

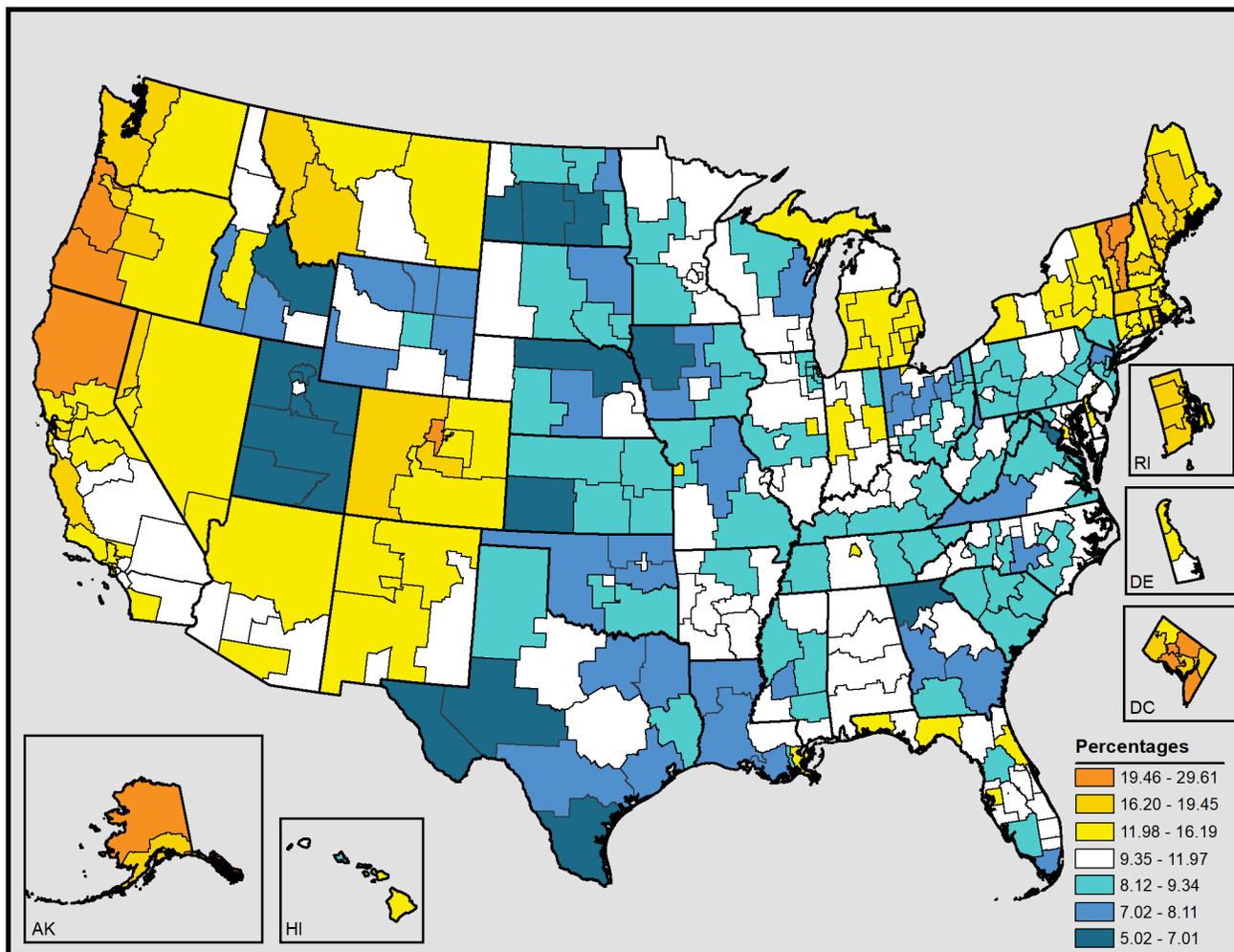
# 2016-2018 National Survey on Drug Use and Health National Maps of Prevalence Estimates, by Substate Region

The 29 national maps presented here show the 2016-2018 National Survey on Drug Use and Health (NSDUH) estimates for 395 substate regions that were ranked from lowest to highest for each measure and divided into seven categories (based on estimates rounded to two decimal places) designed to represent somewhat symmetric distributions, as in a normal distribution. Colors were assigned to all substate regions such that the third having the lowest prevalence are in shades of blue (132 substate regions), the middle third are in white (131 substate regions), and the third with the highest prevalence are in shades of yellow (132 substate regions). The only exceptions are the five perception-of-risk outcomes shown in [Figure 4](#) (marijuana), [Figure 8](#) (cocaine), [Figure 10](#) (heroin), [Figure 15](#) (alcohol), and [Figure 20](#) (cigarettes), which have the highest estimates represented in blue and the lowest estimates represented in shades of yellow to reflect the inverse relationship between substance use and the perception of risk from using that substance. To further distinguish among the substate regions displaying relatively higher prevalence, the "highest" third has been subdivided into (a) orangish-yellow for the 18 substate regions with the highest estimates, (b) dark yellow for the 37 substate regions with the next highest estimates, and (c) light yellow for the 77 substate regions in the third highest group. The "lowest" third is categorized in a similar way using three distinct shades of blue (i.e., dark blue, medium blue, and light blue). In some cases, a group (or category) could have more or fewer substate regions because two (or more) substate regions have the same estimate (to two decimal places). When such ties occurred at the "boundary" between two groups, all substate regions with the same estimate (to two decimal places) were assigned to the lower group. The upper and lower limits of each of the seven categories shown in the map legend collectively define a continuum and are not necessarily the actual values of a particular substate region. For example, in [Figure 13](#) (a national map showing alcohol use in the past month among individuals aged 12 or older), the values on the boundary in the lowest category (group 1) correspond to Utah County in Utah (19.56 percent) and Catchment Area 3 in Arkansas (35.60 percent) and are displayed in the legend. In the next to lowest category, Catchment Area 4 in Arkansas (35.80 percent) and the Southeast region in Oklahoma (42.52 percent) are the substate regions with the lowest and highest values; however, in the continuum of the legend, the lower limit for group 2 was assigned a value of 35.61 percent because the upper limit of group 1 is 35.60 percent. Note that the rankings used to create these maps do not account for the standard errors of the estimates (i.e., just because two regions are in different map groups does not imply that they are significantly different from each other). Tables containing specific estimates for these substate regions are available on the 2016-2018 NSDUH substate webpage at <https://www.samhsa.gov/data/>. Specifically, see the "2016-2018 NSDUH Substate Region Estimates – Excel Tables and CSV Files." Additionally, tables containing *p* values for comparing two substate regions can be found at the same webpage. Specifically, see the "2016-2018 NSDUH: Comparison of Population Percentages from the United States, Census Regions, States, District of Columbia, and Substate Regions." Individual state maps containing enlarged images of these substate regions also are available.<sup>1</sup>

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<sup>1</sup> The substate regions within Los Angeles County, California, Cook County, Illinois, and New York City, New York, shown on the national maps also appear as enlarged images in the individual state maps for California, Illinois, and New York, respectively. Enlargements of specific substate regions other than for an entire state are unavailable in this set of 29 national maps.

**Figure 1 *Illicit Drug Use in the Past Month* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**

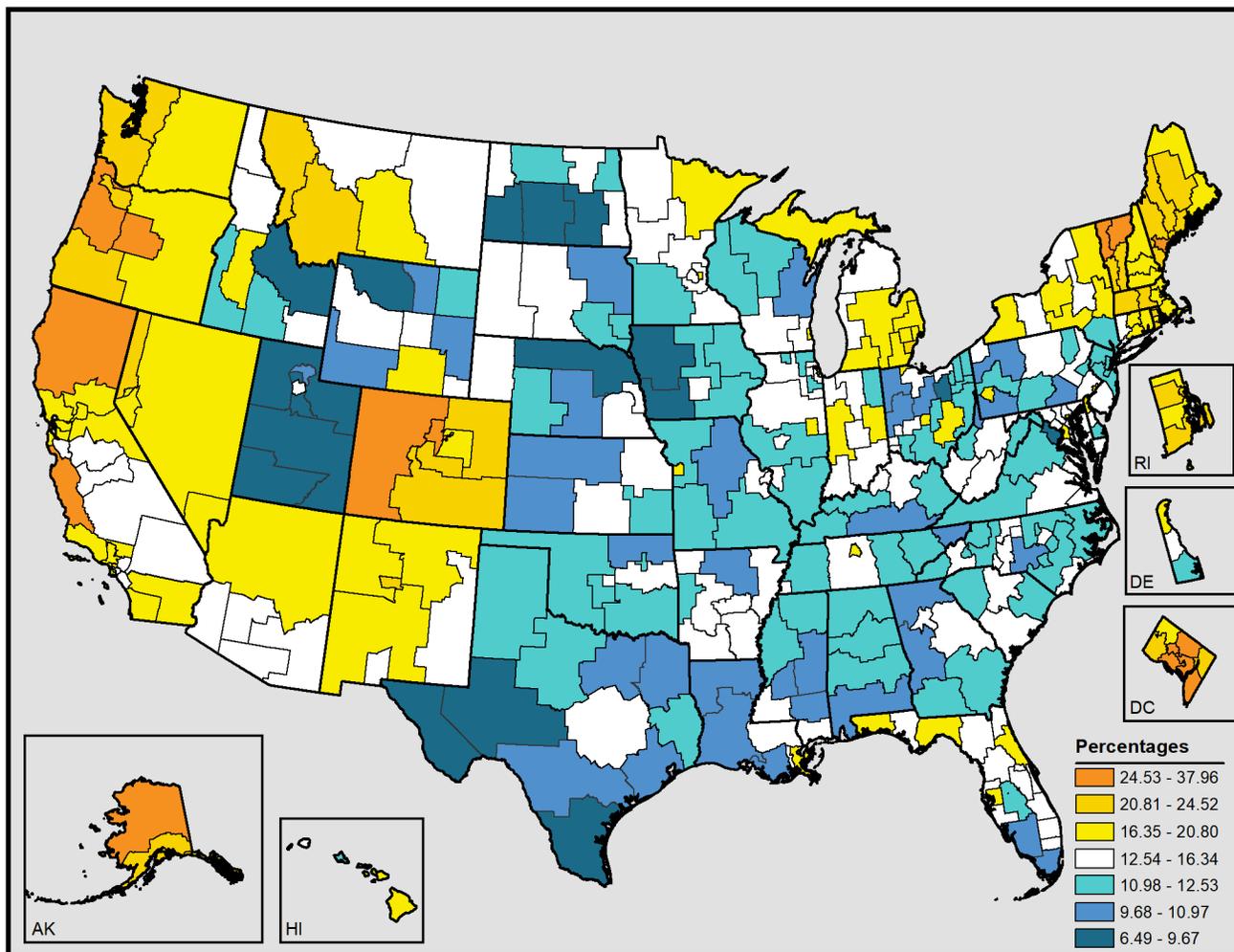


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NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

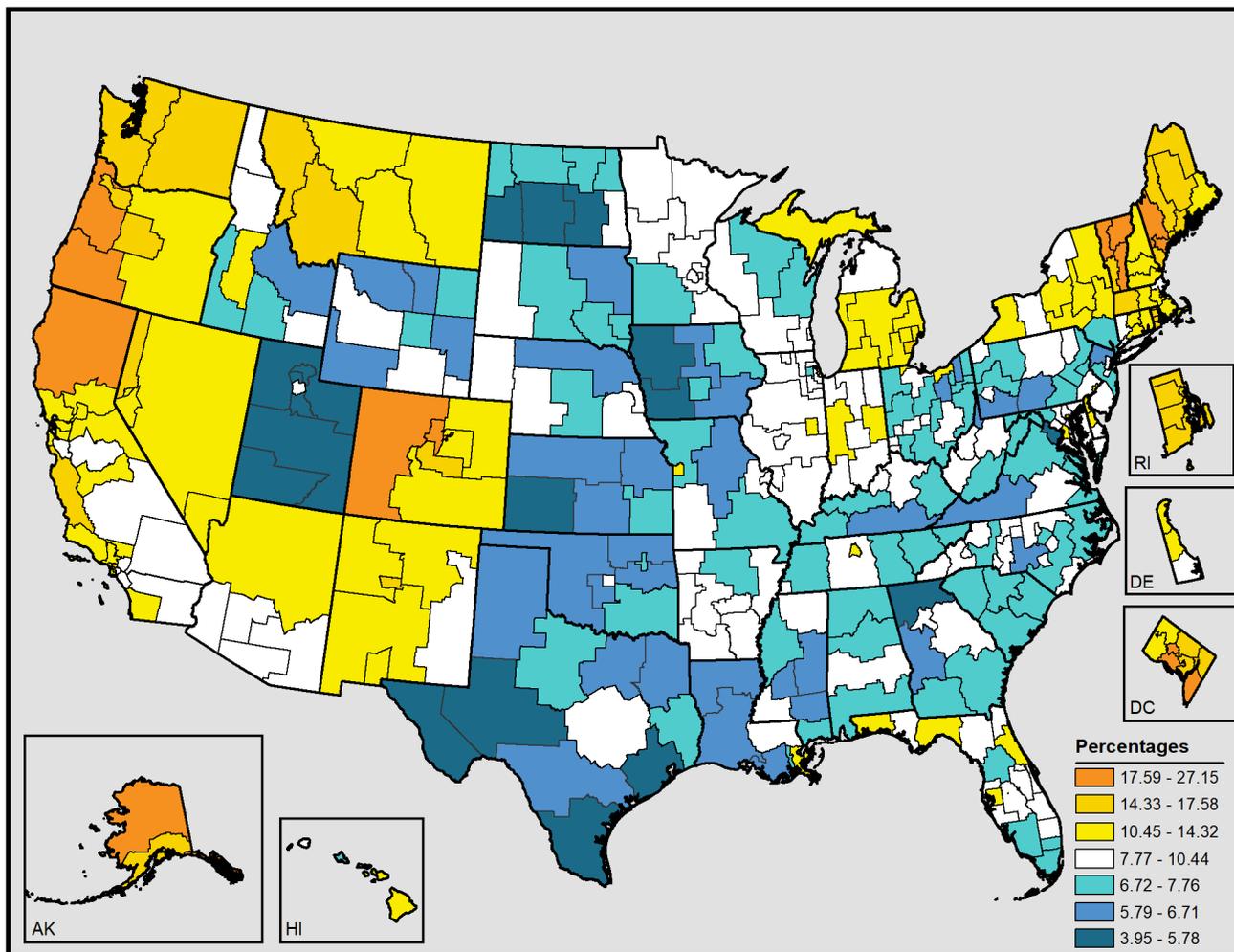
**Figure 2** *Marijuana Use in the Past Year* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

