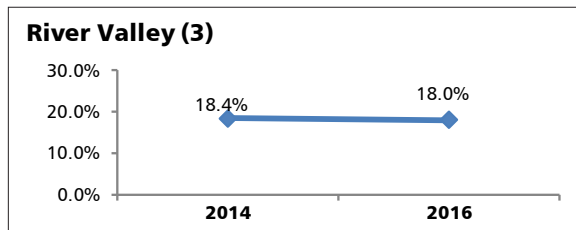
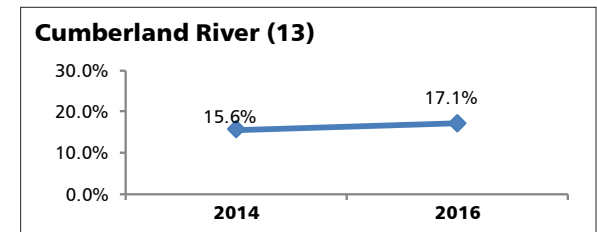
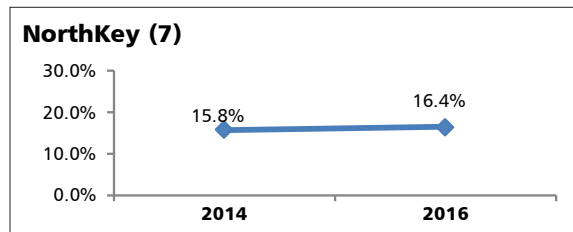
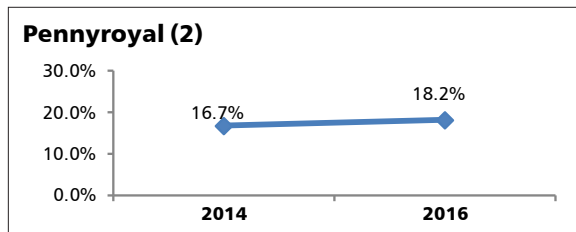
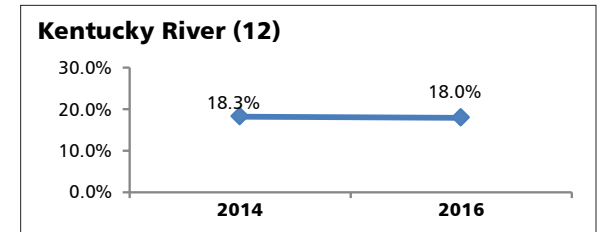
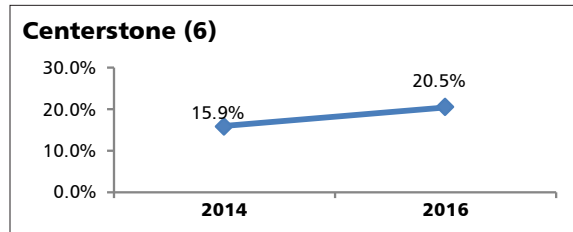
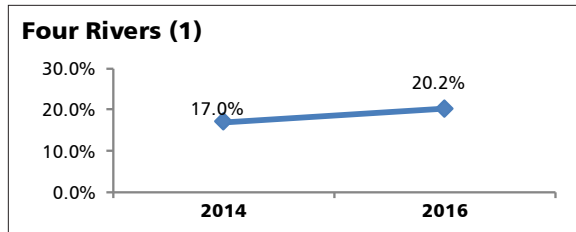


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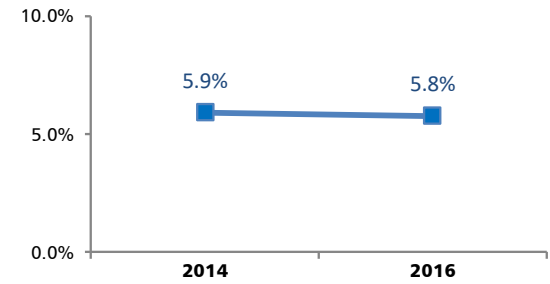
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Regional Trends—**Cyberbullying** by 10th Graders, 2014-2016  
 (% responding that they had been electronically bullied within the past year, including bullying through email, chat rooms, instant messaging, websites, social networks, or texting)



**Past Year Physical Dating Violence 2014-2016**  
**KY State Trend for 10th graders\***



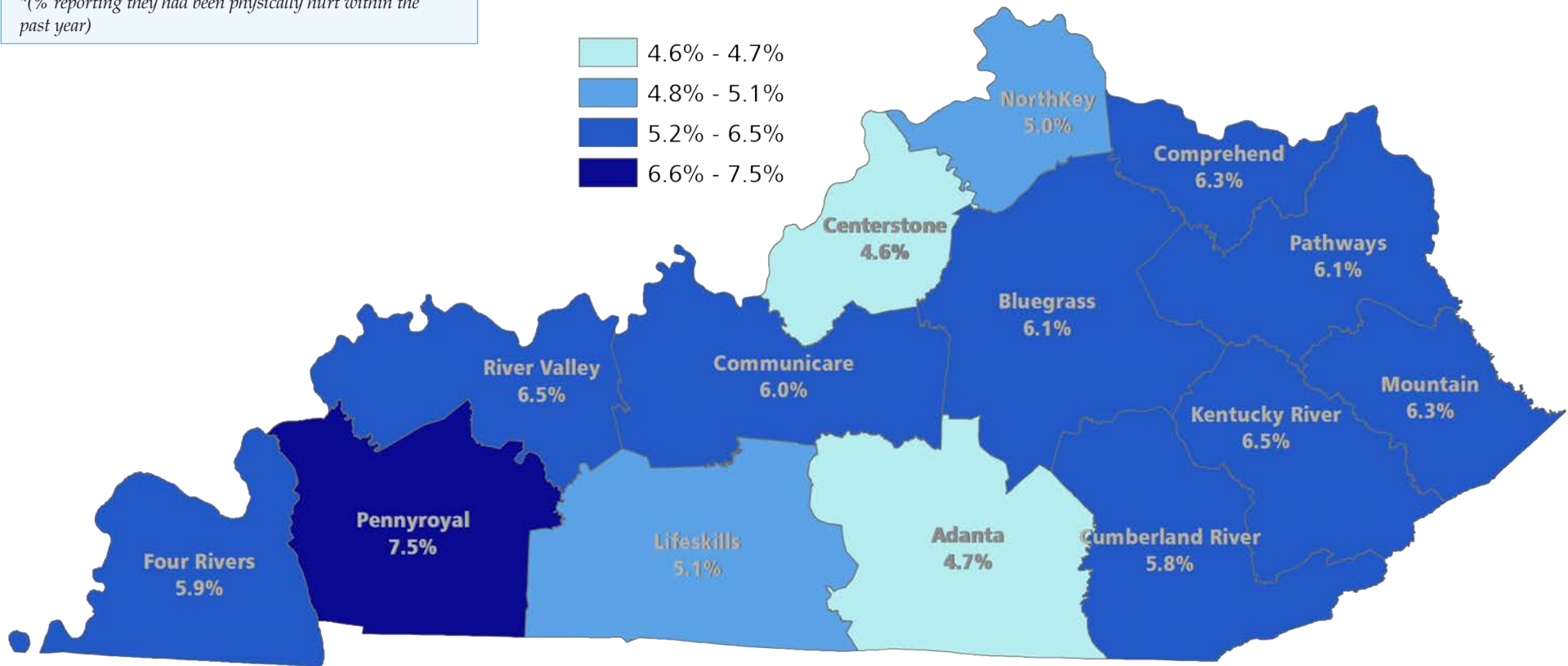
\*(% reporting they had been physically hurt within the past year)

# Grade 10 - Physical Dating Violence, 2016

(% responding that they had been physically hurt on purpose by a boyfriend or girlfriend within the past year, including being hit, pushed, or hair pulled)

## PERCENTAGE OF 10TH GRADERS, 2016

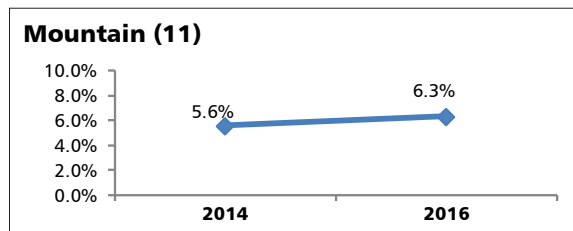
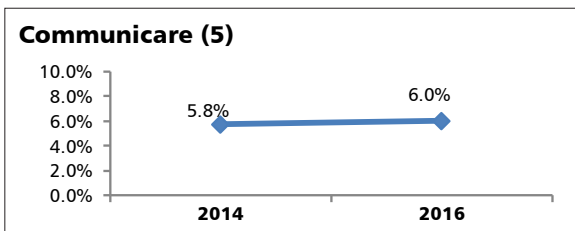
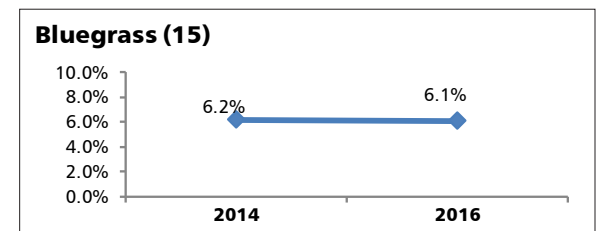
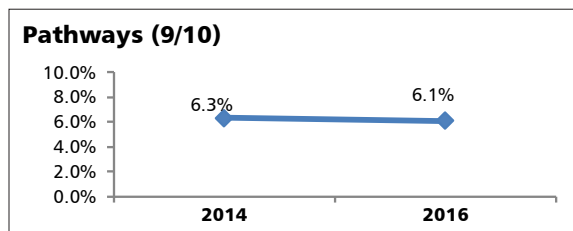
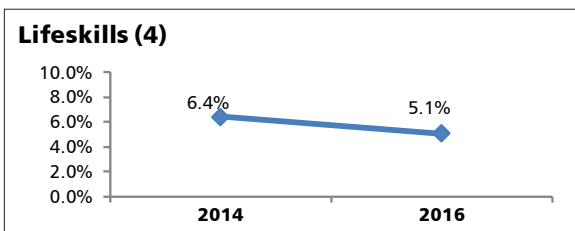
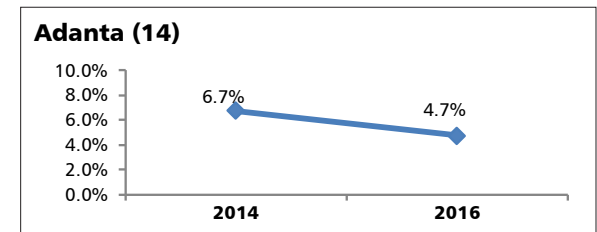
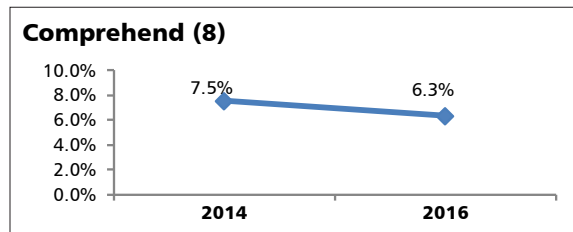
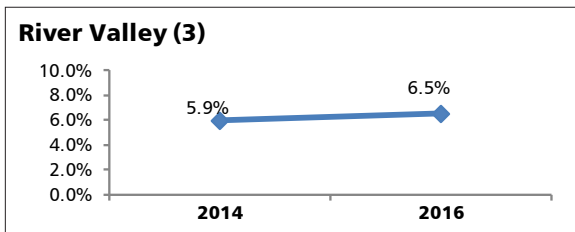
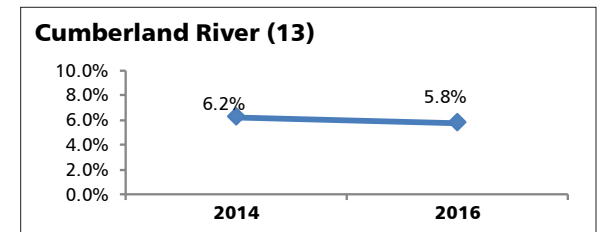
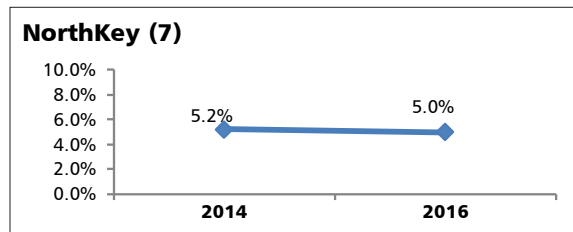
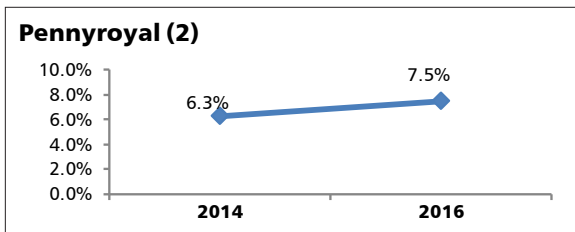
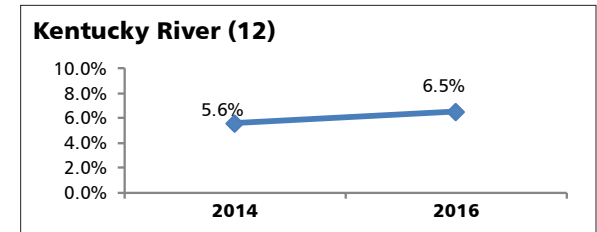
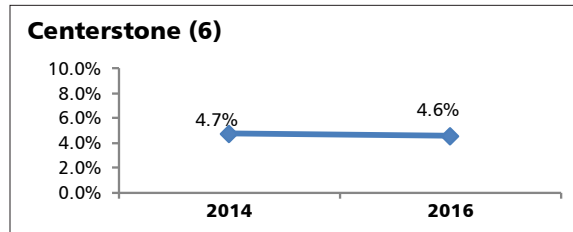
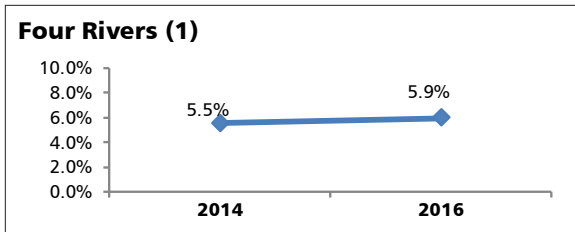
Min: 4.6% (CENTERSTONE); Max: 7.5% (PENNYROYAL)