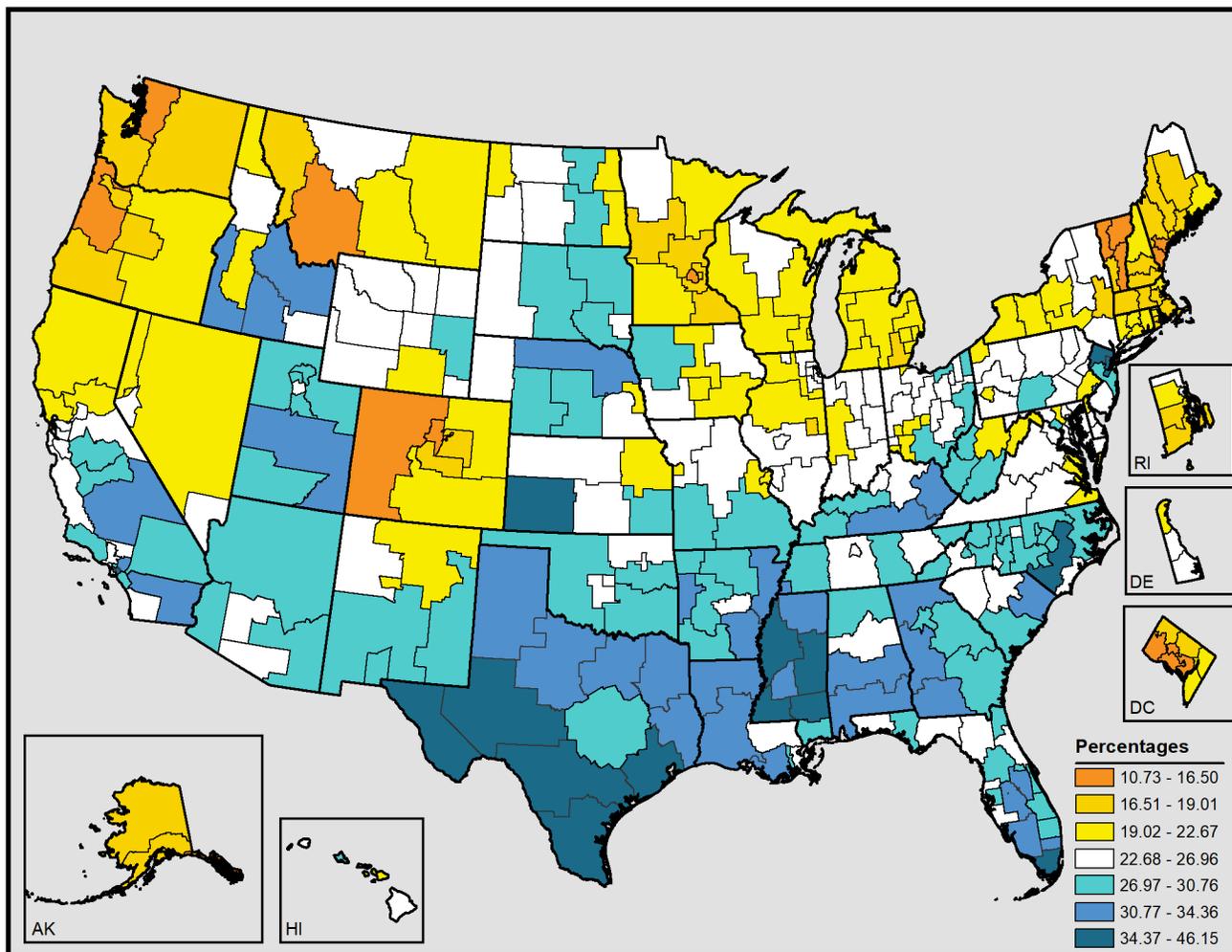
**Figure 3 Marijuana Use in the Past Month among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

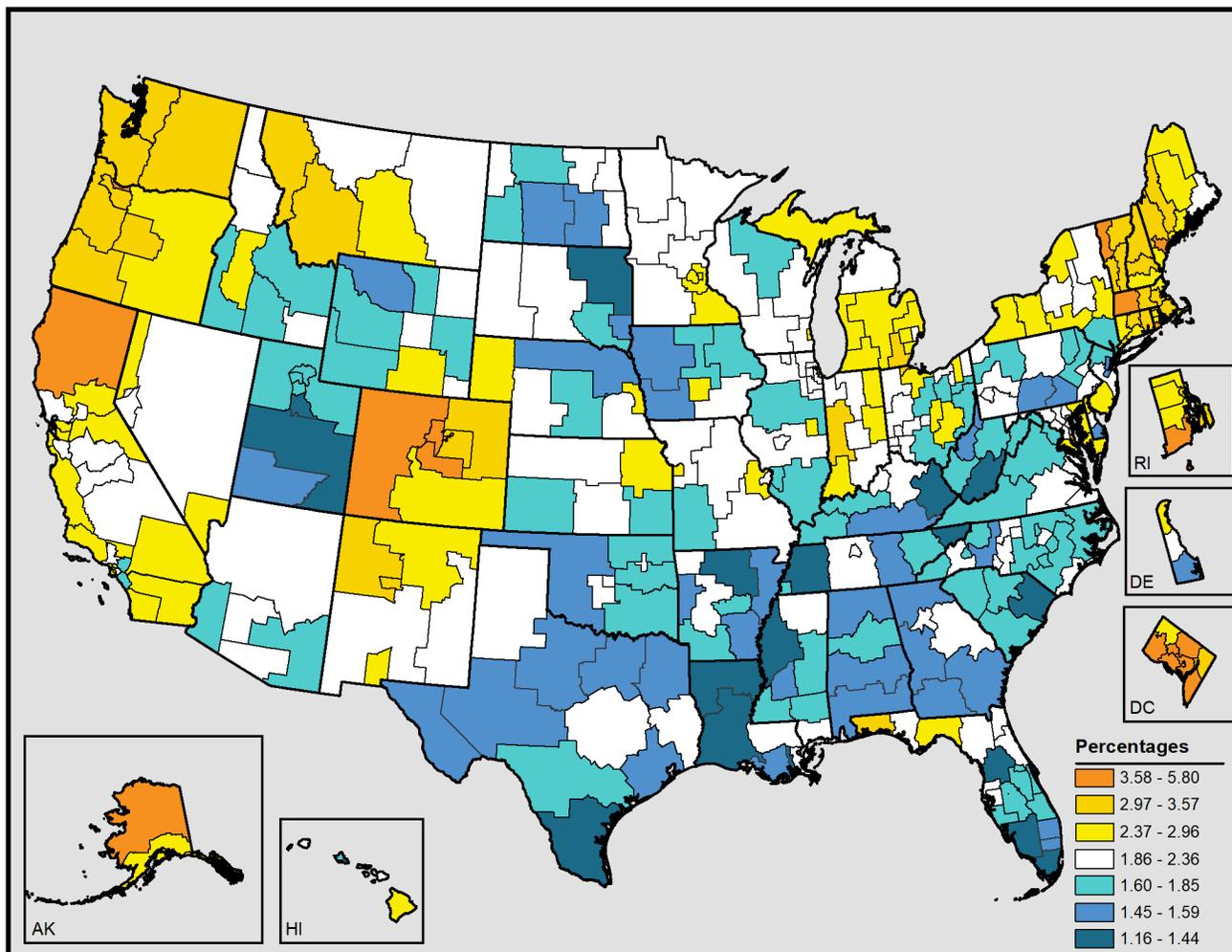
**Figure 4** *Perceptions of Great Risk from Smoking Marijuana Once a Month* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

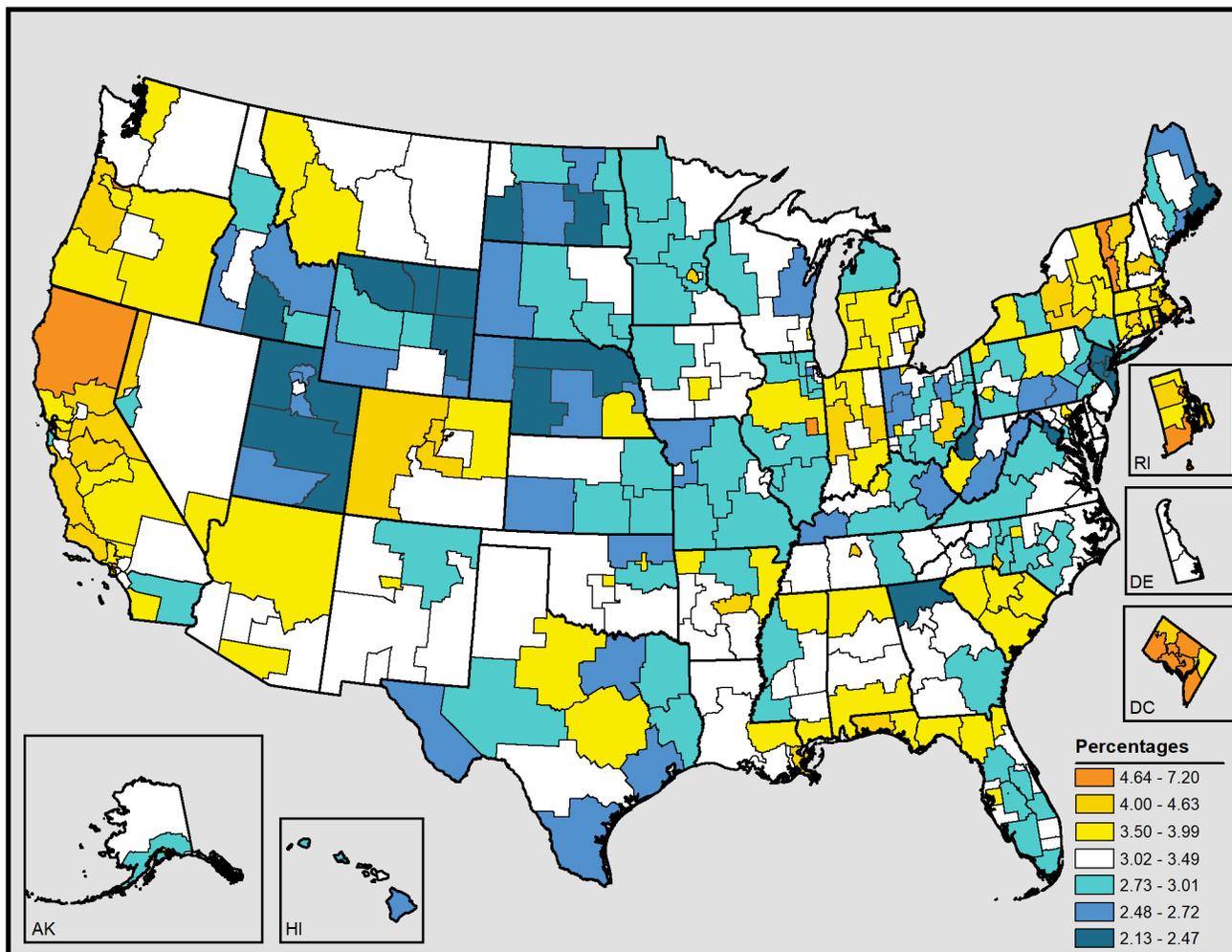
**Figure 5** *First Use of Marijuana* among Individuals Aged 12 or Older, by Substate Region: Average Annual Initiation Estimates (Expressed as Percentages of the At-Risk Population) Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

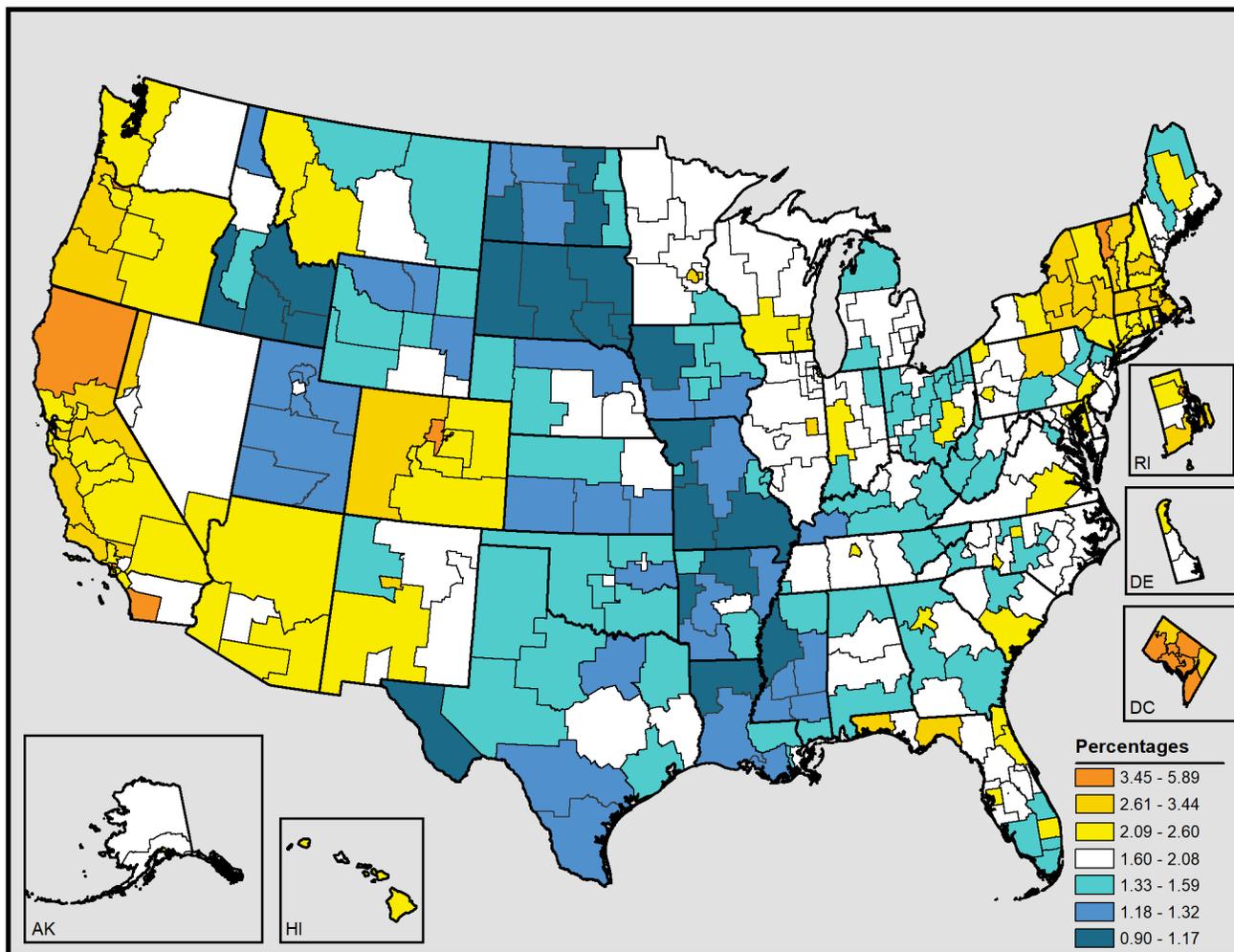
**Figure 6 *Illicit Drug Use Other Than Marijuana in the Past Month* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

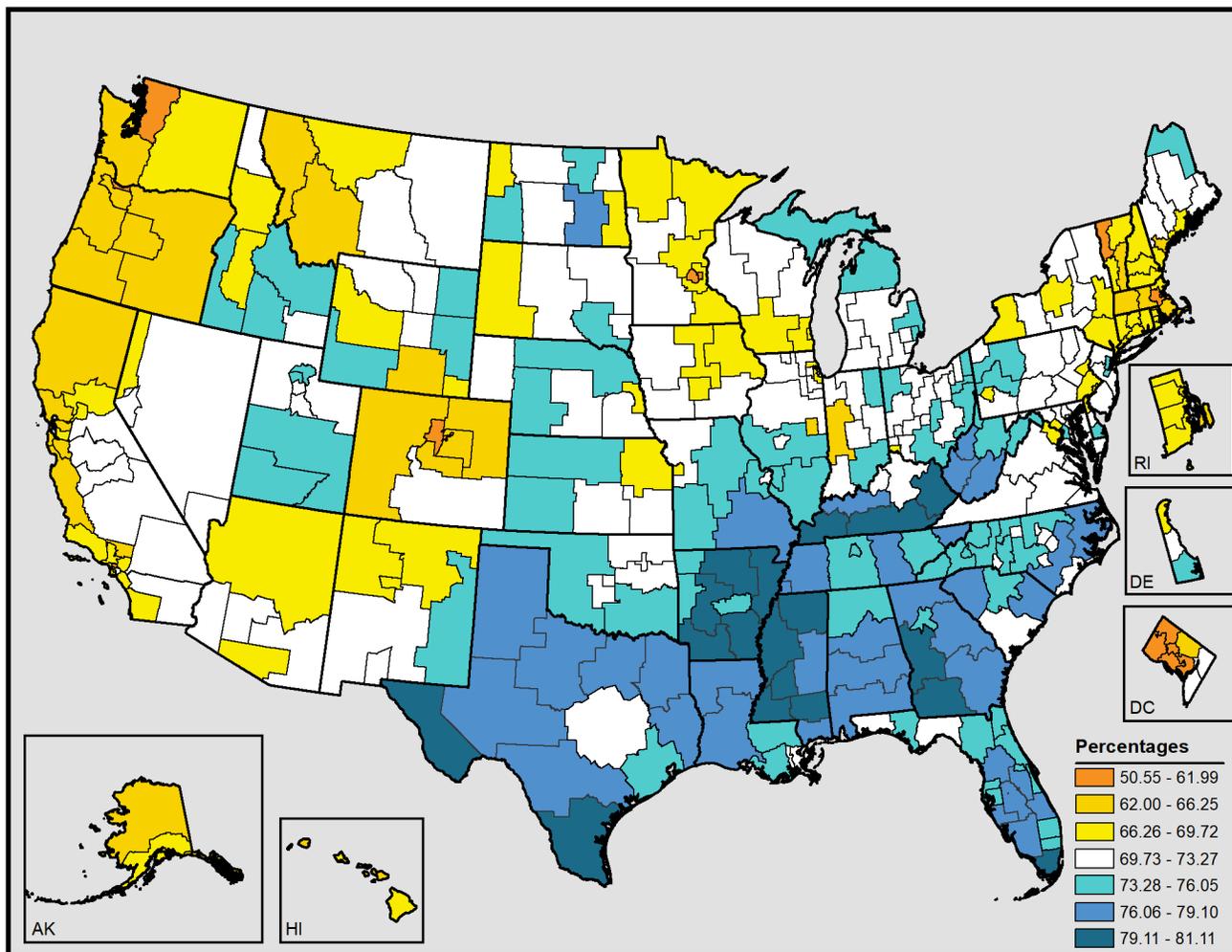
**Figure 7 Cocaine Use in the Past Year among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

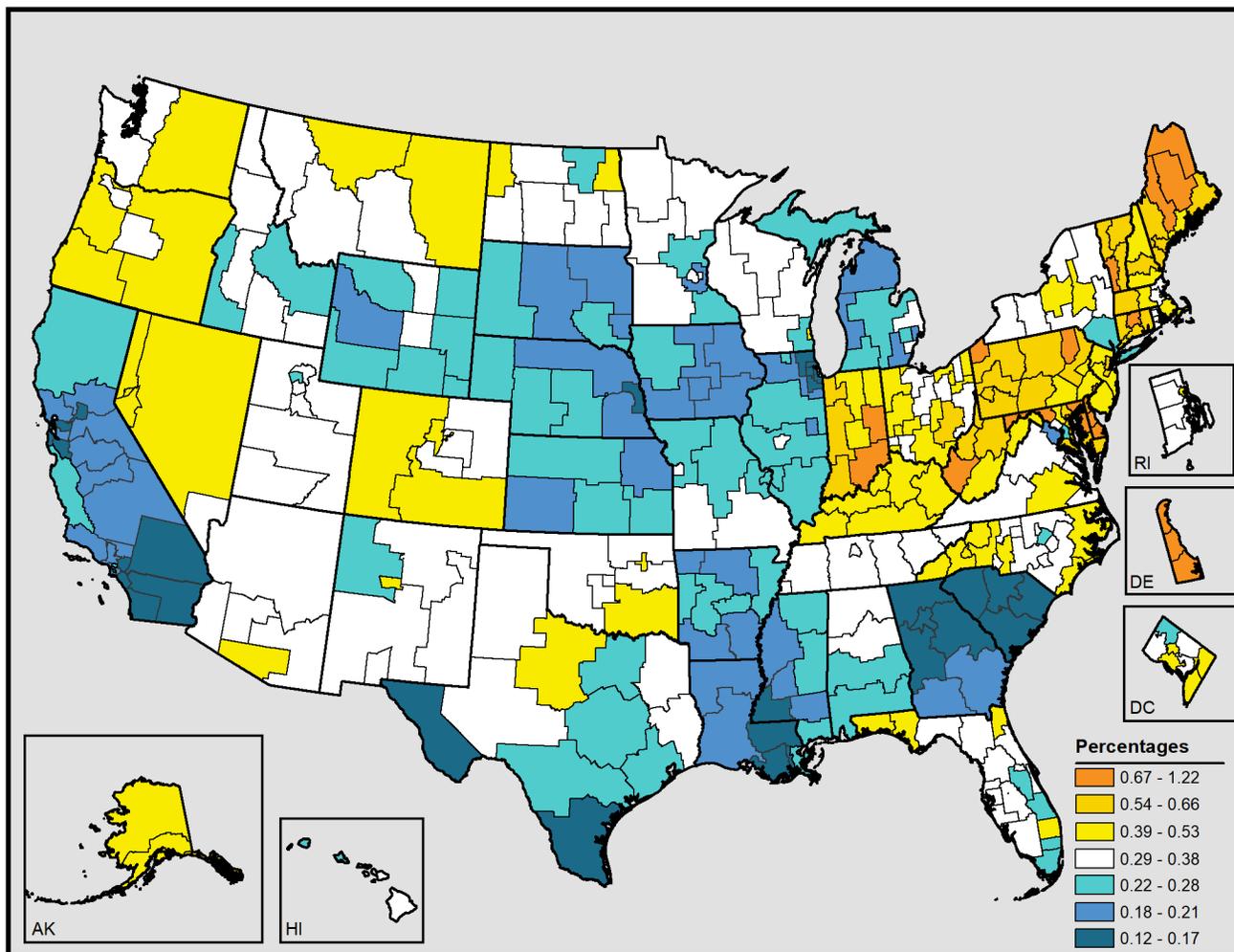
**Figure 8** *Perceptions of Great Risk from Using Cocaine Once a Month among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

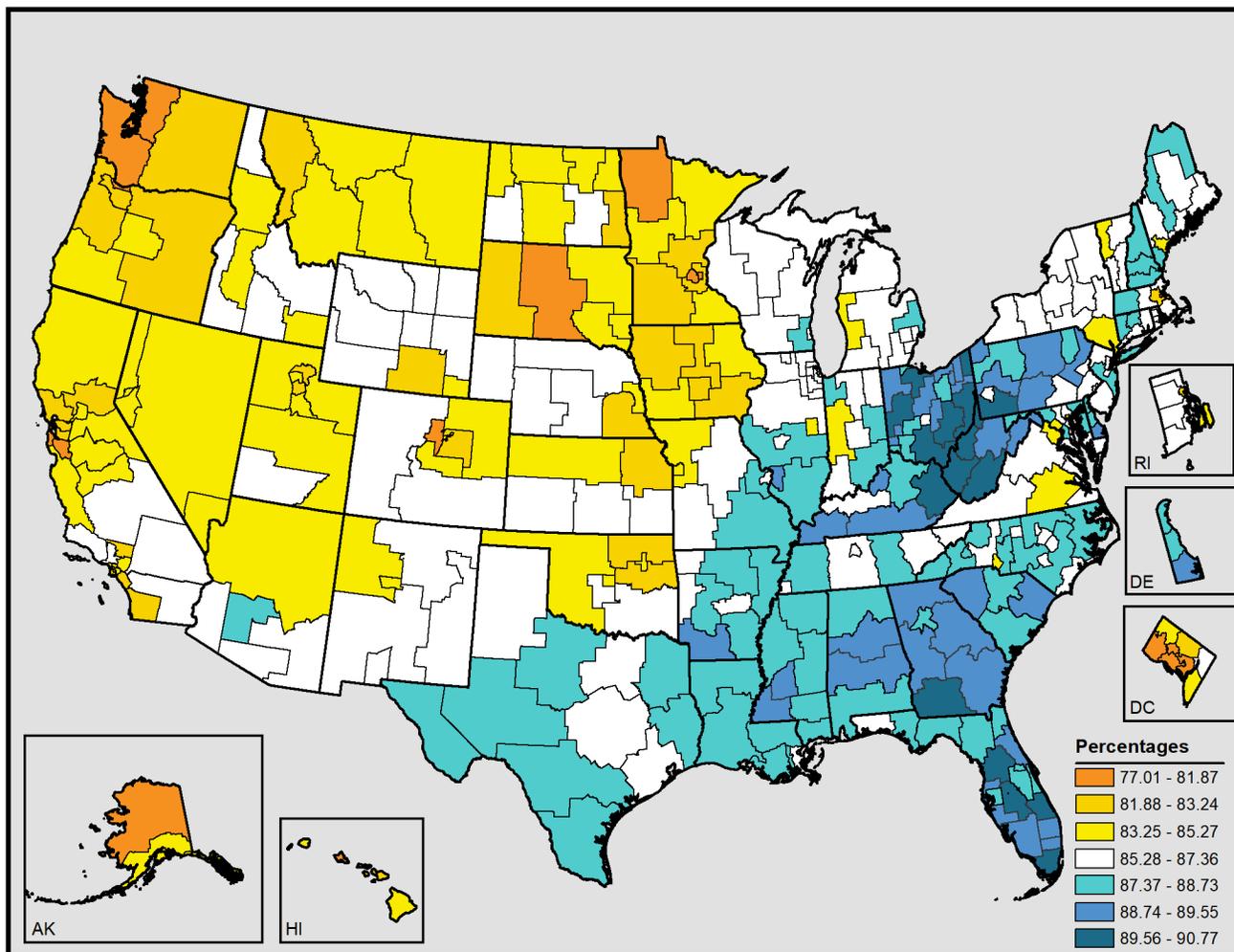
**Figure 9 Heroin Use in the Past Year among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