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Regional Trends—**Physical Dating Violence** by 10th Graders, 2014-2016  
 (% responding that they had been physically hurt on purpose by a boyfriend or girlfriend within  
 the past year, including being hit, pushed, or hair pulled)

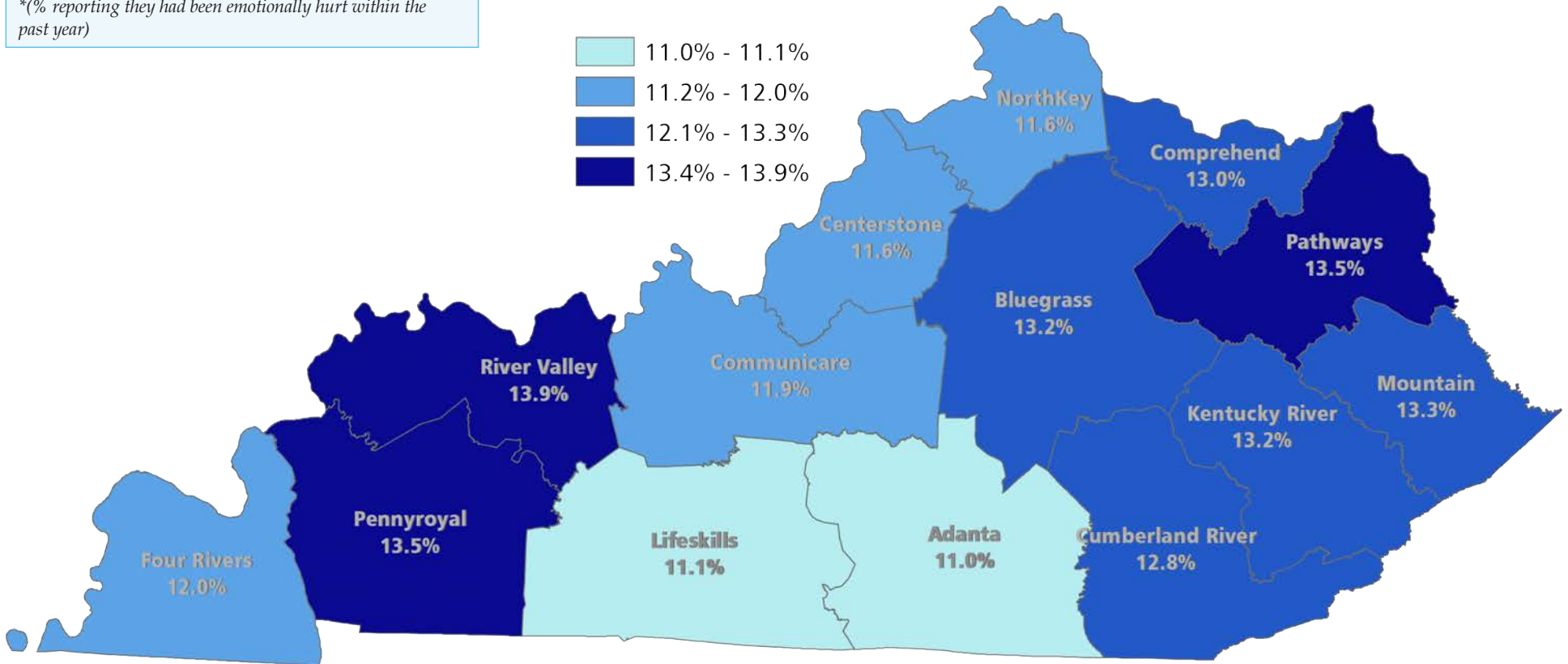
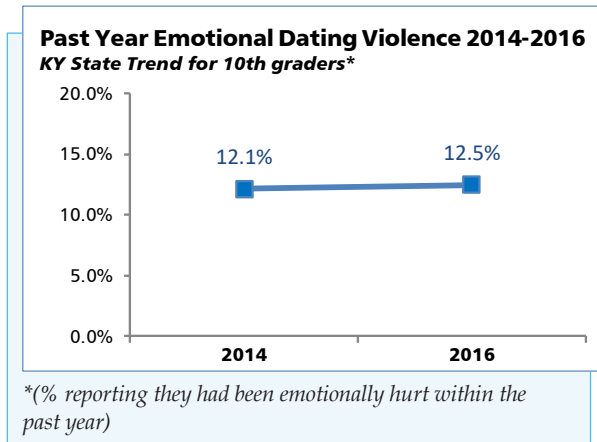


# Grade 10 - Emotional Dating Violence, 2016

(% responding that they had been emotionally hurt on purpose by a boyfriend or girlfriend within the past year, including threats, threatening phone calls/texts, name-calling, online harrasment)

## PERCENTAGE OF 10TH GRADERS, 2016

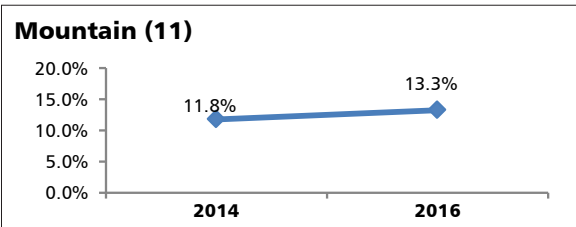
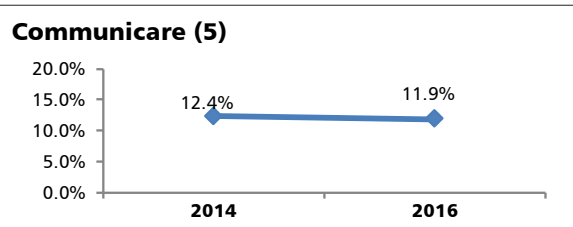
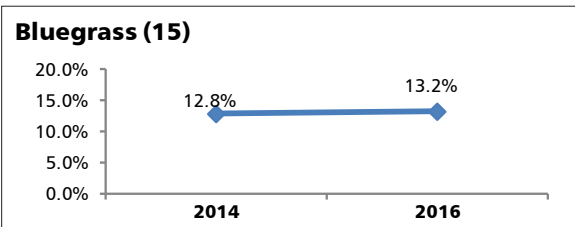
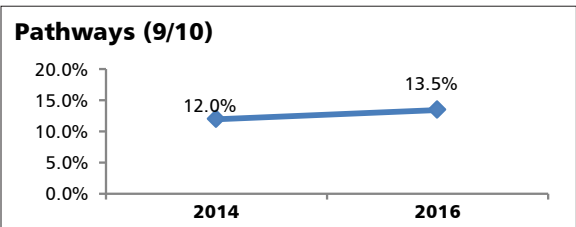
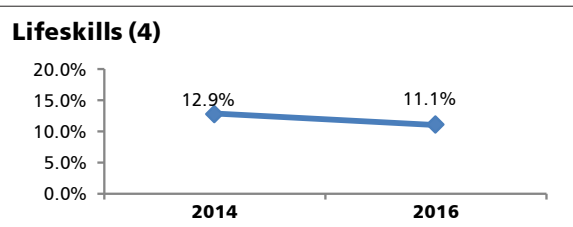
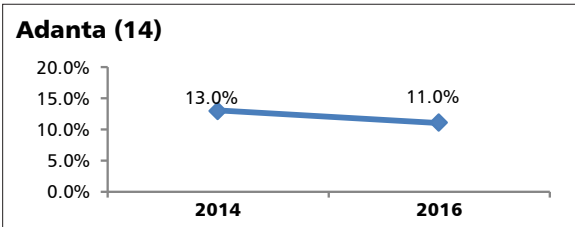
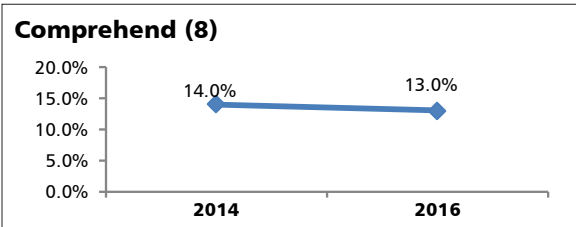
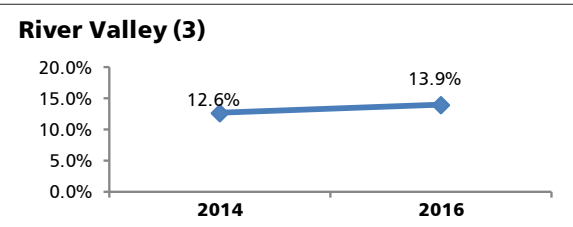
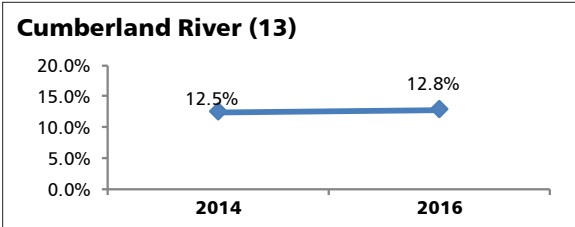
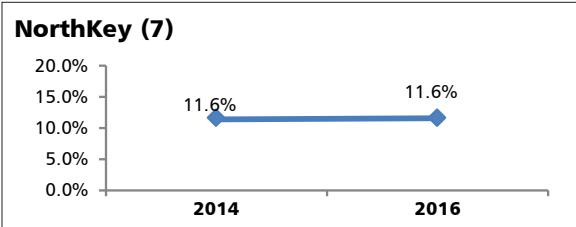
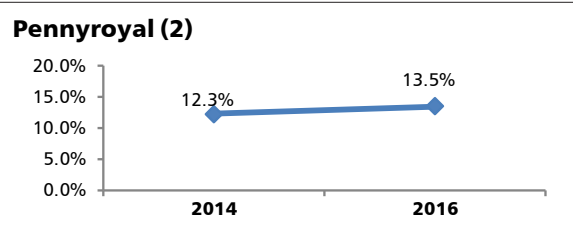
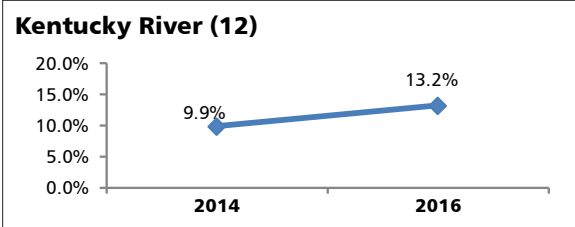
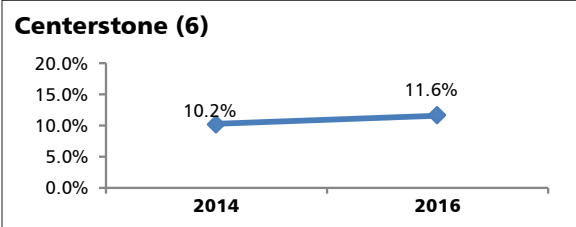
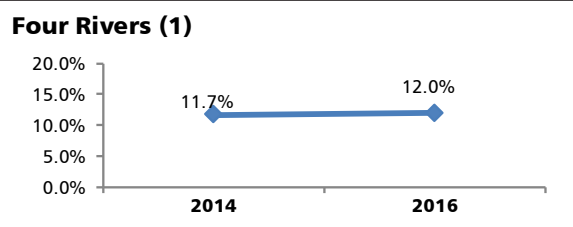
Min: 11.0% (ADANTA); Max: 13.9% (RIVER VALLEY)



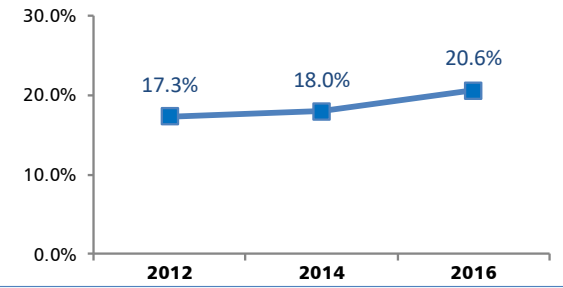
**NON-PARTICIPATING DISTRICTS BY REGION:** FOUR RIVERS (Calloway County, Murray Independent), PENNYROYAL (Dawson Springs Independent), LIFESKILLS (Bowling Green Independent, Warren County), COMMUNICARE (Meade County), CENTERSTONE (Anchorage Independent, Eminence Independent, Jefferson County), NORTHKEY (Beechwood Independent, Bellevue Independent, Kenton County, Southgate Independent), PATHWAYS (Ashland Independent, Morgan County), MOUNTAIN (Martin County, Paintsville Independent), CUMBERLAND RIVER (East Bernstadt Independent, Laurel County), BLUEGRASS (Fayette County).

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Regional Trends—**Emotional Dating Violence** by 10th Graders, 2014-2016  
*(% responding that they had been emotionally hurt on purpose by a boyfriend or girlfriend within the past year, including threats, threatening phone calls/texts, name-calling, online harrassment)*



**30-Day Serious Psychological Distress  
2012-2016 - KY State Trend for 10th graders\***



\*(% meeting the threshold for serious psychological distress)

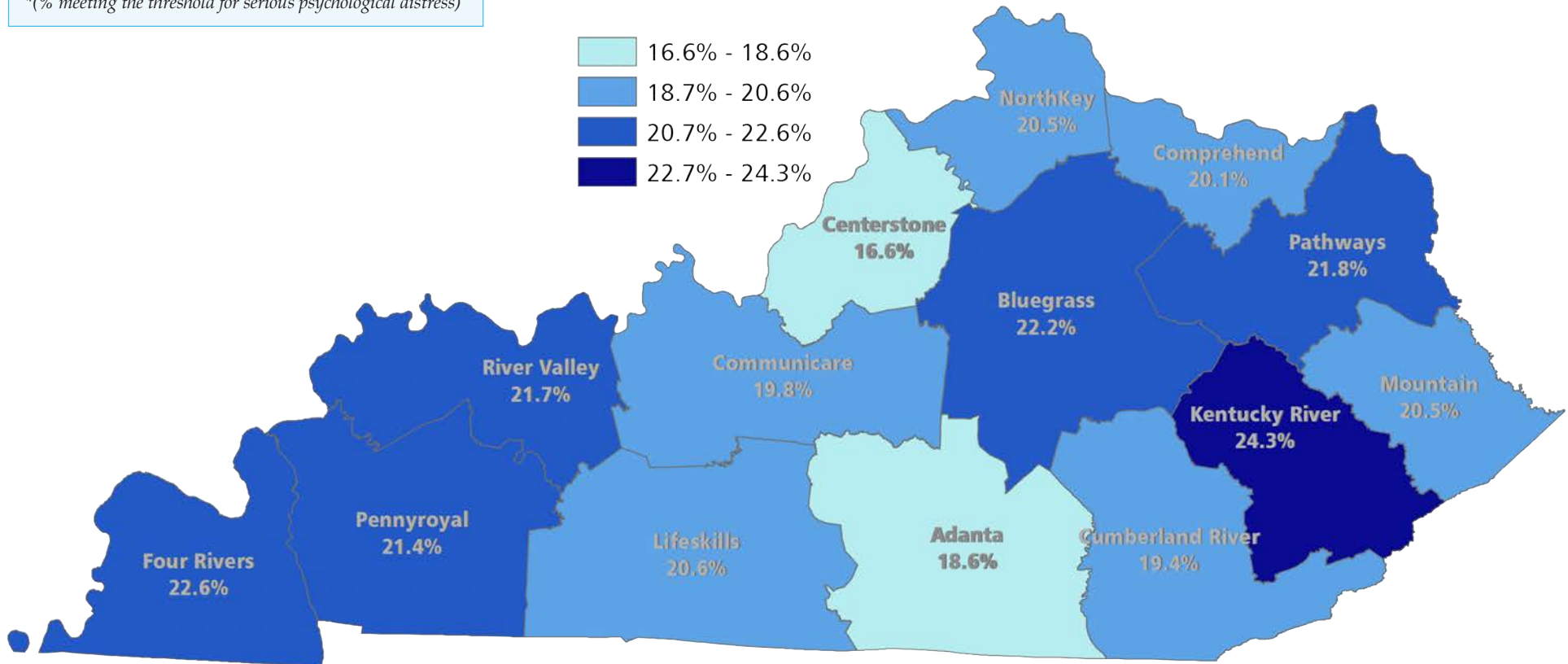
## Grade 10 - Serious Psychological Distress,\* 2016

*\*nervous, hopeless, restless or fidgety, so depressed nothing could cheer you up, everything was an effort, worthless*

(% meeting the threshold for serious psychological distress)

### PERCENTAGE OF 10TH GRADERS, 2016

Min: 16.6% (CENTERSTONE); Max: 24.3% (KENTUCKY RIVER)



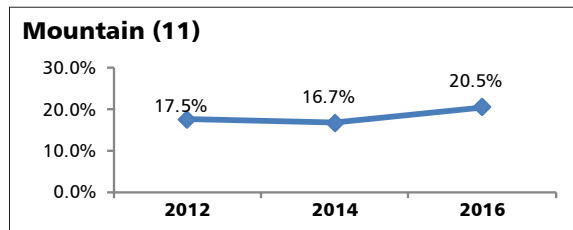
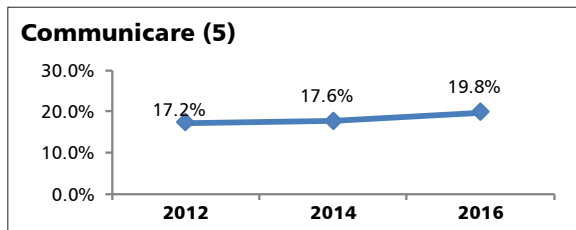
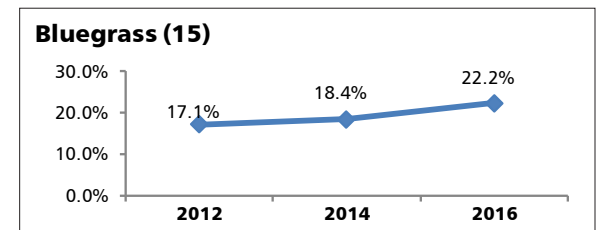
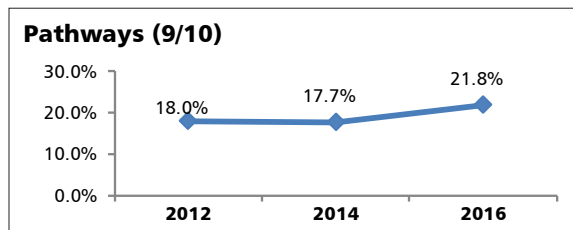
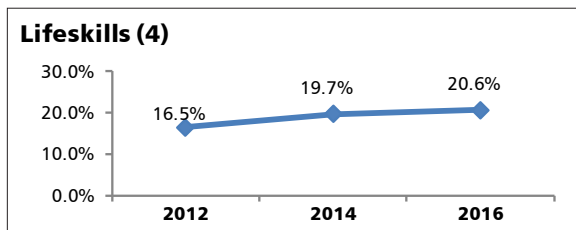
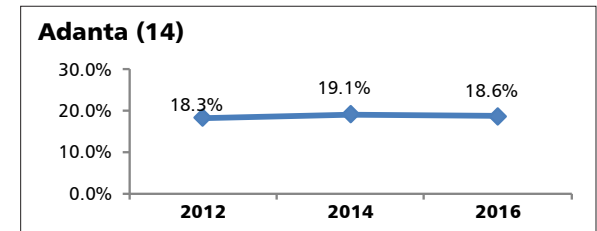
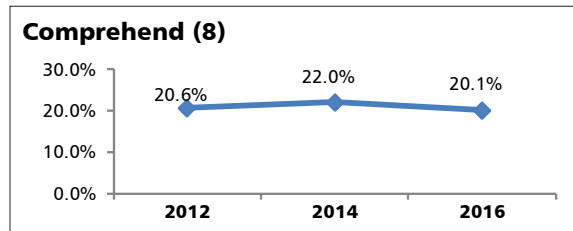
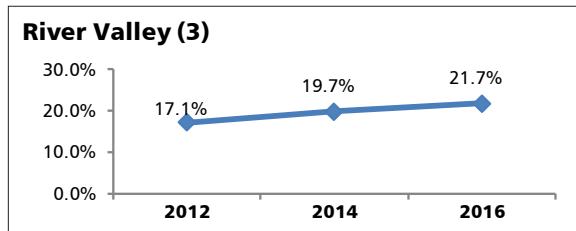
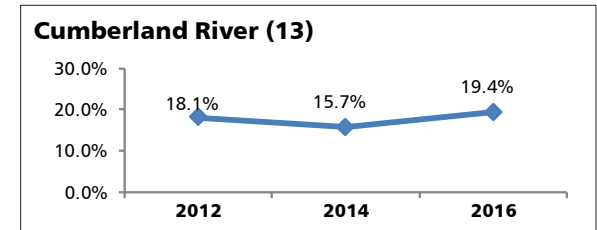
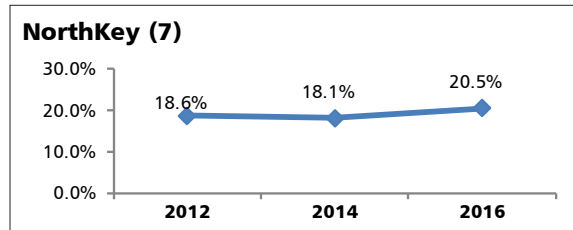
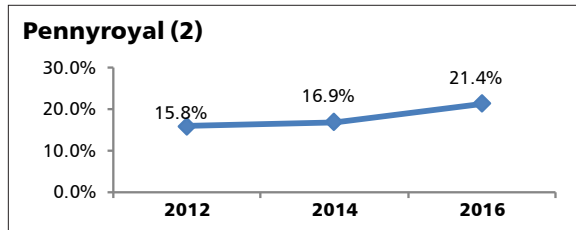
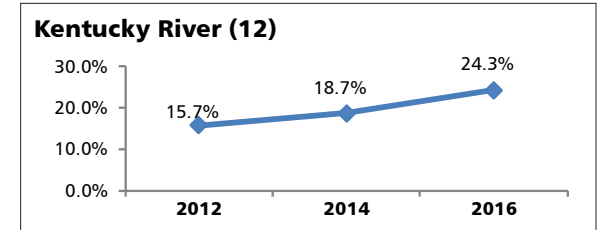
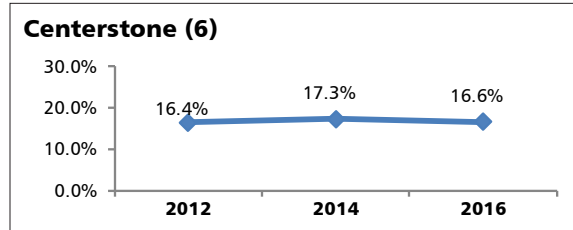
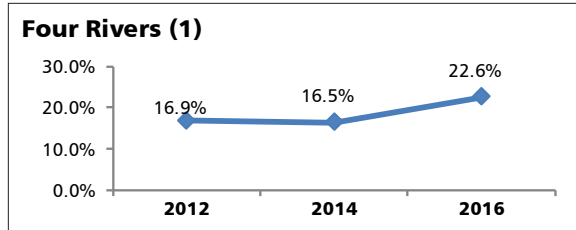
**NON-PARTICIPATING DISTRICTS BY REGION:** FOUR RIVERS (Calloway County, Murray Independent), PENNYROYAL (Dawson Springs Independent), LIFESKILLS (Bowling Green Independent, Warren County), COMMUNICARE (Meade County), CENTERSTONE (Anchorage Independent, Eminence Independent, Jefferson County), NORTHKEY (Beechwood Independent, Bellevue Independent, Kenton County, Southgate Independent), PATHWAYS (Ashland Independent, Morgan County), MOUNTAIN (Martin County, Paintsville Independent), CUMBERLAND RIVER (East Bernstadt Independent, Laurel County), BLUEGRASS (Fayette County).