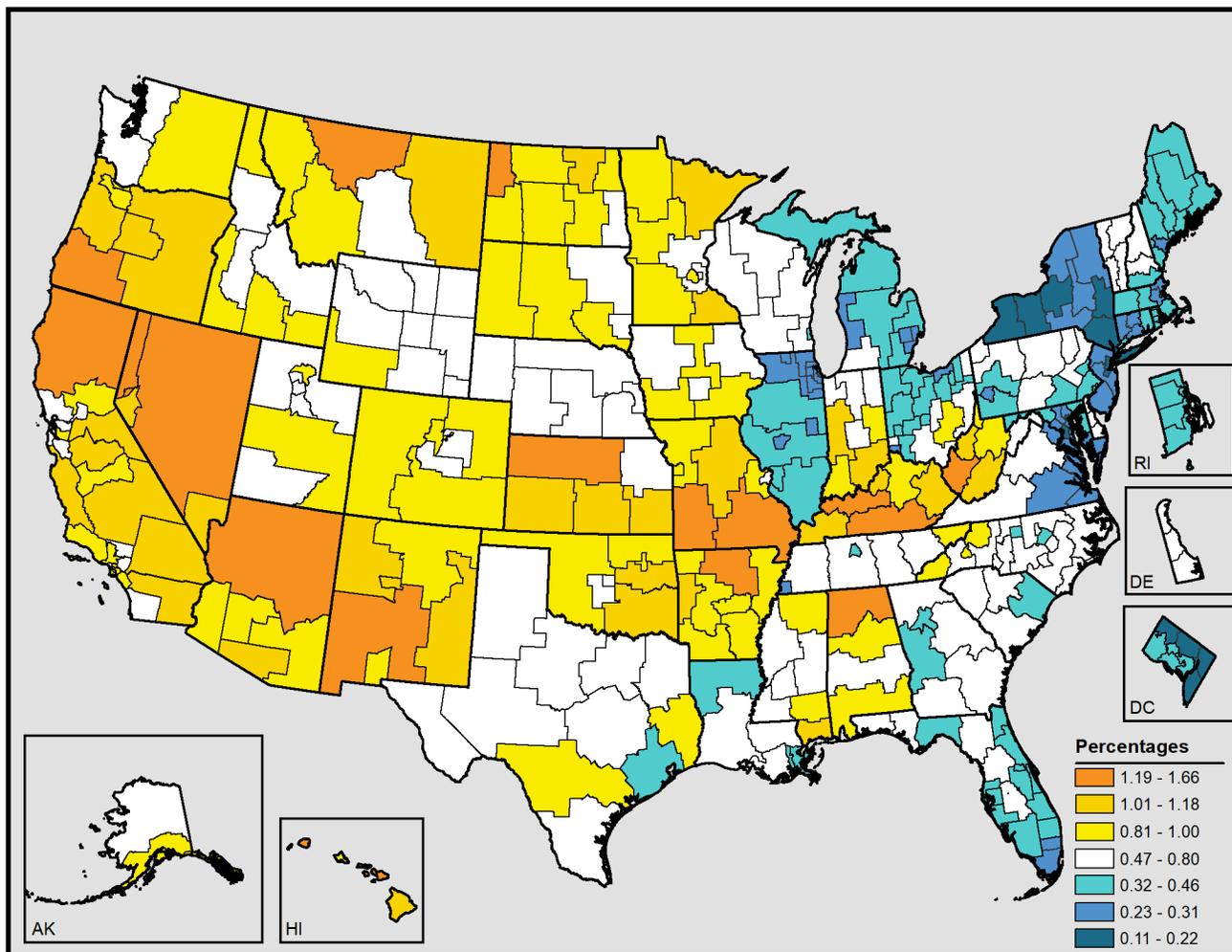
**Figure 10** *Perceptions of Great Risk from Trying Heroin Once or Twice* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

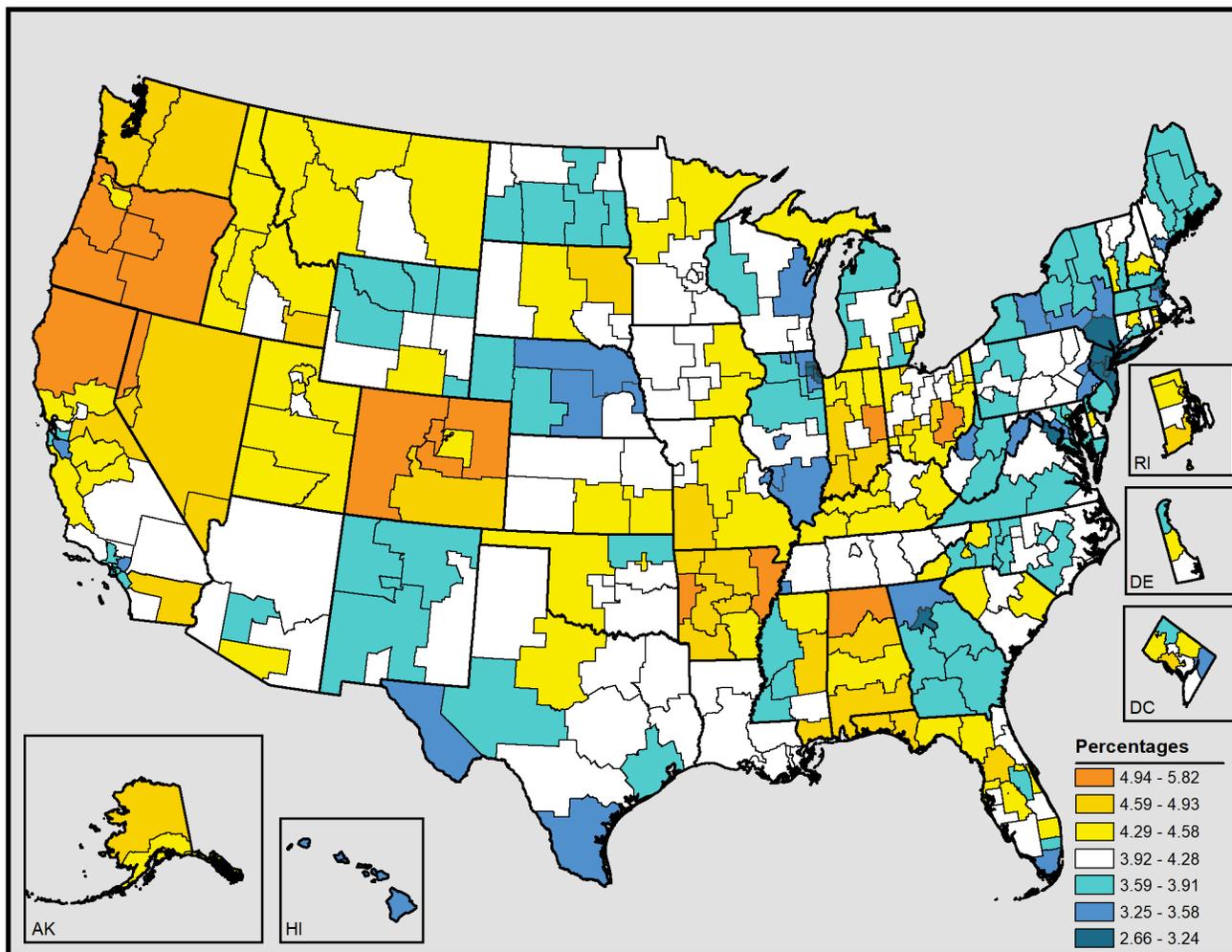
**Figure 11** *Methamphetamine Use in the Past Year* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

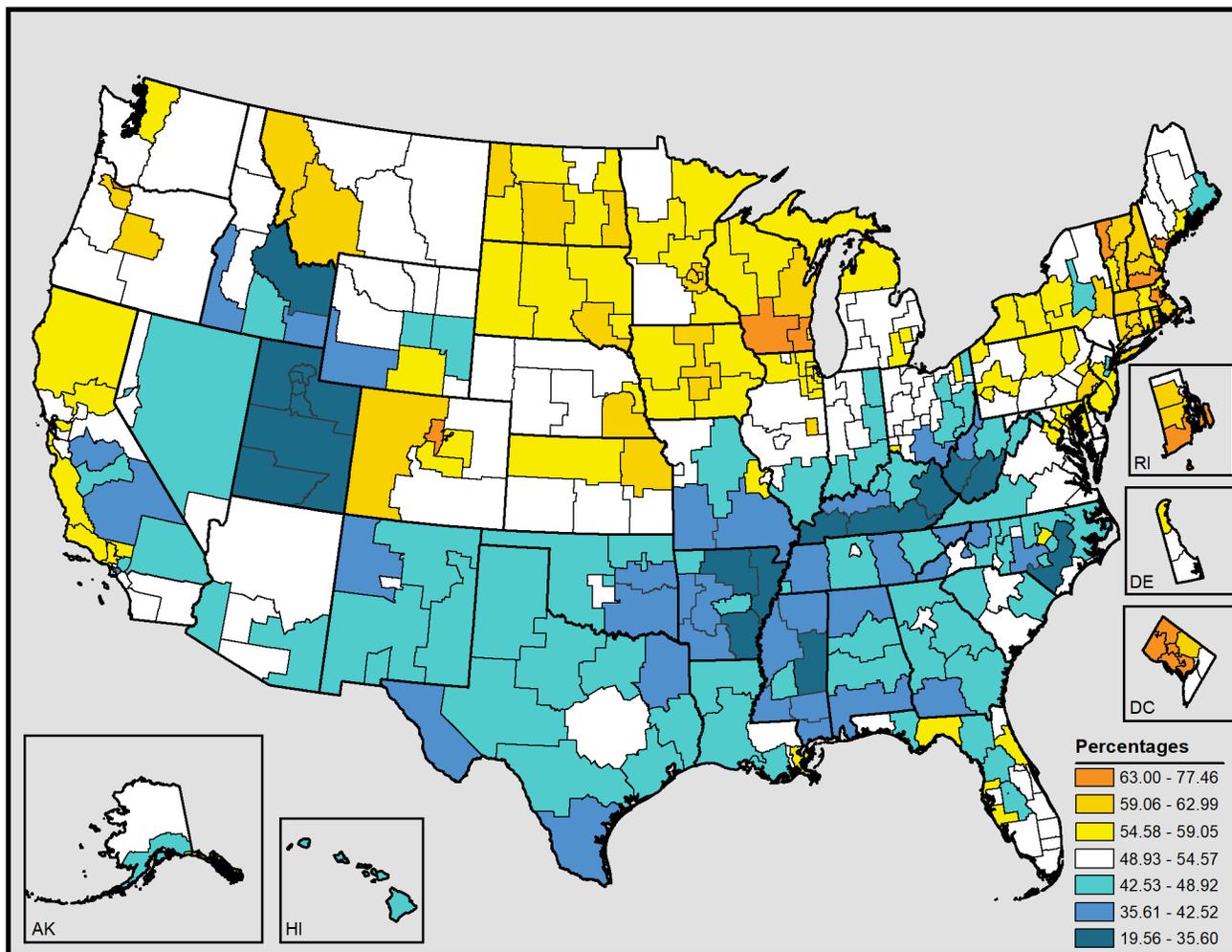
**Figure 12 Pain Reliever Misuse in the Past Year among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

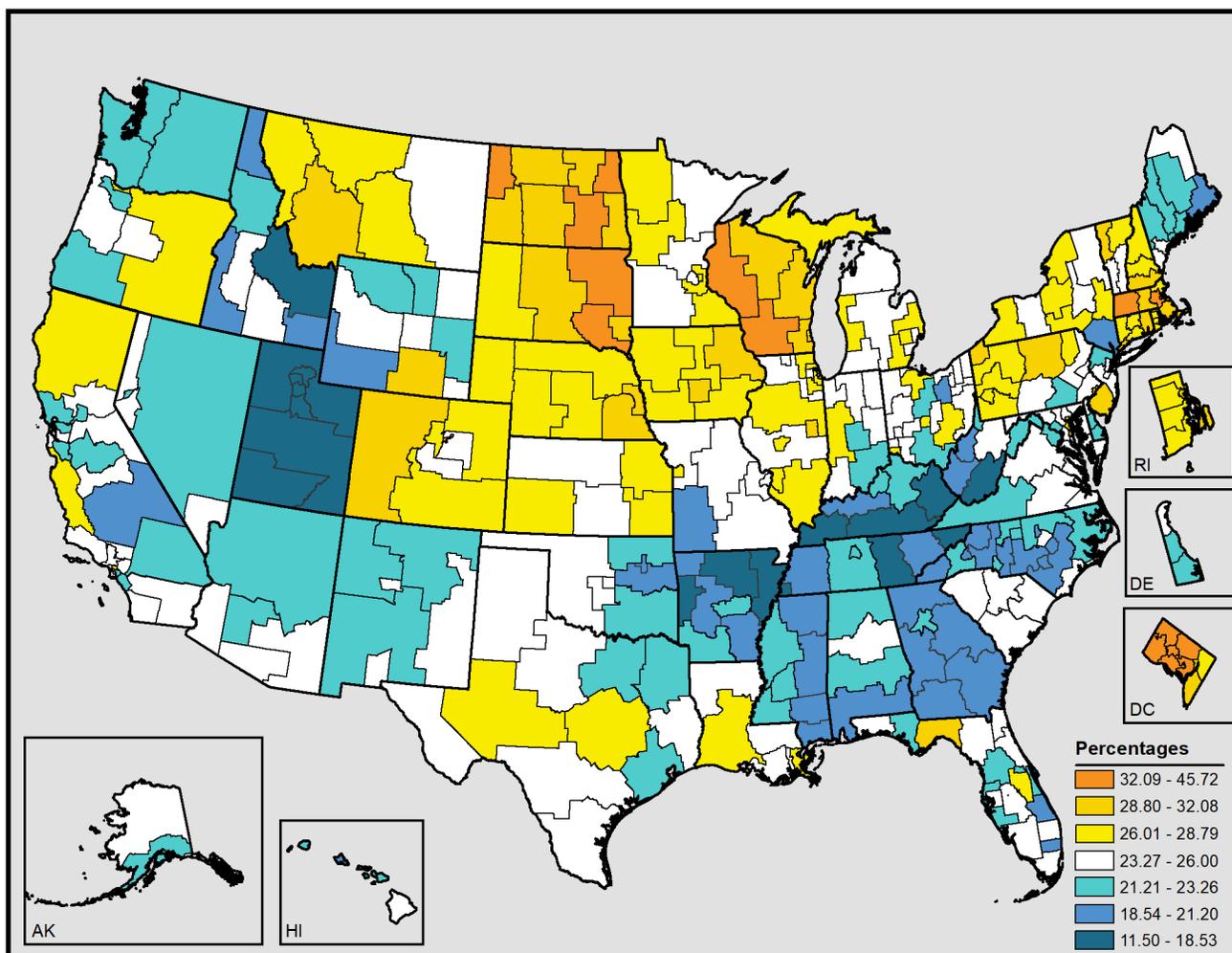
**Figure 13** *Alcohol Use in the Past Month* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

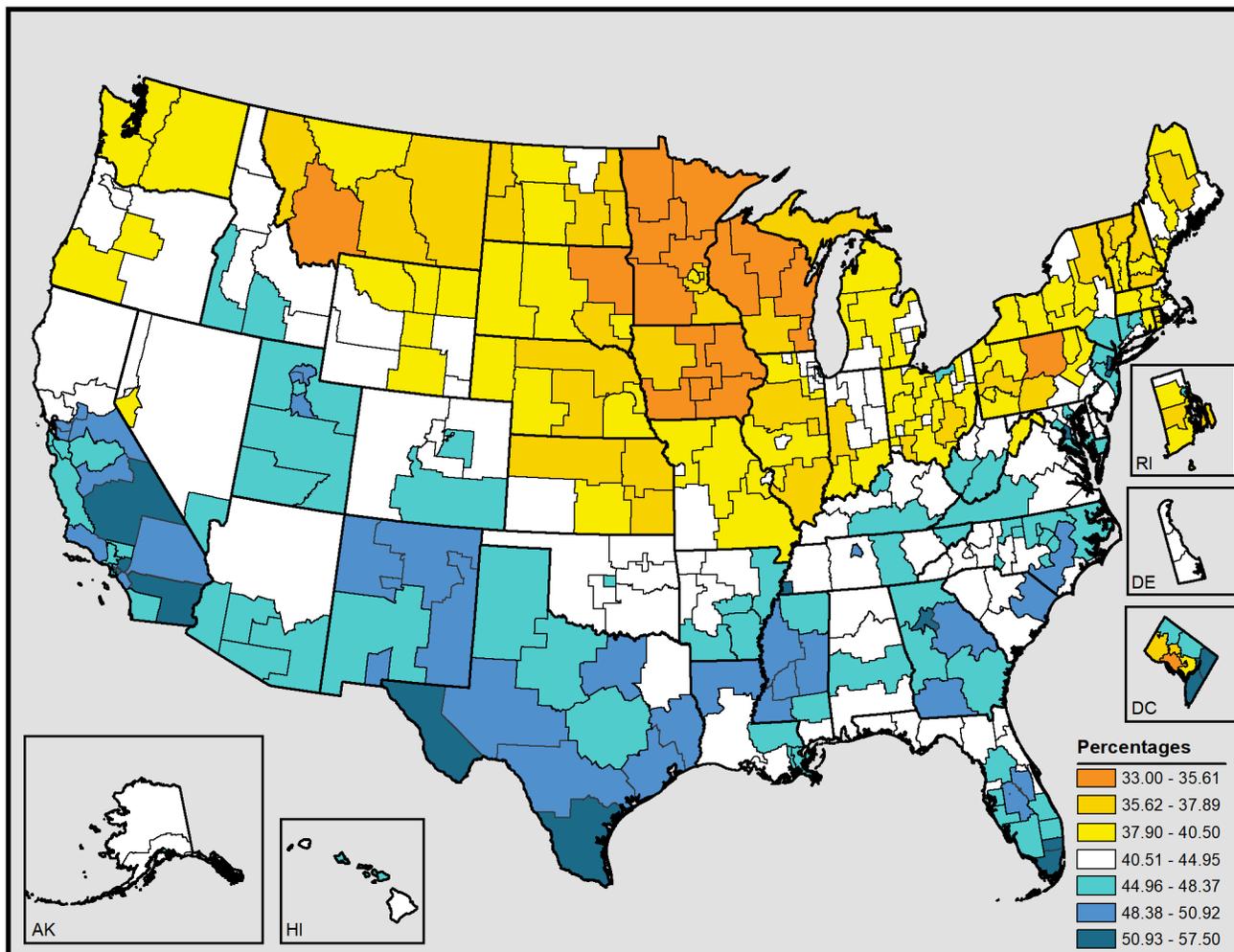
**Figure 14** *Binge Alcohol Use in the Past Month* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

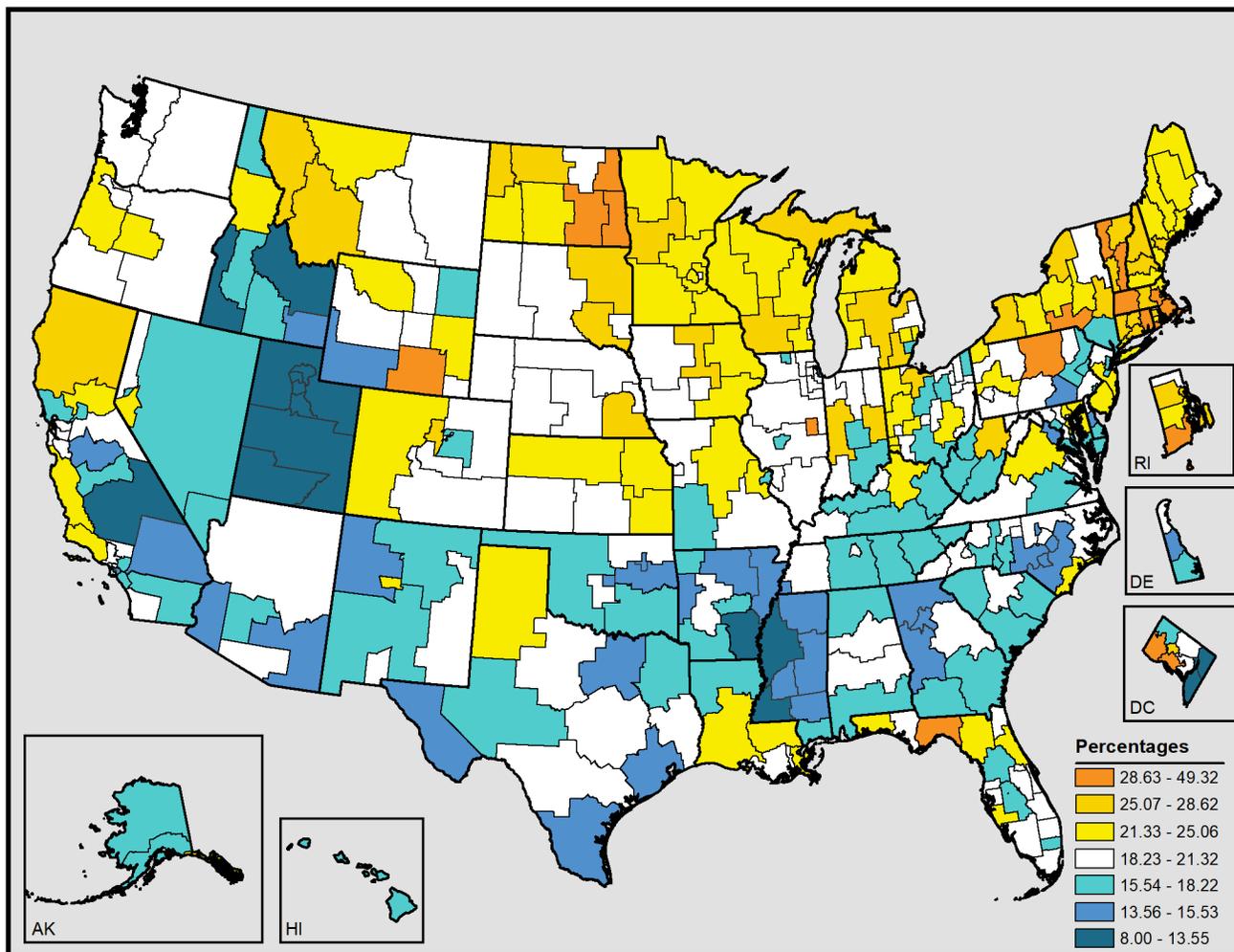
**Figure 15** *Perceptions of Great Risk from Having Five or More Drinks of an Alcoholic Beverage Once or Twice a Week among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

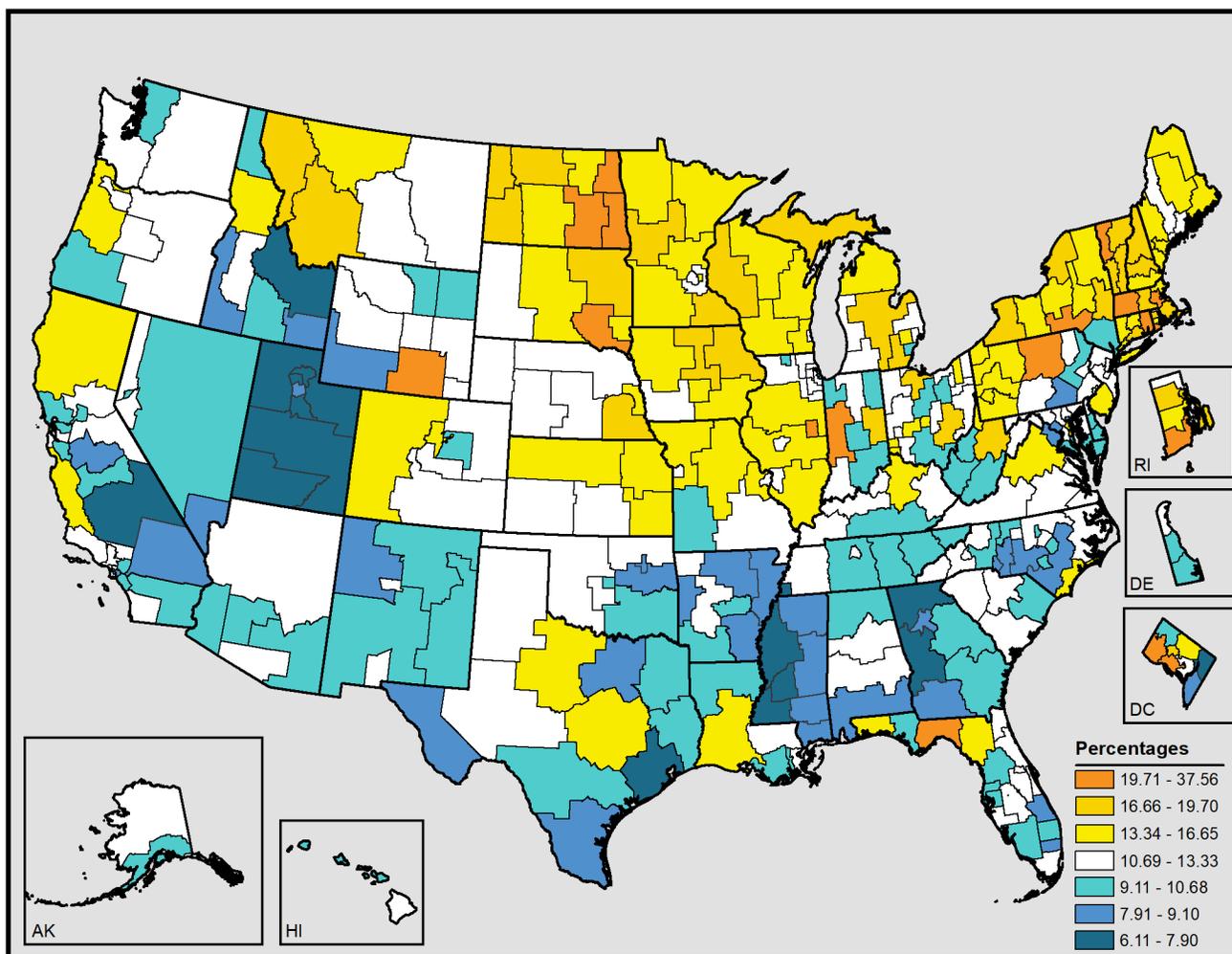
**Figure 16 Alcohol Use in the Past Month among Individuals Aged 12 to 20, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

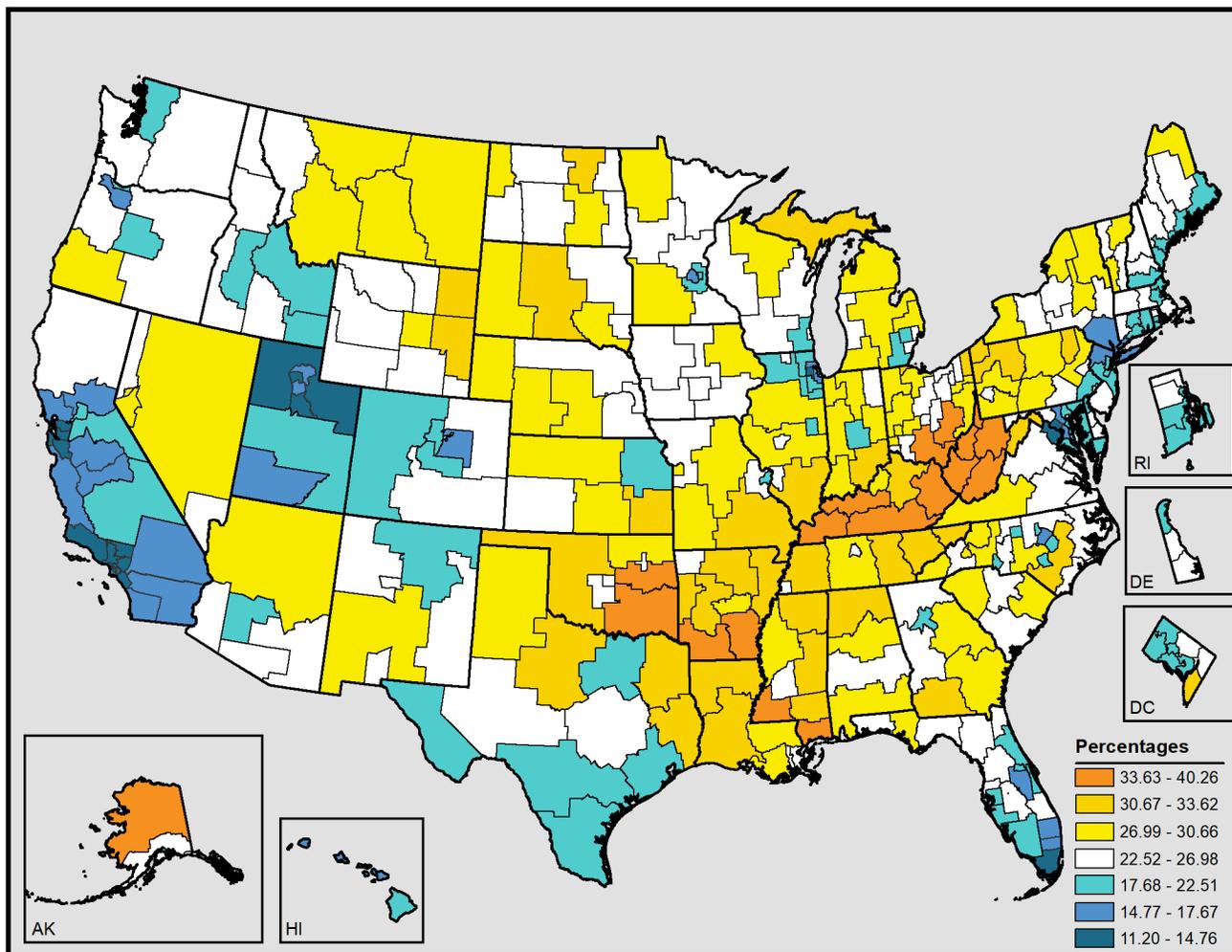
**Figure 17** *Binge Alcohol Use in the Past Month among Individuals Aged 12 to 20, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