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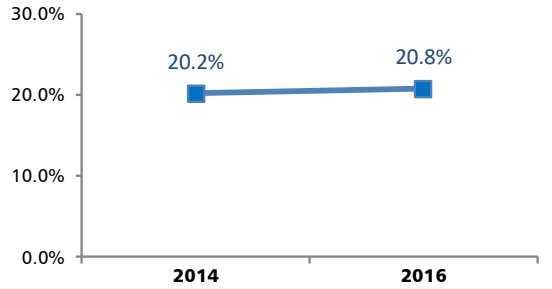
# Regional Trends—**Serious Psychological Distress\*** by 10th Graders, 2012-2016

(% meeting the threshold for serious psychological distress)

*\*nervous, hopeless, restless or fidgety, so depressed nothing could cheer you up, everything was an effort, worthless*



**Lifetime Deliberate Self-Harm 2014-2016**  
**KY State Trend for 10th graders\***



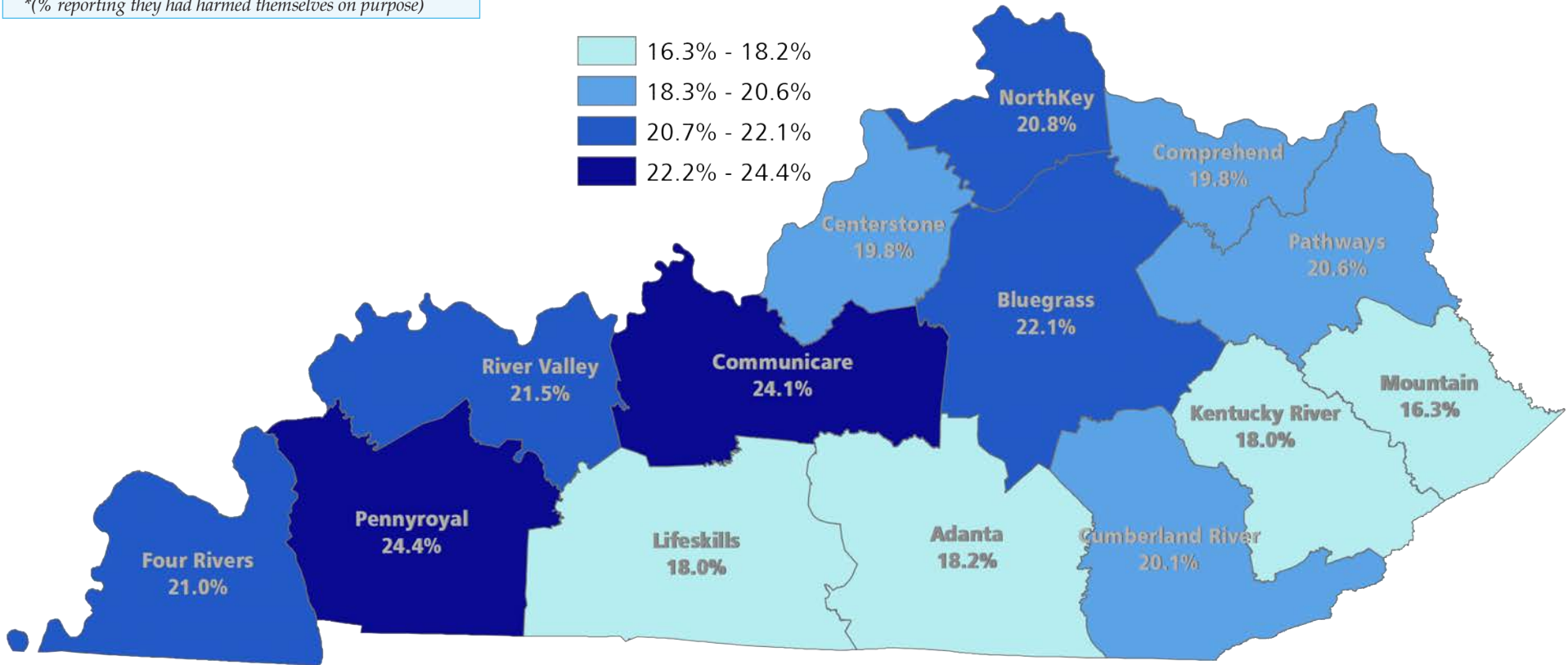
\*(% reporting they had harmed themselves on purpose)

## Grade 10 - Self-Harm, 2016

(% responding that they had ever cut or harmed themselves on purpose)

### PERCENTAGE OF 10TH GRADERS, 2016

Min: 16.3% (MOUNTAIN); Max: 24.4% (PENNYROYAL)

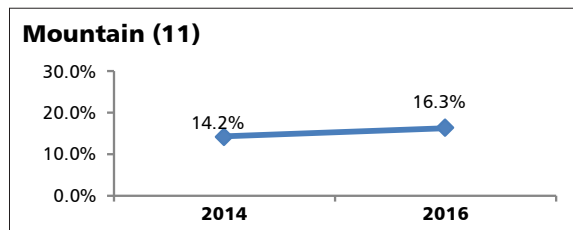
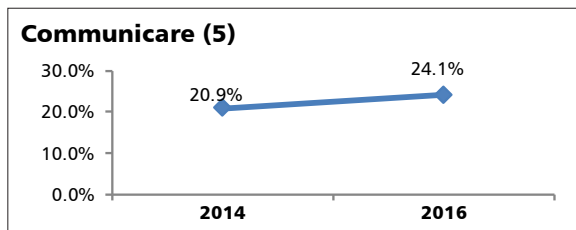
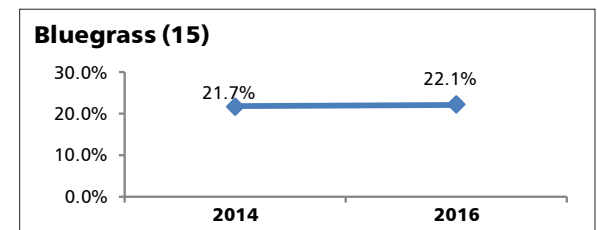
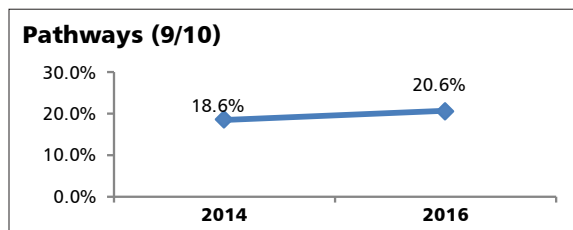
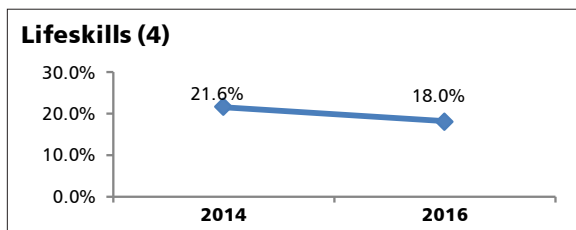
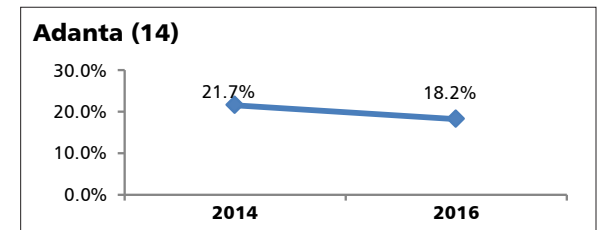
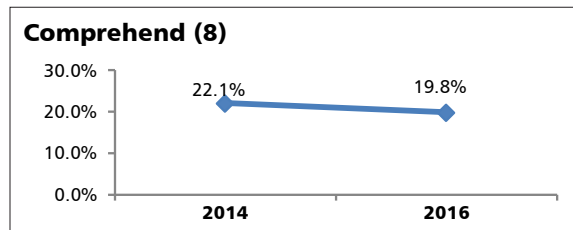
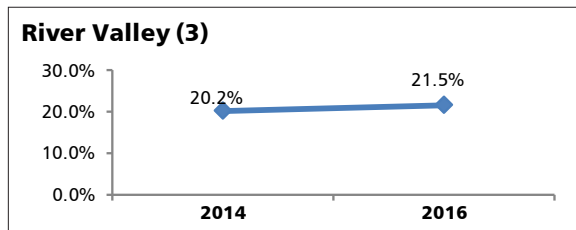
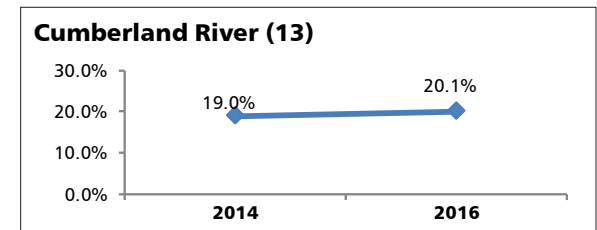
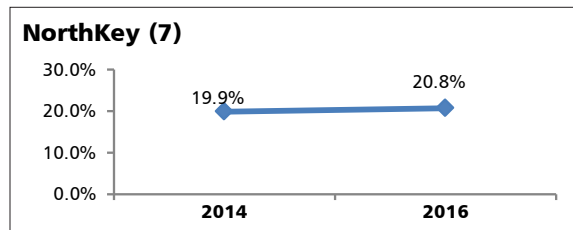
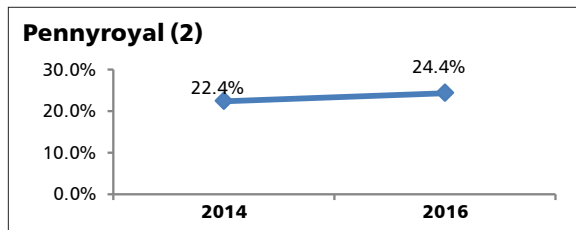
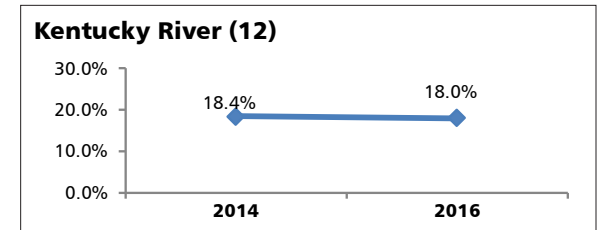
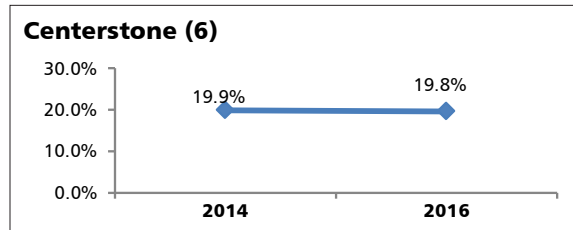
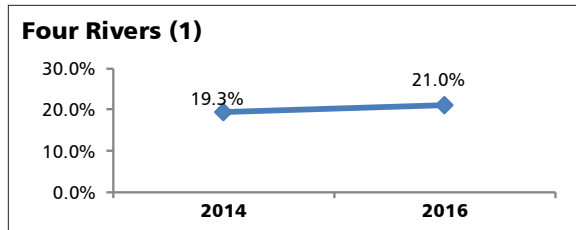