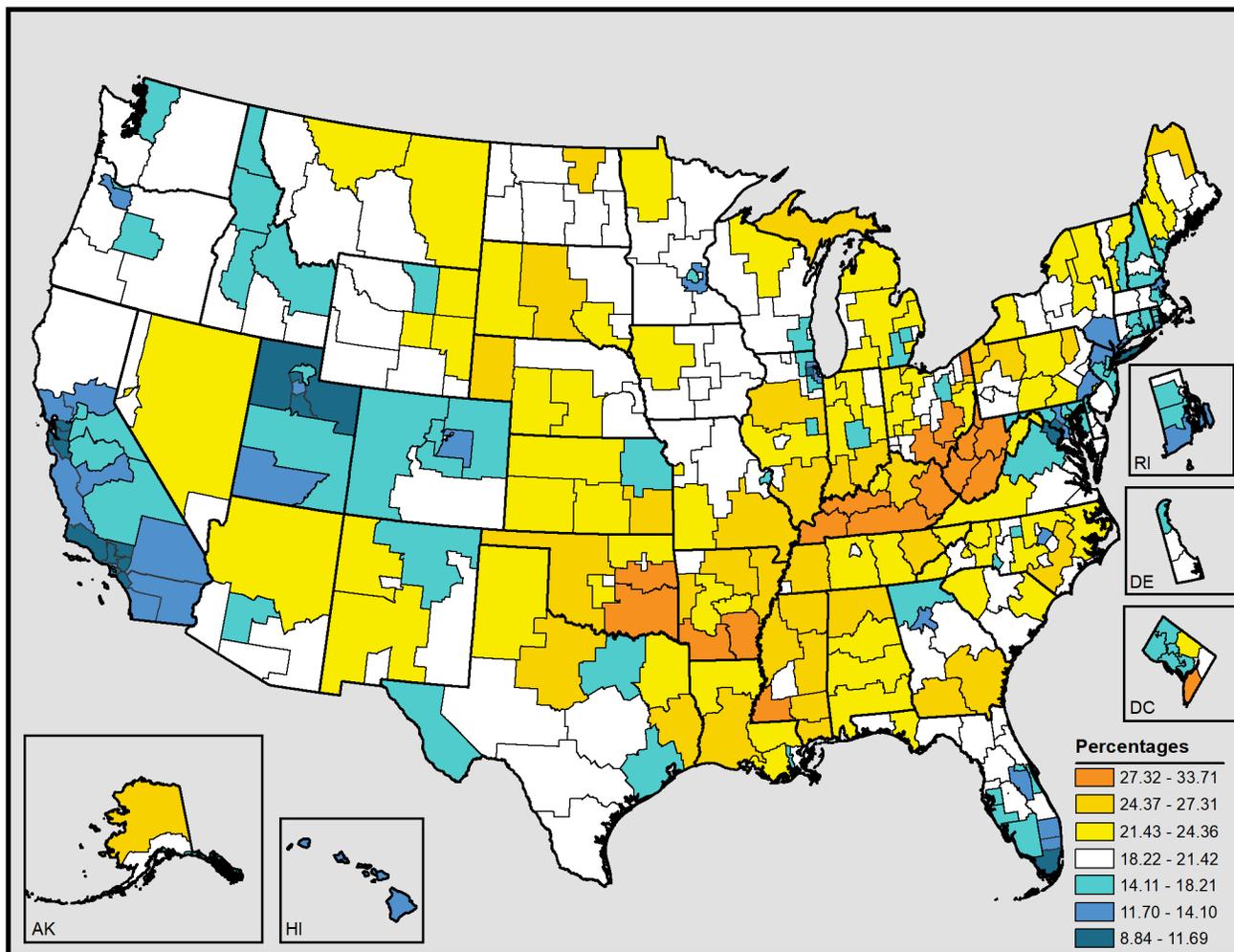
**Figure 18 Tobacco Product Use in the Past Month among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

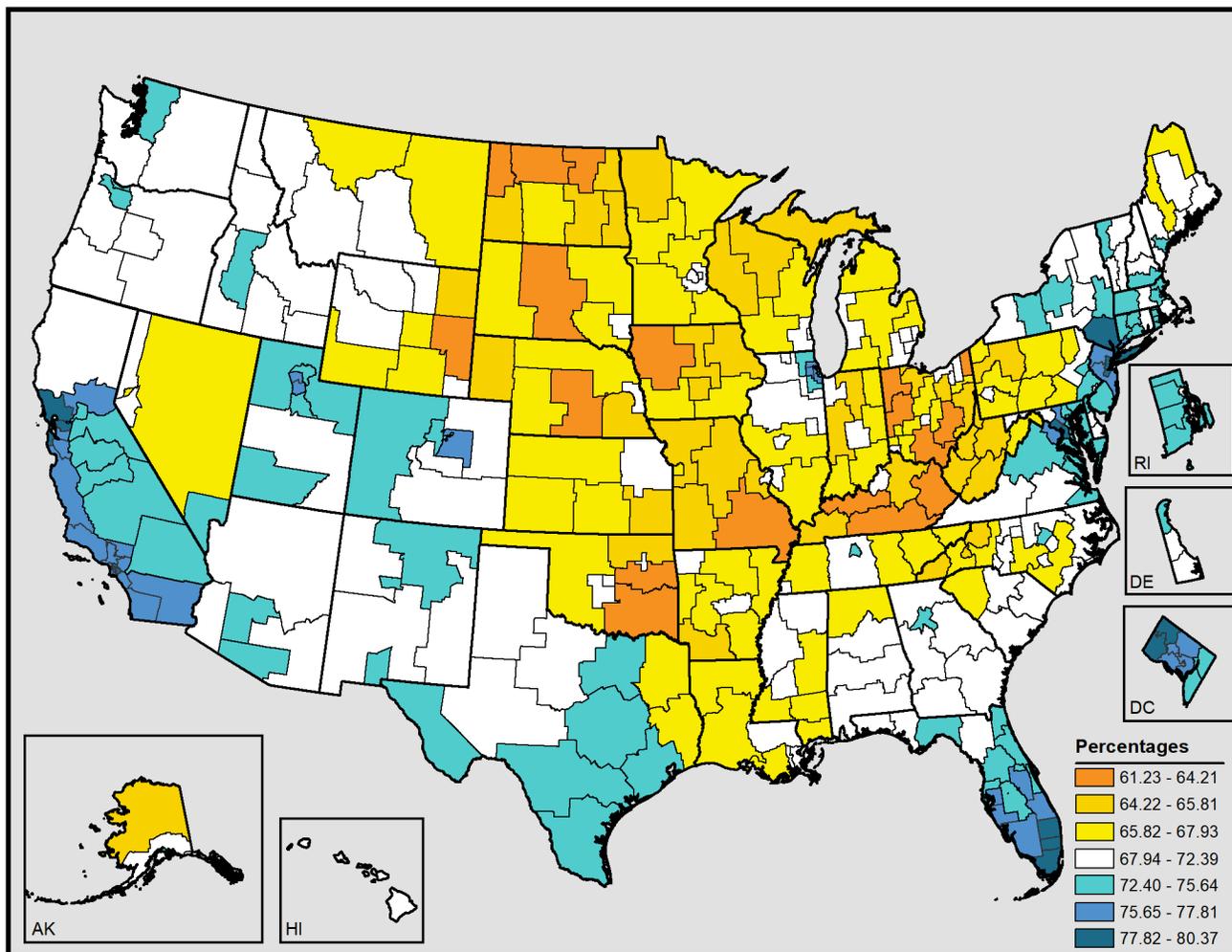
**Figure 19 Cigarette Use in the Past Month among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

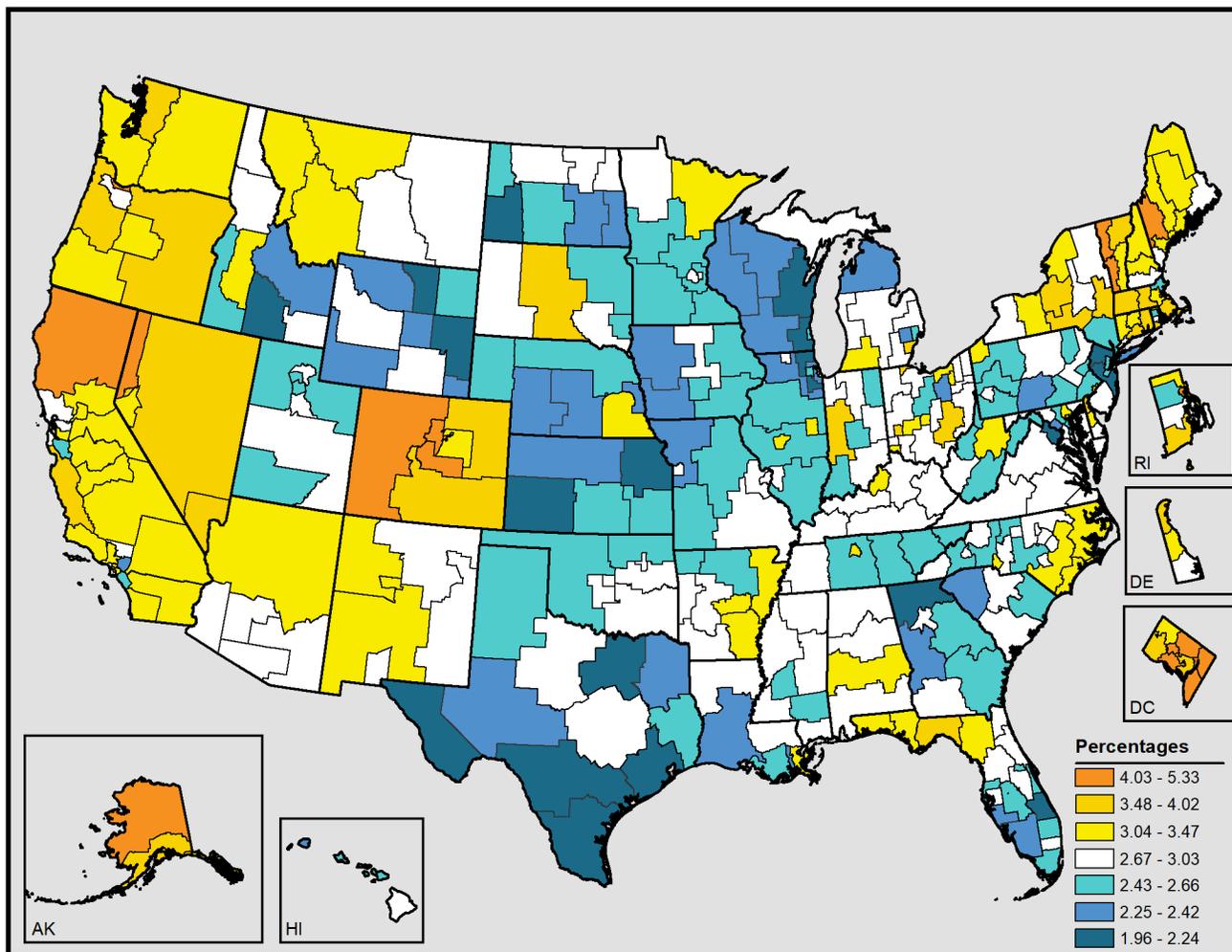
**Figure 20** *Perceptions of Great Risk from Smoking One or More Packs of Cigarettes per Day among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

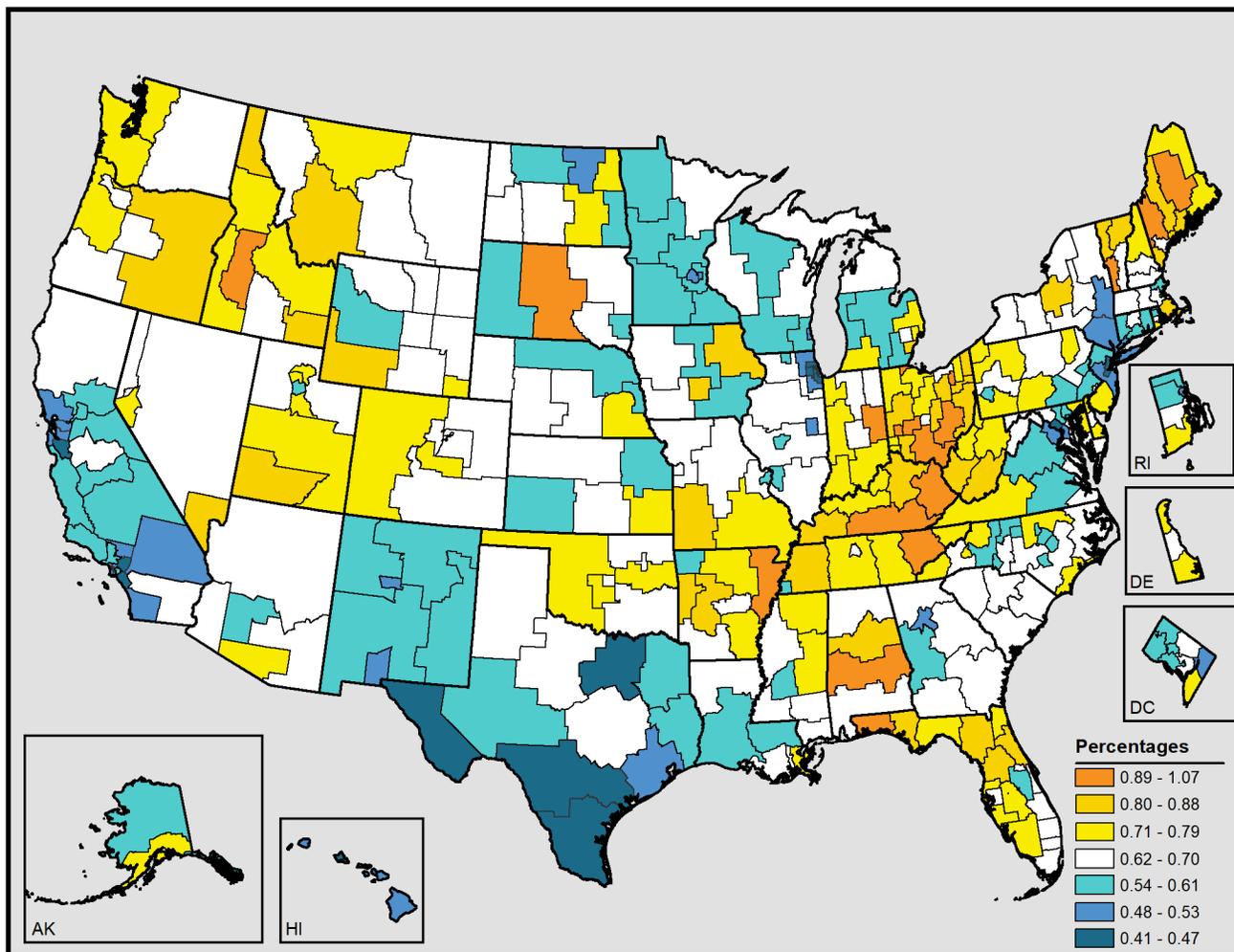
**Figure 21** *Illicit Drug Use Disorder in the Past Year* among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