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## Regional Trends—**Self Harm** by 10th Graders, 2014-2016 (% responding that they had ever cut or harmed themselves on purpose)

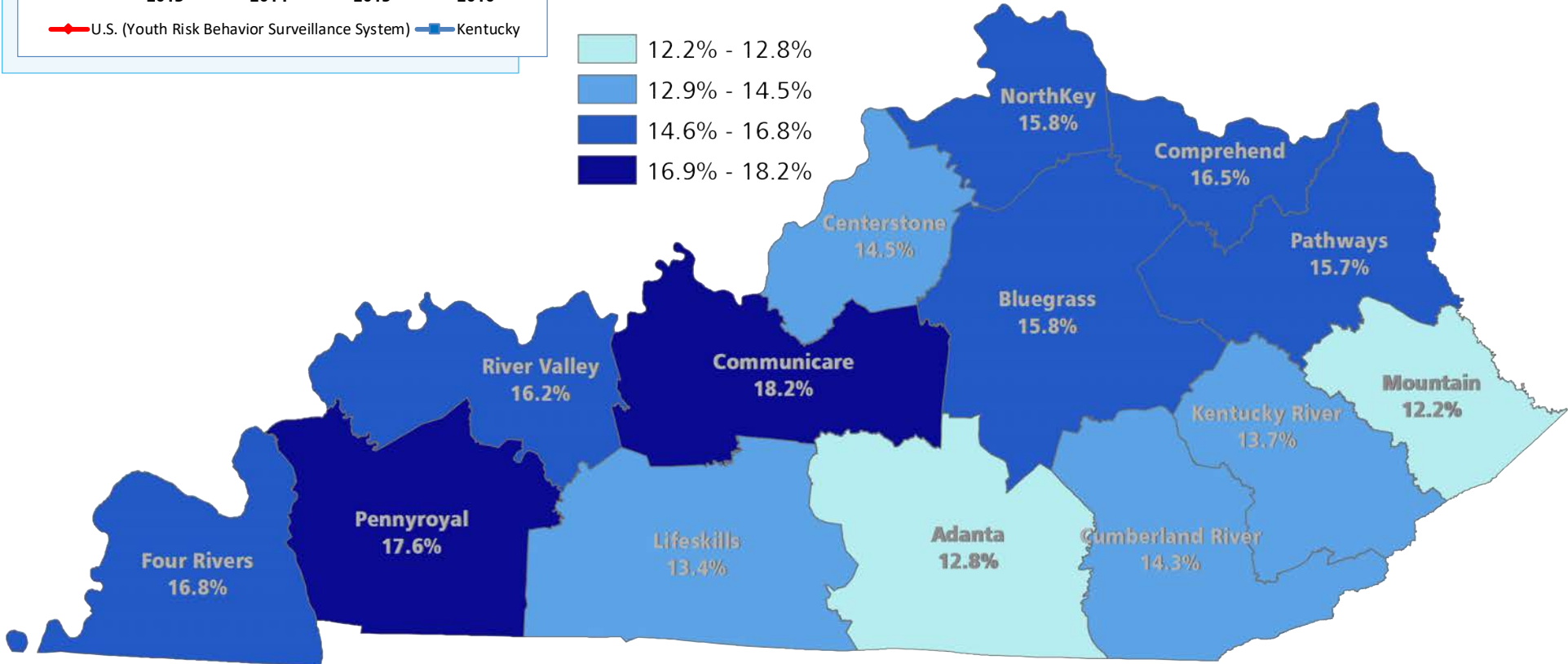
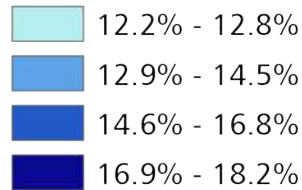
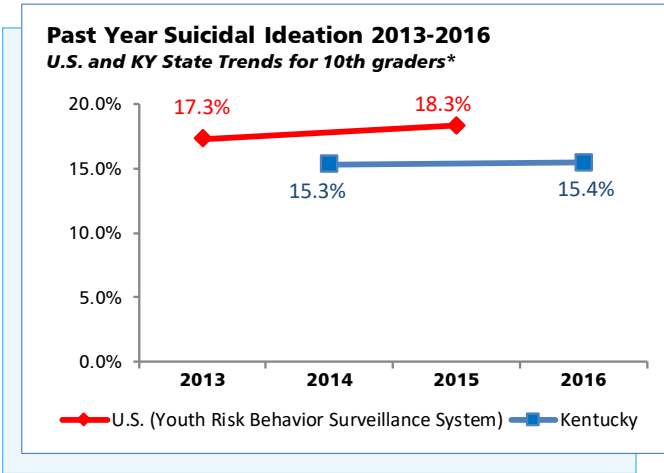


# Grade 10 - Suicidal Ideation, 2016

(% responding that they had seriously considered attempting suicide within the past year)

## PERCENTAGE OF 10TH GRADERS, 2016

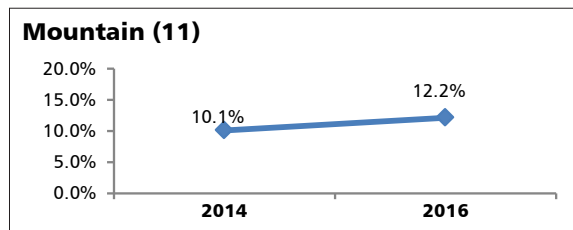
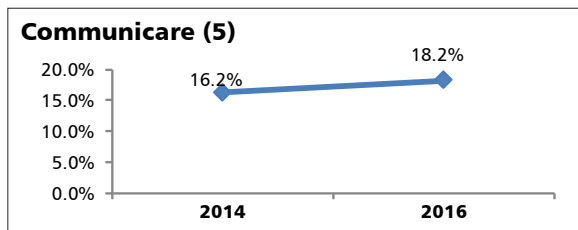
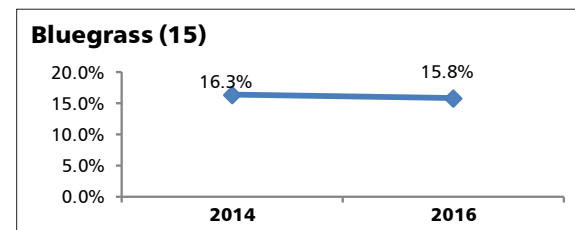
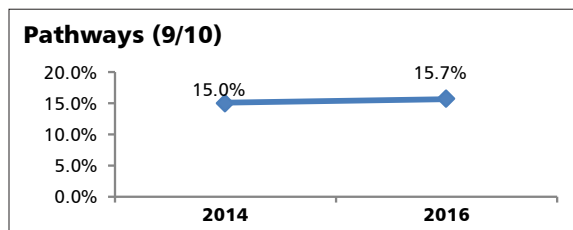
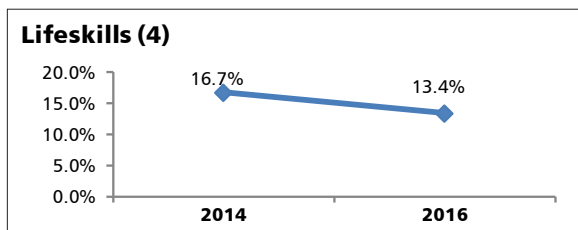
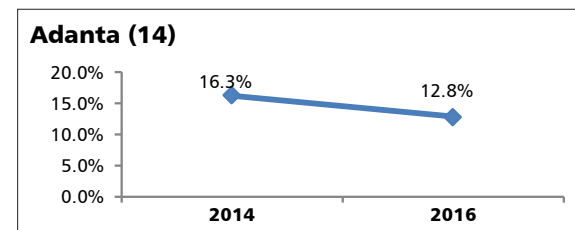
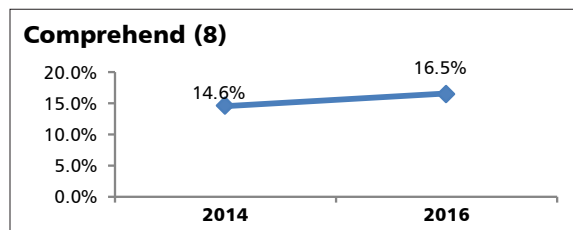
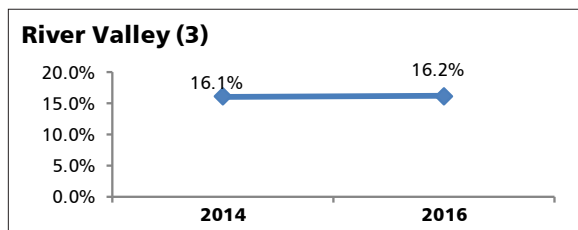
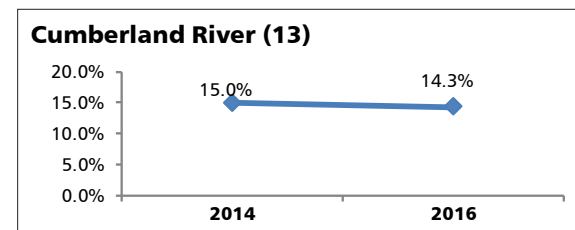
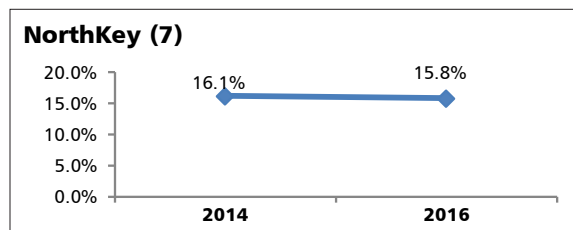
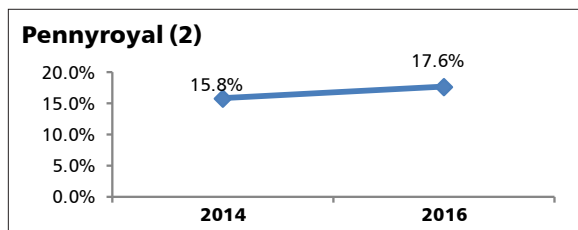
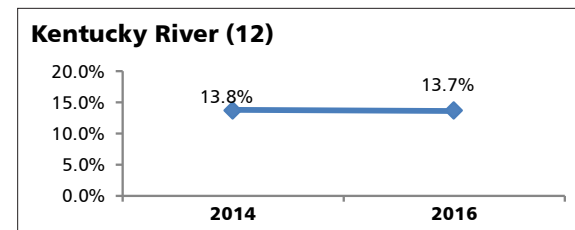
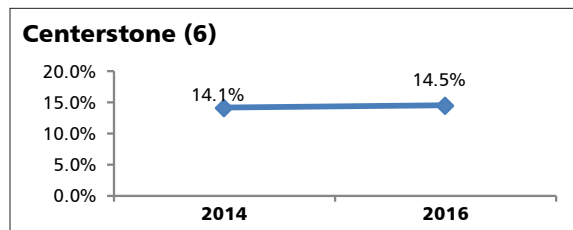
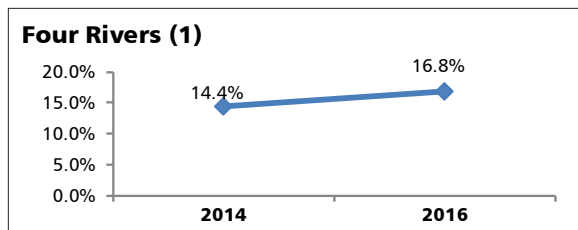
Min: 12.2% (MOUNTAIN); Max: 18.2% (COMMUNICARE)