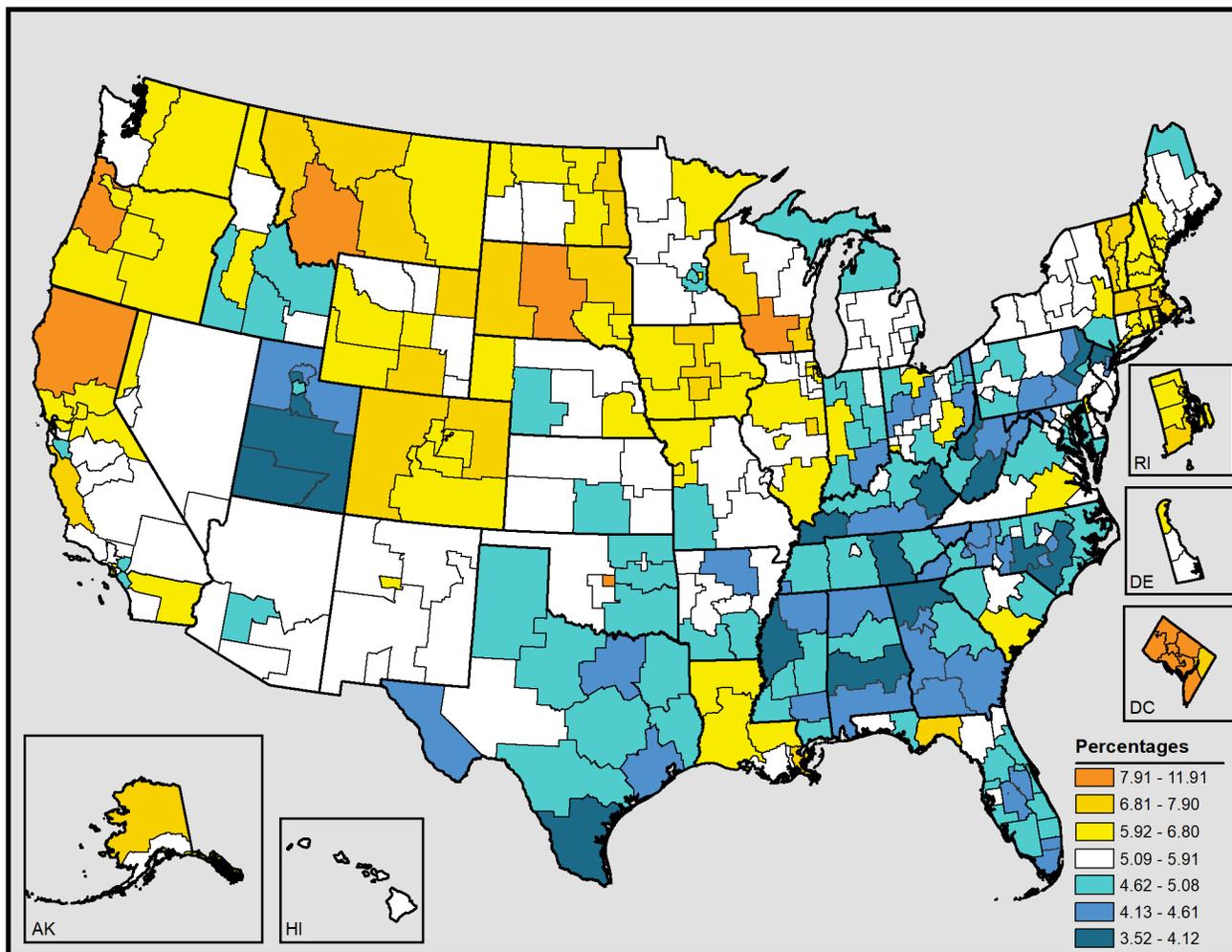
**Figure 22 Pain Reliever Use Disorder in the Past Year among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

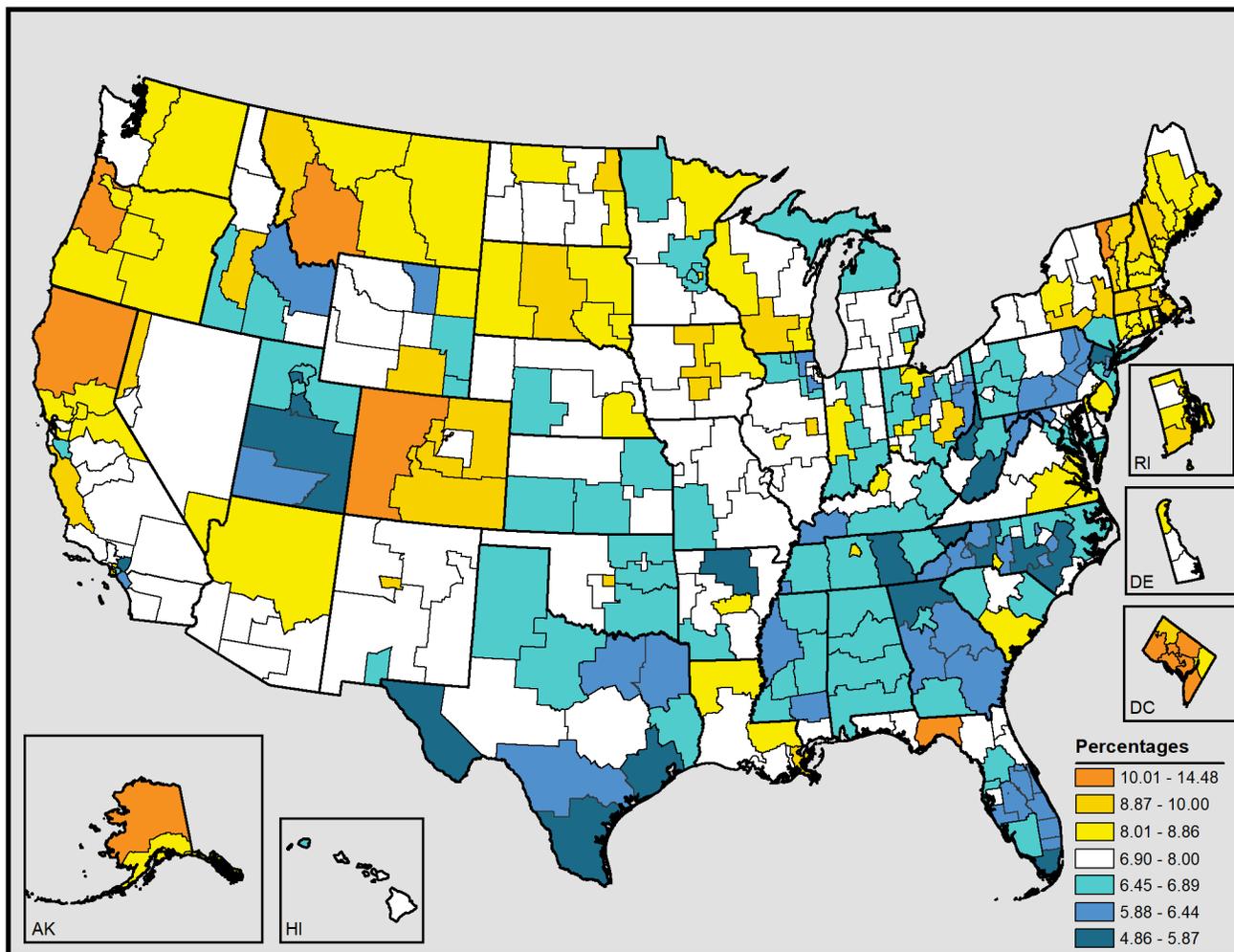
**Figure 23 Alcohol Use Disorder in the Past Year among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

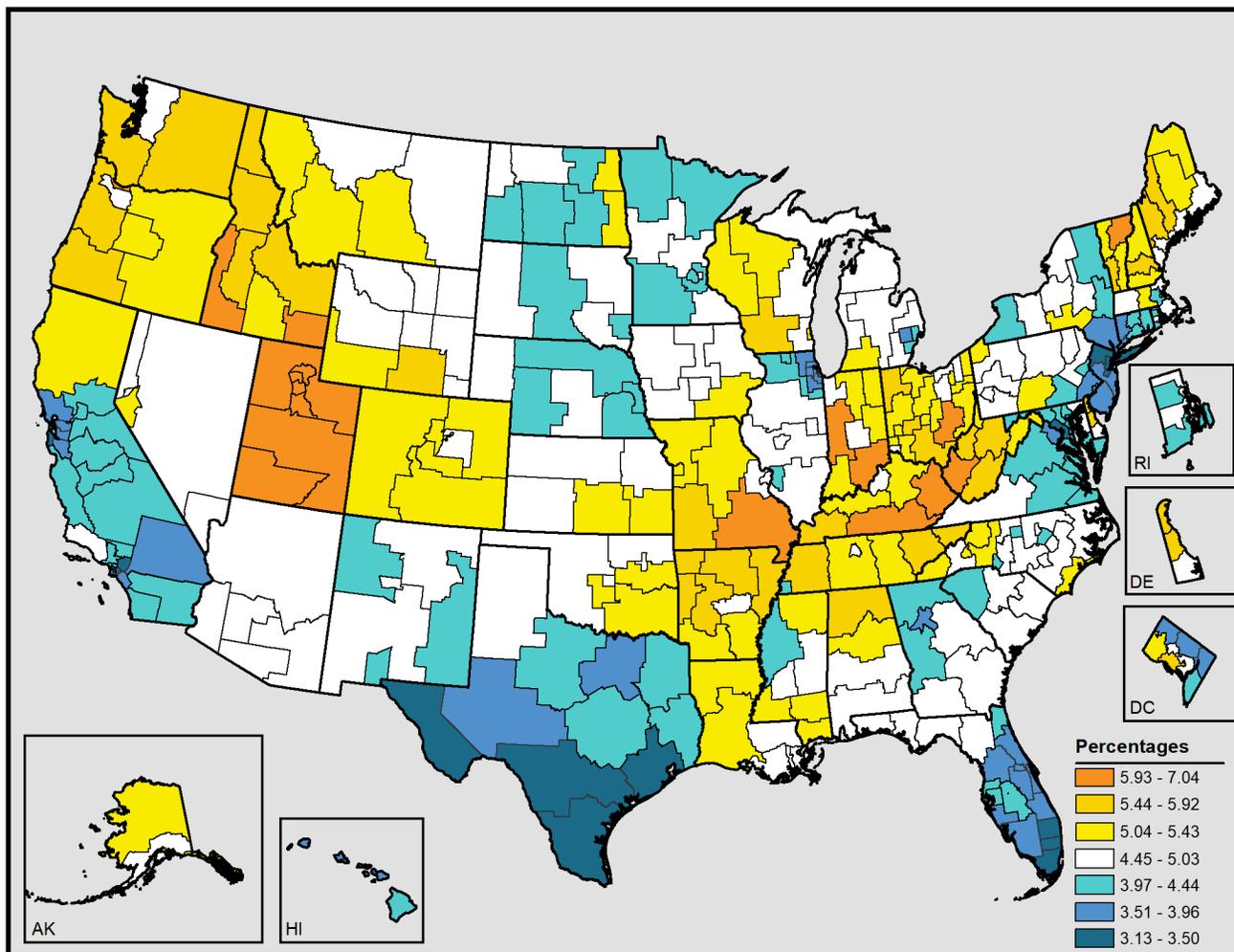
**Figure 24** *Substance Use Disorder in the Past Year among Individuals Aged 12 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