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Regional Trends—**Suicidal Ideation** by 10th Graders, 2014-2016  
 (% responding that they had seriously considered attempting suicide within the past year)

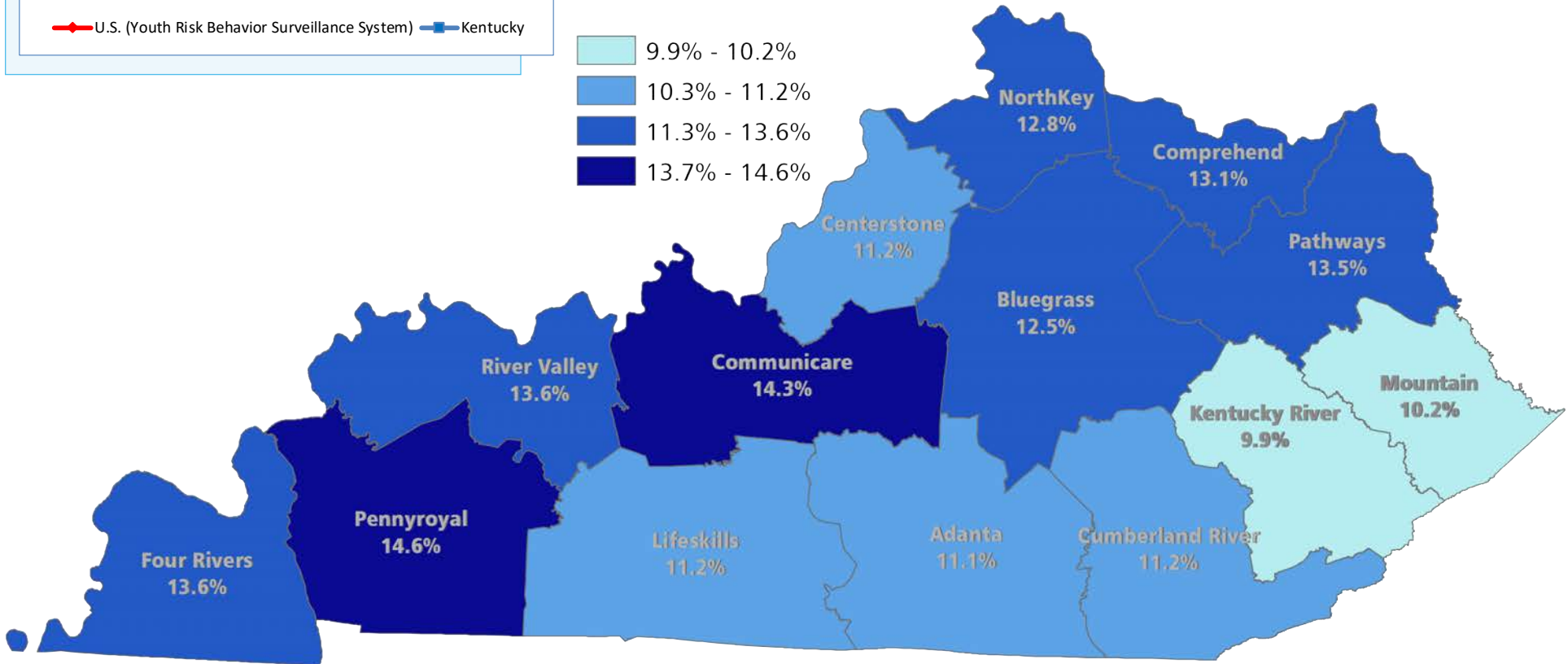
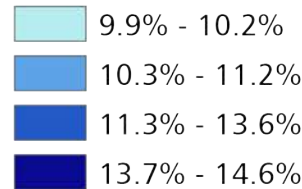
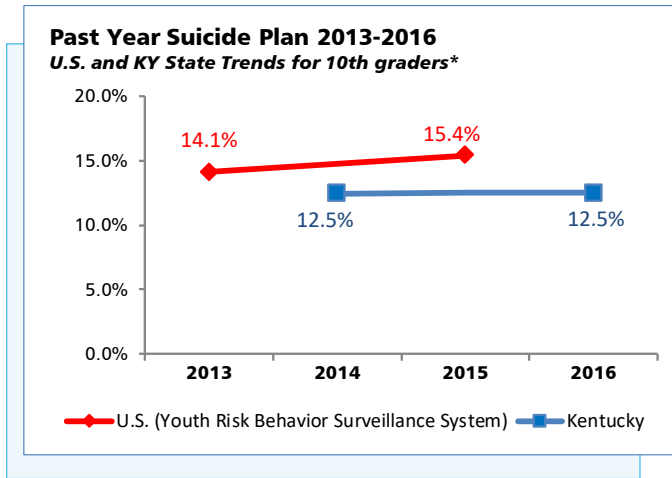


# Grade 10 - Suicide Plan, 2016

(% responding that they had made a plan about how they would attempt suicide within the past year)

## PERCENTAGE OF 10TH GRADERS, 2016

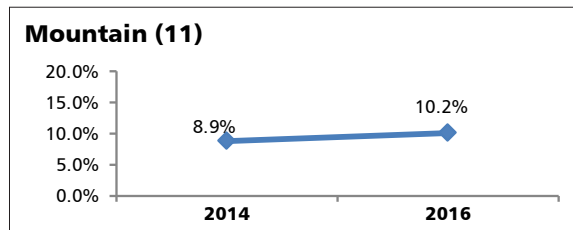
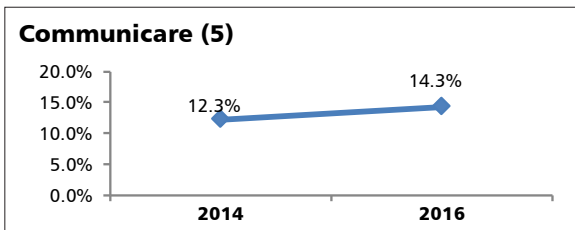
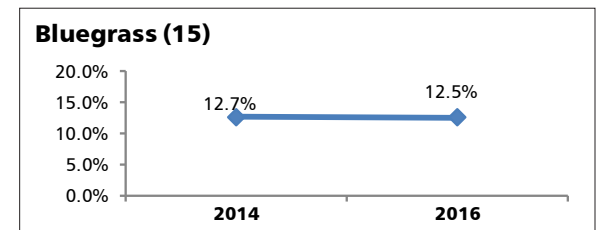
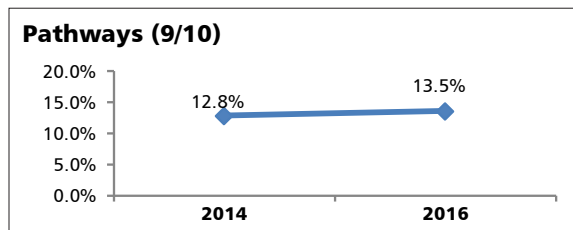
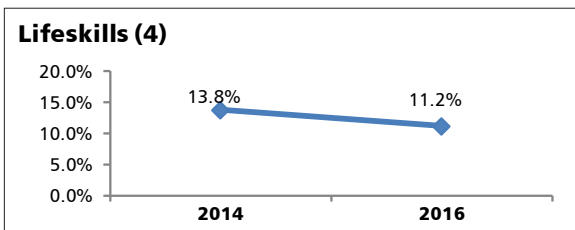
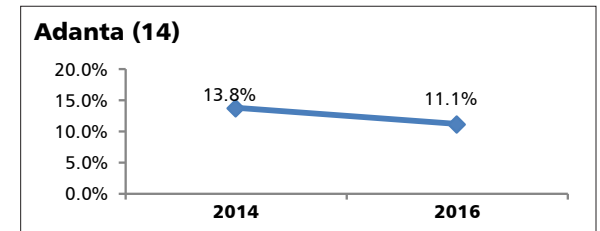
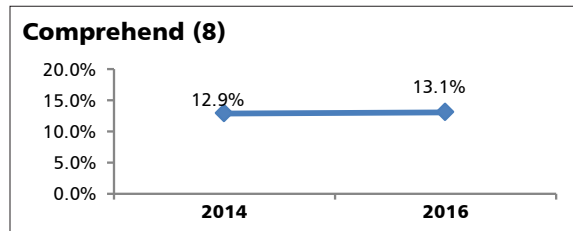
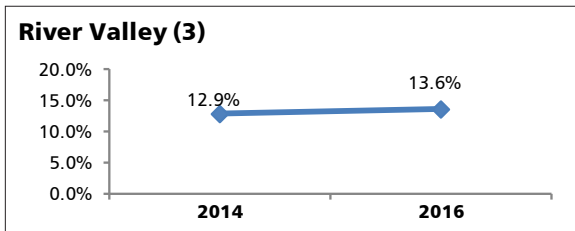
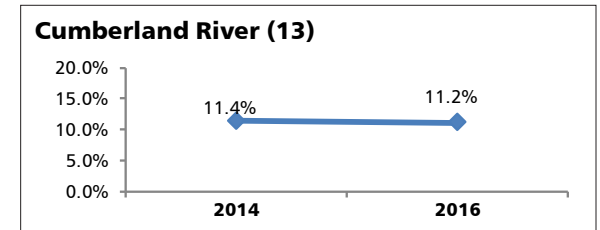
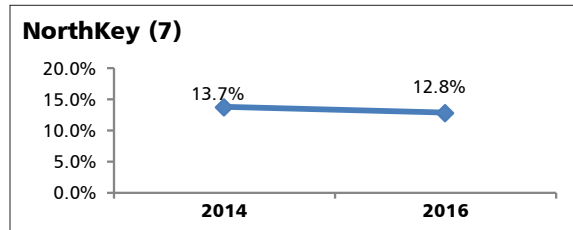
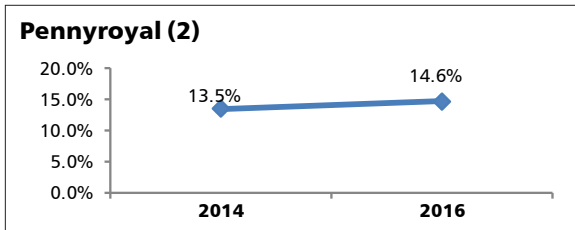
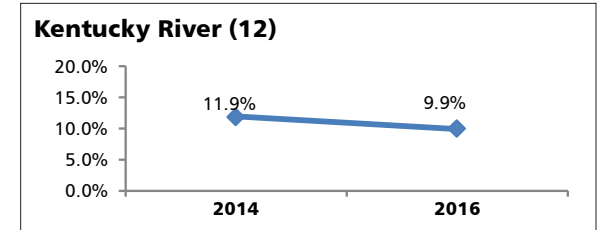
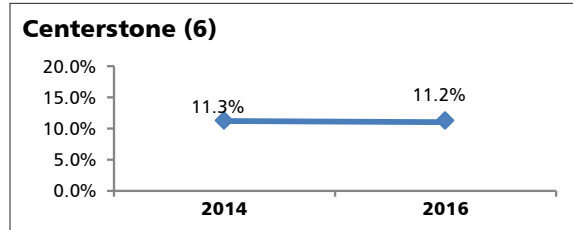
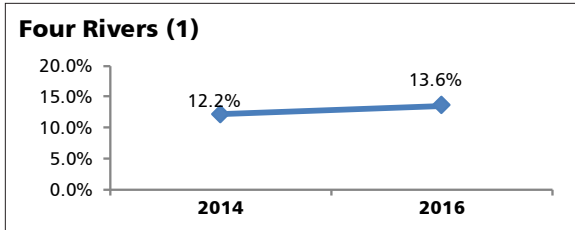
Min: 9.9% (KENTUCKY RIVER); Max: 14.6% (PENNYROYAL)