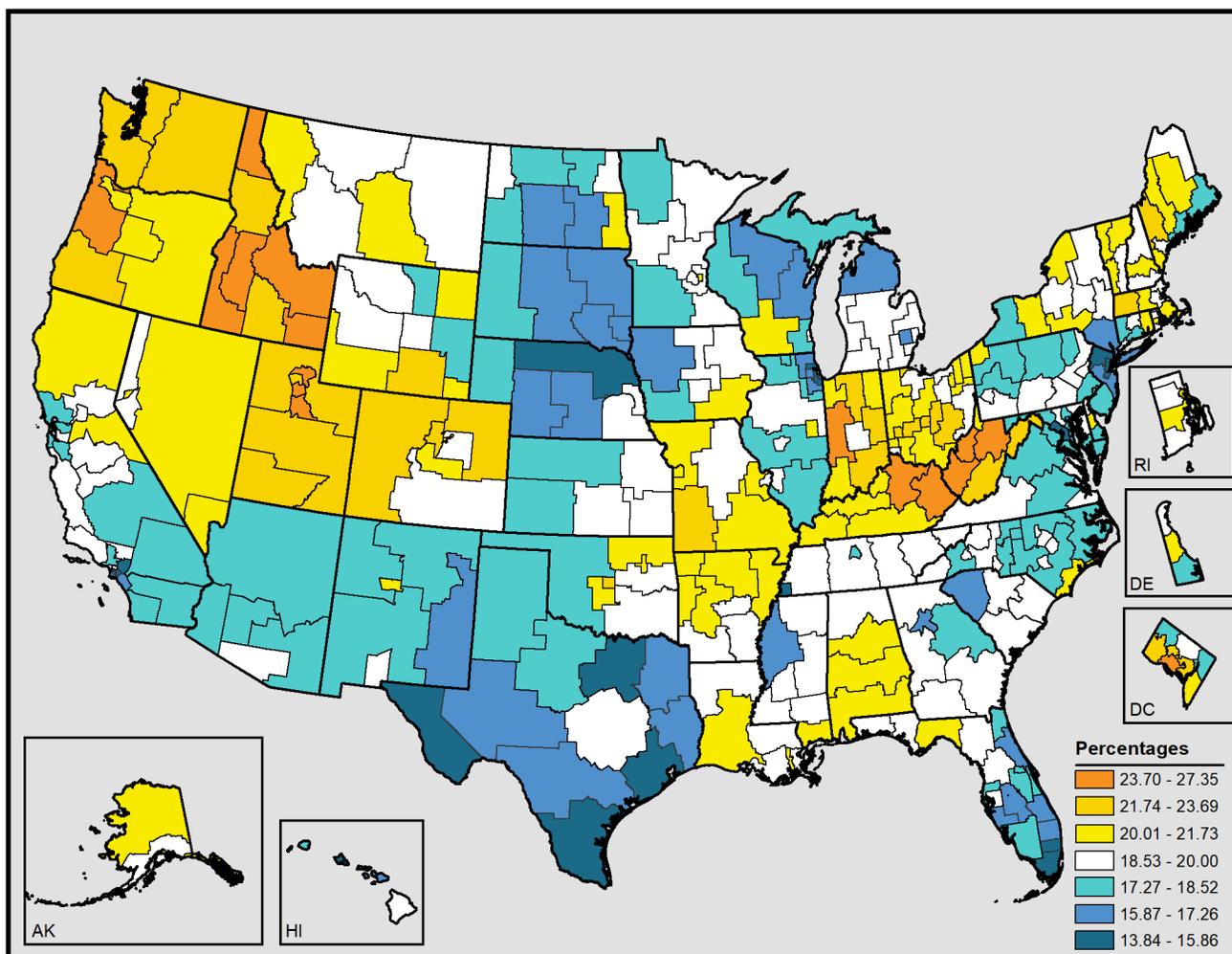
**Figure 25** *Serious Mental Illness in the Past Year among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

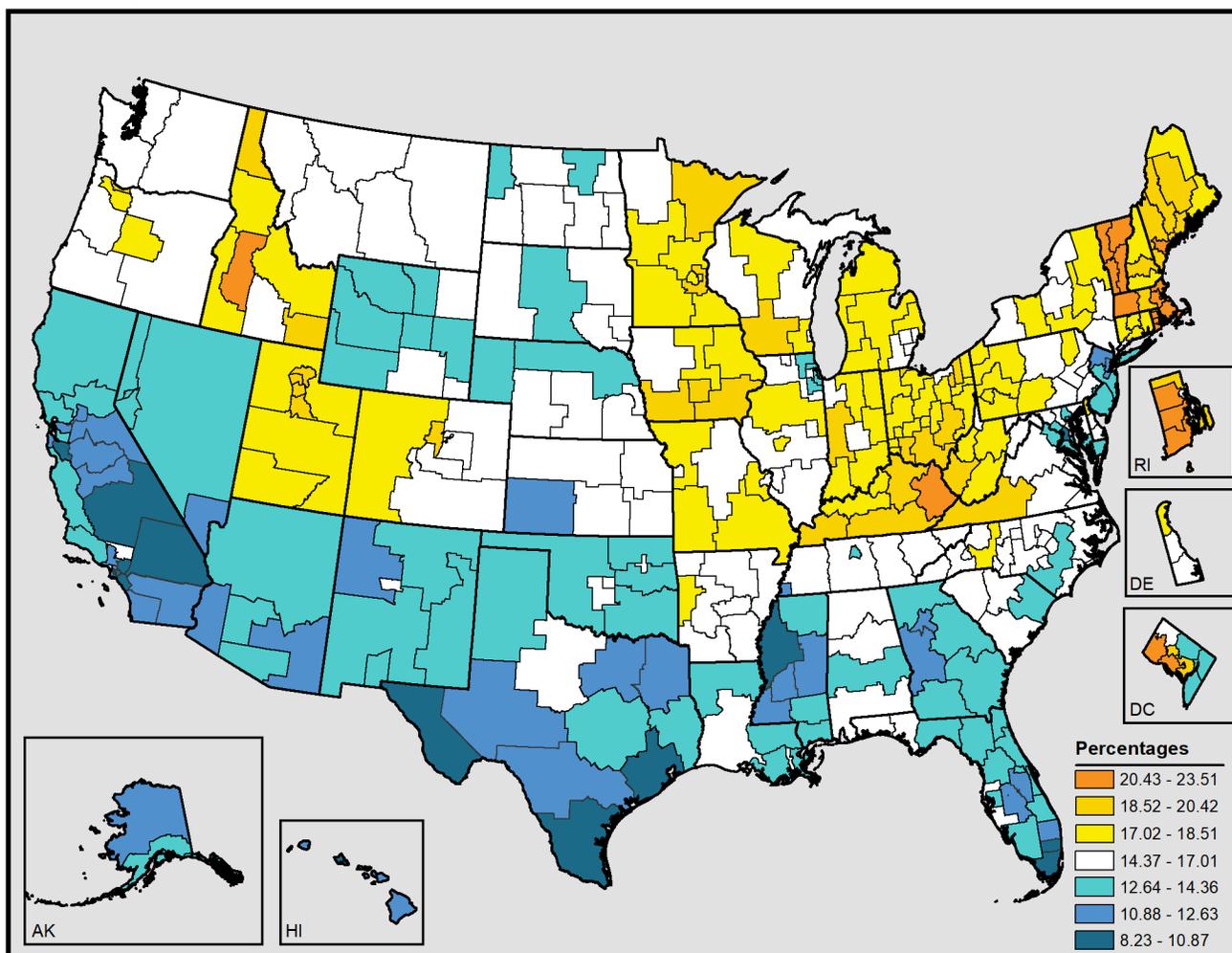
**Figure 26** *Any Mental Illness in the Past Year among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

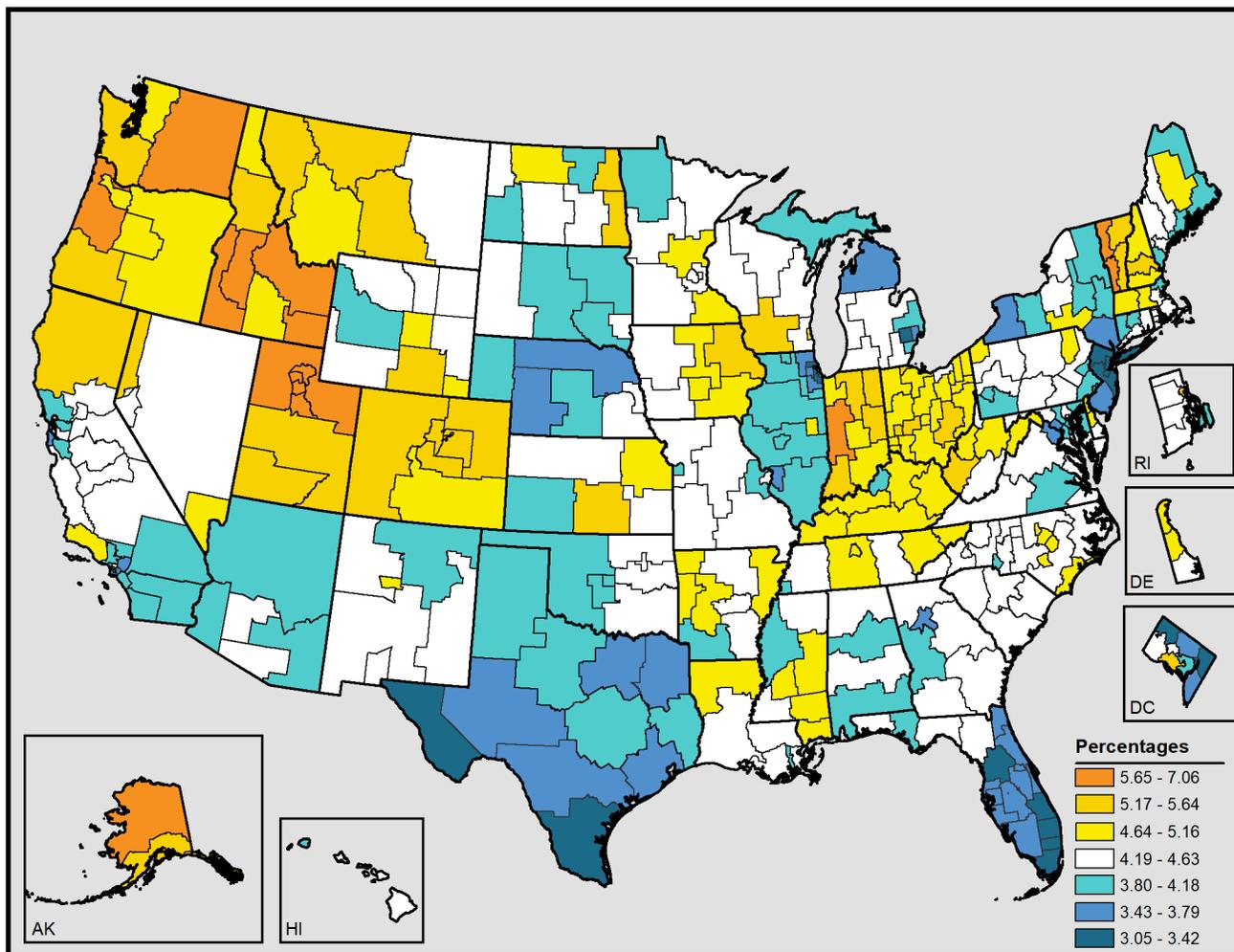
**Figure 27** *Received Mental Health Services in the Past Year among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

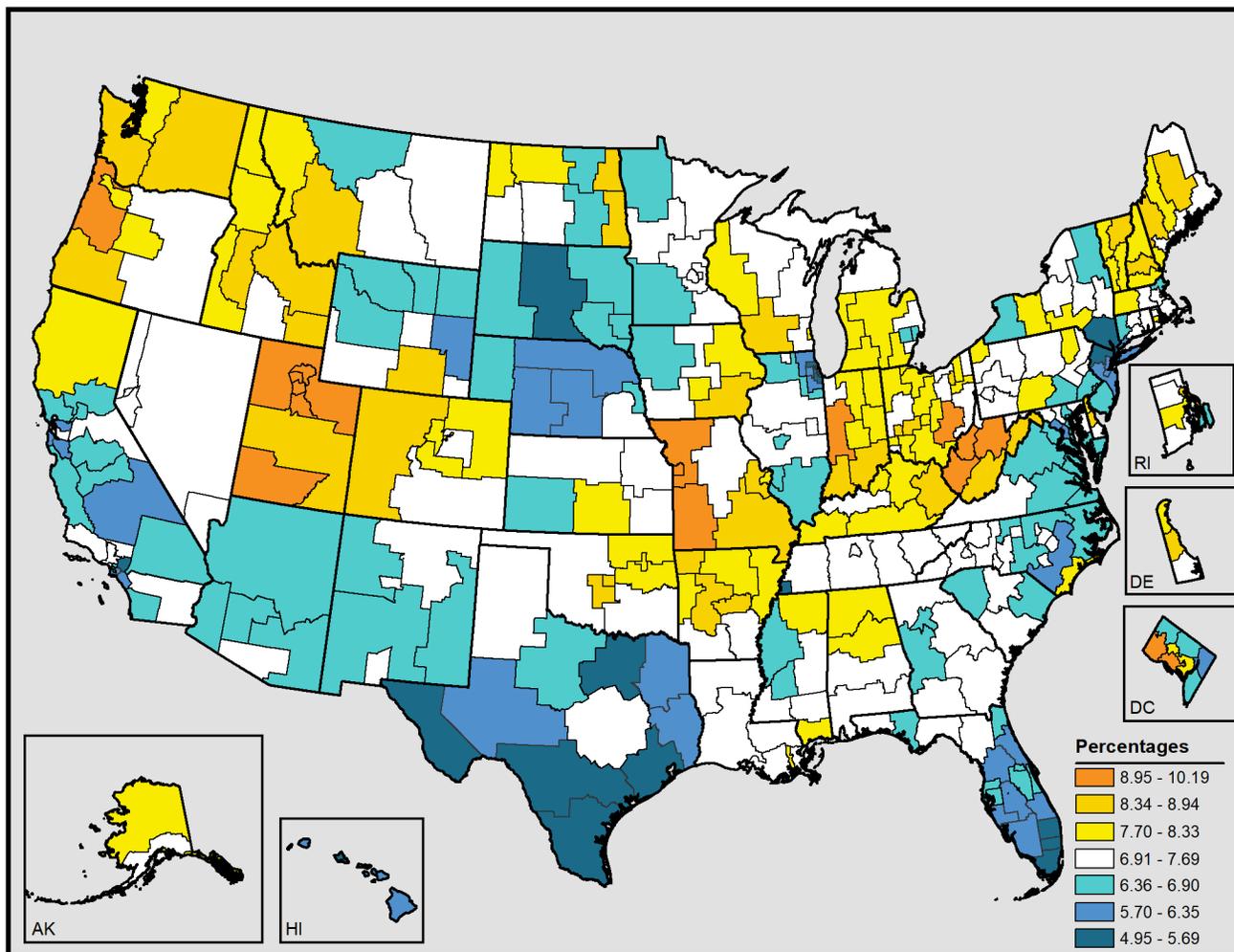
**Figure 28** *Had Serious Thoughts of Suicide in the Past Year among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs*



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.

**Figure 29 Major Depressive Episode in the Past Year among Adults Aged 18 or Older, by Substate Region: Percentages, Annual Averages Based on 2016, 2017, and 2018 NSDUHs**



NOTE: For substate region definitions, see the "2016-2018 National Survey on Drug Use and Health Substate Region Definitions" at <https://www.samhsa.gov/data/>.

Source: SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2016, 2017, and 2018.