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Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.

Regional Trends—**Suicidal Plan** by 10th Graders, 2014-2016  
 (% responding that they had made a plan about how they would attempt suicide within the past year)

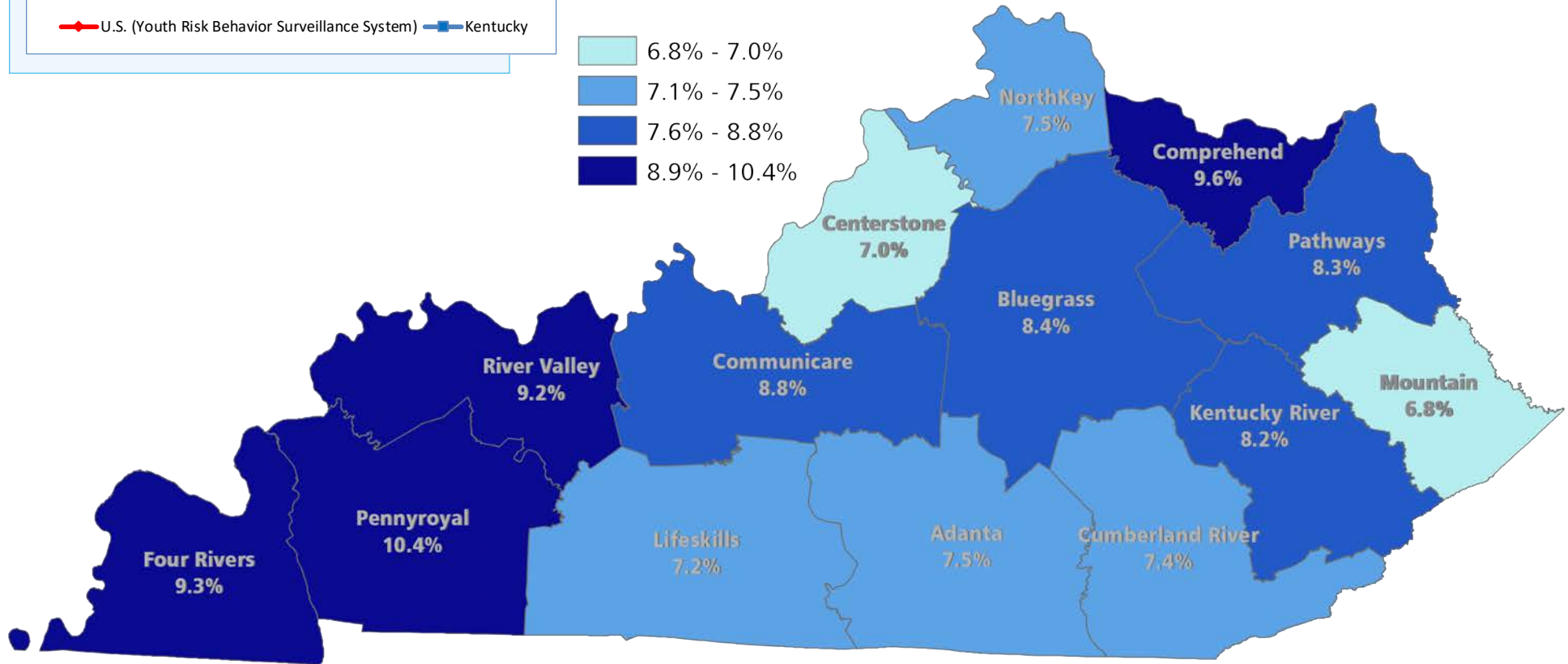
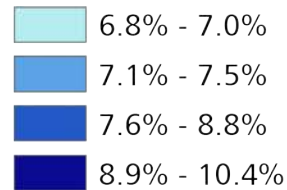
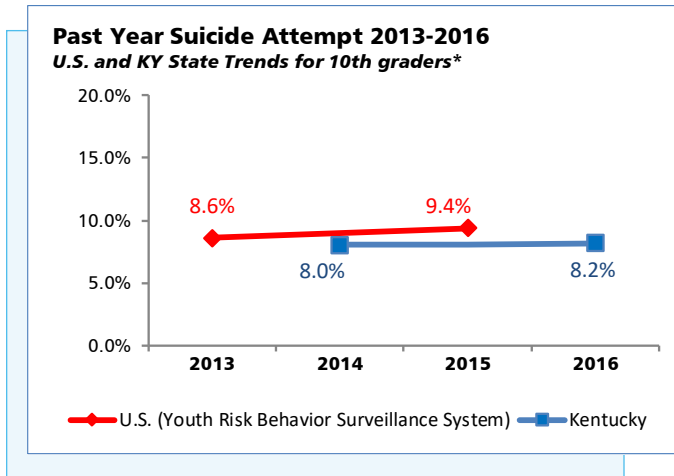


# Grade 10 - Suicide Attempt, 2016

(% responding that they had actually attempted suicide at least one time within the past year)

## PERCENTAGE OF 10TH GRADERS, 2016

Min: 6.8% (MOUNTAIN); Max: 10.4% (PENNYROYAL)

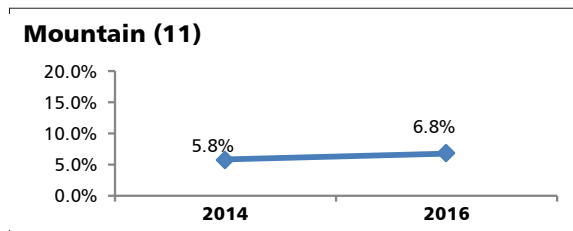
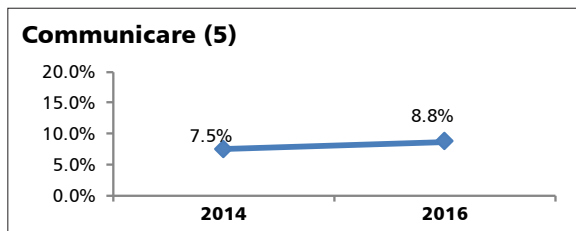
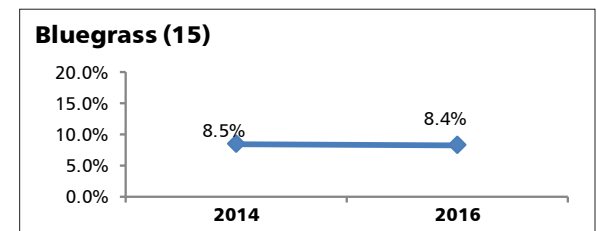
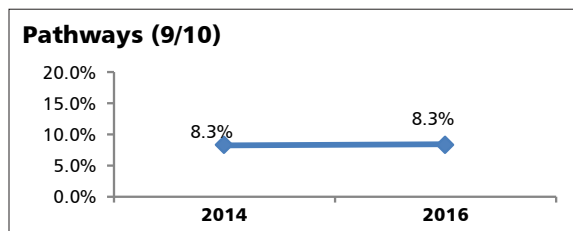
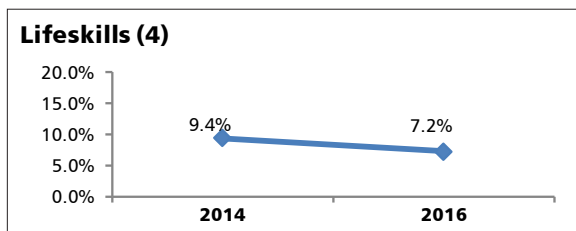
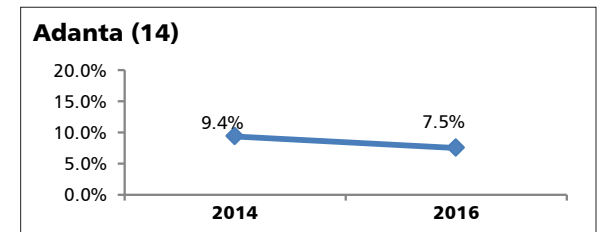
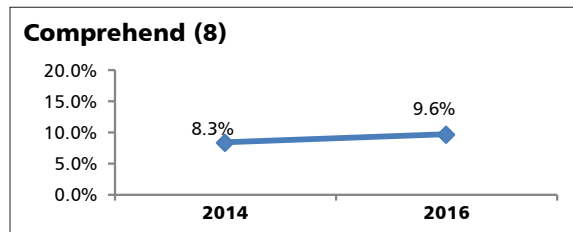
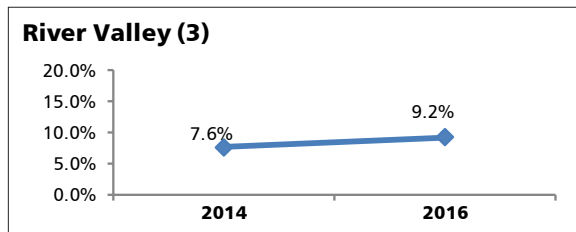
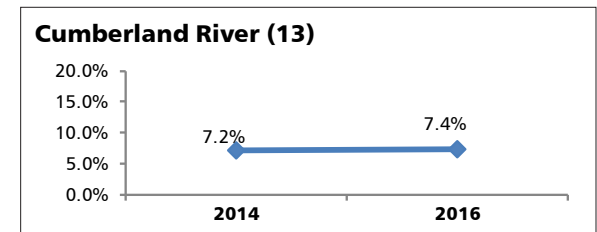
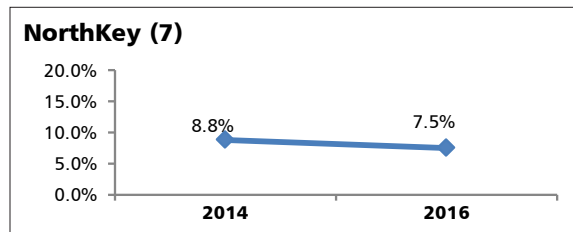
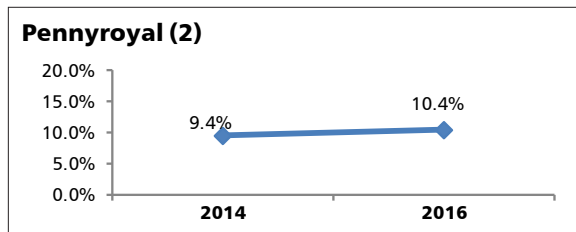
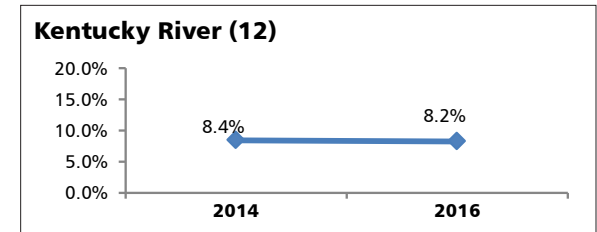
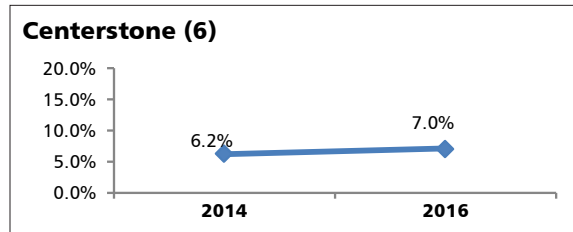
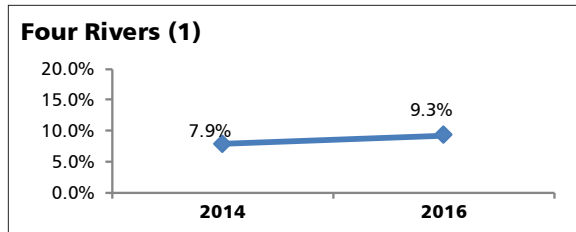


**NON-PARTICIPATING DISTRICTS BY REGION:** FOUR RIVERS (Calloway County, Murray Independent), PENNYROYAL (Dawson Springs Independent), LIFESKILLS (Bowling Green Independent, Warren County), COMMUNICARE (Meade County), CENTERSTONE (Anchorage Independent, Eminence Independent, Jefferson County), NORTHKEY (Beechwood Independent, Bellevue Independent, Kenton County, Southgate Independent), PATHWAYS (Ashland Independent, Morgan County), MOUNTAIN (Martin County, Paintsville Independent), CUMBERLAND RIVER (East Bernstadt Independent, Laurel County), BLUEGRASS (Fayette County).

Data are classified using Natural Breaks. Natural Breaks minimize each class's average deviation from the class mean, while maximizing each class's deviation from the means of the other groups.

## Regional Trends—**Suicide Attempt** by 10th Graders, 2014-2016

(% responding that they had actually attempted suicide at least one time within the past year)



# Resources

## Prevention Science

Program planning and evaluation efforts to prevent substance abuse in Kentucky are grounded in the field of prevention science. Prevention science is related to on-going work in the areas of health promotion and behavioral risk reduction. Fundamental to this emerging science of substance abuse prevention are certain core empirically-based concepts. All are predicated on the belief that it is crucial to have clear estimates of the prevalence and incidence of substance abuse for various populations and settings (a key reason for the KIP survey in Kentucky) in order to gauge change and the effectiveness of prevention and treatment programs. There are a variety of developmental pathways to substance abuse.

- Early childhood developmental and family factors can play a substantial role in creating subsequent vulnerability.
- The eventual emergence of substance abuse is influenced by the presence or absence of specific risk and resilience factors, which can also serve as targets for intervention.
- Substance abuse prevention efforts need to be systemic in orientation, and have been shown to be effective in family, school, peer group, mass media, or community contexts (or combinations of these).
- Media-based programs have been shown to have some utility when used with other strategies, but alone are insufficient to induce change.
- Target population characteristics should be considered in planning for prevention program implementation (e.g., adolescents, African-American youth, male-female differences, children of divorce).
- Setting characteristics of prevention and intervention strategies can also make a difference (e.g., urban-rural).
- Promoting behavioral competence in social, behavioral, emotional, and academic areas is central to effective prevention.
- Effective substance abuse interventions tend to combine useful content with a delivery approach that is engaging.

## Conceptual Framework for Substance Abuse Prevention

A review of the research literature in the field of prevention science suggests that there are certain key factors to be considered in school- and community-based substance abuse prevention. These can be grouped into three main areas (or domains): (1) Substance Abuse Problem Identification; (2) Proximal Risk and Resilience (i.e., protective) Factors; and, (3) Community Level Contextual Factors.

### Substance Abuse Problem Identification

Substance Abuse Problem Identification refers to prevalence and incidence data that can help a community understand: (1) the rate at which substances are being used or abused; (2) the nature and scope of these problems; and, (3) how the problems are perceived. These kinds of problem identification data are most often used to construct a needs assessment for the community. The KIP survey can be invaluable in this respect, because it provides information about student self-reported use of substances (e.g., within last 30 days, last year), student perceptions about substance use (e.g., level of risk, peer and parent disapproval), and perceived accessibility of substances in the community. Other sources of data can help “fill in the picture”; these include data reported to the Kentucky Center for School Safety, such as the number of school disciplinary actions related to ATOD offenses on school property in a given year, and the rate of tobacco-related policy violations in a particular school district. It is important to note that in addition to the “quantitative” information described above, a fuller picture may emerge by using “qualitative” methods to gather information. Such methods can include anecdotal data from specific incidents, focus groups, and supplemental student surveys.

### Proximal Risk and Resilience Factors

Research has shown that there are some factors that are highly correlated with substance abuse. Knowledge about the relative presence or absence of these factors in a given school-community can help to both understand the nature of the problems and plan for effective

preventive interventions. Examples of proximal factors at the school level may include economic disadvantage (as measured by the number of students eligible for free and reduced lunch), student engagement or “bonding” (as measured by attendance and drop out rates), school achievement (e.g., retention rates, academic performance/achievement assessment scores), and school safety and climate (e.g., perception of risk, number of law and school board policy violations). All of these are indicators that may help to understand the factors that may give rise to problems related to substance abuse. Interpretation of the KIP findings should always take these factors into consideration.

### Community-Level Contextual Factors

The data for each school-community have meaning only in the context of the general factors that make that community unique. For example, some communities are densely populated within relatively small geographic regions, while others are more sparsely populated but are geographically quite large. Communities across Kentucky vary tremendously with respect to demographic characteristics, such as population, race/ethnicity, literacy, poverty, business patterns, and many other such dimensions. A broad understanding of these factors can also help to place substance abuse issues in context.

### National Data Trends

A review of recent national and state-level data trends relative to substance abuse can help ‘set the stage’ for review and analysis of Kentucky Incentives for Prevention survey data. Included below are descriptions of significant resources for national data related to substance abuse, as well as various associated risk and protective factors.

The most comprehensive source of statistical information on the use of illegal drugs by the U.S. population is the National Survey of Drug Use and Health (NSDUH). This is an annual survey, sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA), and pertains to individuals aged 12 years or



older. To access findings from the 2015 NSDUH survey, go to <https://nsduhweb.rti.org/> (click on “Latest Survey Results” under the “Survey Results” tab) to read the “*Key Substance Use and Mental Health Indicators in the United States: Results from the 2015 National Survey on Drug Use and Health*” report. Here, you can explore findings related to youth (and adult) illicit drug use, tobacco use, alcohol use, and mental health issues.

A comparative analysis of state-level data provides additional insight into substance abuse trends in various regions of the US. Maps depicting key themes that emerge from such a review of the state-level 2014 National Survey of Drug Use and Health can be found here: <https://www.samhsa.gov/data/sites/default/files/NSDUHsaeMaps2014/NSDUHsaeMaps2014.htm>. Particularly notable are the maps depicting: Past Month Illicit Drug Use, Past Month Alcohol Use, Past Month Marijuana Use, Perception of Risk Associated With Marijuana Use, Past Year Non-Medical Use Of Pain Relievers, Past Month Binge Alcohol Use, and Past Month Tobacco Product Use.

State-specific data are also available from the Youth Risk Behavior Surveillance System (YRBSS). YRBSS includes a national school-based survey conducted by the Centers for Disease Control (CDC) as well as state and local school-based surveys conducted by education and health agencies. It monitors six categories of priority health-risk behaviors among youth and young adults, including alcohol, other drug and tobacco use. Comprehensive results of the 2015 YRBSS survey related to alcohol, other drug, and tobacco use among Kentucky youth (in grades 9, 10, 11 and 12) can be found here: <https://nced.cdc.gov/Youthonline/App/Results.aspx?LID=KY>

### Synthesizing Information

Sometimes patterns in the data will become more obvious by making region-to-region or region-to-state comparisons. Questions to consider include:

- What is the current state of affairs within our region with respect to student use of various substances? Has this changed over time?

- How do we compare to other regions in Kentucky? How do we compare to national scores, such as the Monitoring the Future?
- Are there any patterns or trends that emerge as we review our data? Any surprises? When there have been changes, what are the factors that likely contributed to the change?
- What are the areas of greatest concern for our region? Where should our priorities lie?
- Are there any obvious linkages between our current substance abuse prevention and intervention activities and the patterns seen in the data?
- What are the perceptual data about risk, approval/disapproval, and accessibility telling us about our community’s norms, values, and expectations?
- Are there demographic factors that cause our region to be more (or less) susceptible to youth substance abuse problems?
- To what extent do students in our communities perceive that they are engaged in the schooling process? To what extent do some students feel alienated or disenfranchised?
- In general, how do our students achieve in school, compared to other regions and the state? Do any patterns emerge across grade levels? Across subject areas?
- Do students perceive that they are safe in school? What aspects of school safety may be related to substance abuse?
- What are the physical, resource, and geographic features of our region? Population characteristics? Family characteristics? Socioeconomic characteristics? How might these variables contribute (directly or indirectly) to substance abuse?

The process of profiling your region and its communities can lead to not only insights into possible connections between these various factors, but also ideas for goal-setting and prevention program planning.

### Additional Resources

Worksheets to help organize information related to the domains of Substance Abuse Problem Identification,

Proximal Risk and Resilience Factors and Community-Level Contextual Factors are available at [www.reachevaluation.com/kip](http://www.reachevaluation.com/kip) (click on “KIP Survey 2016 District Report Planning Worksheets”).

County-level demographics and related information are available online in Kentucky’s Substance Abuse Prevention Data Warehouse at <http://sig.reachoflouisville.com>. In addition to providing a wealth of information about community characteristics and substance abuse prevention, this site is useful in creating presentation-ready tables, graphs, and maps.

Additional information related to the KIP survey administration can be found at: <http://reachevaluation.com/kip>. This site includes answers to frequently asked questions about the KIP Survey, the KIP Training Manual, and contact information for KIP personnel. To access KIP regional and statewide reports, go to <https://reacheval.com/projects/kentucky-incentives-for-prevention-kip-survey/>

The Behavioral Health Prevention and Promotion Branch in the Division of Behavioral Health works to prevent substance misuse and abuse, prevent suicide, and promote mental health and resilience factors. With the support of federal and state funding, the Prevention and Promotion Branch and 14 Regional Prevention Centers (RPCs) across the state use data from the KIP survey and a number of other data sources to guide their prevention efforts. To learn more about the Prevention and Promotion Branch’s work and for a Provider Directory to contact your local RPC, visit: <http://dbhdid.ky.gov/dbh/bhpp.aspx>

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