### 14. Tobacco Usage and Vaping

### Ranked AL's Fourteenth Health Indicator

Tobacco usage and vaping was ranked AL's fourteenth and has consistently been a public health concern since the 1960s. Smoking is the leading cause of preventable disease and death. While the 67 percent national decrease in current cigarette smokers since 1965 is considered a great public health achievement, tobaccorelated disparities persist. <sup>2</sup>

Emerging vaping tobacco products, such as JUUL, led to increased youth initiation and exposure to harmful chemicals, such as heavy metals, volatile organic compounds, diacetyl, and nicotine.<sup>4</sup> Electronic cigarettes or vaping products can also contain tetrahydrocannabinol and other drugs. The long-term effects of e-cigarettes are still unknown.

In August 2019, ADPH began receiving reports from healthcare providers of suspected lung injury cases related to e-cigarette, or vaping products. ADPH began working with CDC and the Food and Drug Administration (FDA) as part of a multistate outbreak investigation related to e-cigarette or vaping use-associated lung injury (EVALI).<sup>5</sup>

### **Vulnerable Populations**

According to CDC, nicotine can harm adolescent and young adult brain development. Minority populations suffer disproportionally from smoke-related diseases such as CVDs, cancer, diabetes, and pulmonary diseases. Nicotine is also a health danger for pregnant adults and their developing infants.

### **Geographic Variation**

In the U.S., current cigarette smoking is the highest in the Midwest (16.4 percent) and the South (15.4 percent). Smoking is banned in many public settings in major cities, but vaping may still be allowed. The full impact of secondhand smoke effects remains unknown.

#### **Topics Addressed for This Indicator are:**

- Current adult tobacco smokers.
- Adult nicotine product use.
- · Current high school student smokers.
- High school students vaping.

### **Highlights**

Data are retrieved from BRFSS, the AL Adult Tobacco Survey, and the Youth Risk Behavioral Surveillance System (YRBSS):

 Individuals who have less than a high school education and individuals who have an income less than \$15,000 per year are more likely to be

- current smokers.
- Currently, the prevalence of AL high school students using cigarettes is 7.1 percent, and the prevalence of those using smokeless tobacco products is 8.9 percent.
- According to YRBSS, over half of AL high school students tried using a vaping device in 2019.
- The percentage of AL high school students who ever used electronic vapor products was higher among whites and Hispanics students than AA/ black students.

#### **Risk Factors:**

- · High-stress atmosphere.
- Family usage.
- · Race/ethnicity.
- Socioeconomic factors/education.

# **Current Adult Cigarette Smokers**

While the statewide prevalence for current smokers remains consistently higher than the U.S. average, the overall prevalence decreased. In 2019, the percentage of current adult smokers was 20.2 percent compared to 23.8 percent in the 2015 CHA. Two criteria define current smokers: (1) all adults that have ever smoked at least 100 cigarettes or 5 packs in their lifetime, and (2) individuals that smoke now, every day or some days:

- In 2019, AL had the ninth highest adult smoking prevalence rate in the U.S. (20.2 percent), contributing to 8,600 adult deaths.
- Males are more likely to self-report smoking than females (22.4 compared to 18.4 percent in 2019).
- Individuals with less than a high school education and individuals with an income less than \$15,000 per year are more likely to be current smokers.

Since 2011, the percent of adults who currently smoke has declined in AL.

Table 14.1 – Percentage of Adults Who Are Current Smokers, 2019							
	%	95% CI					
AL	20.2	(18.9-21.6)					
U.S.	16.0	-					
Public Health Districts							
Northern	19.1	(15.8-22.5)					
Northeastern	22.9	(19.4-26.4)					
West Central	21.3	(17.6-24.9)					
Jefferson	18.6	(15.0-22.3)					

East Central	17.7	(14.2-21.2)					
Southeastern	24.3	(20.0-28.7)					
Southwestern	20.3	(16.5-24.2)					
Mobile	19.7	(16.2-23.2)					
Geographic Variation							
N/A	-	-					
Sex							
Male	22.4	(20.3-24.5)					
Female	18.4	(16.6-20.1)					
Race							
White	19.8	(18.2-21.4)					
AA/black	20.3	(17.6-23.0)					
Household Income							
Less than \$15,000	33.1	(28.3-37.9)					
\$15,000-24,999	31.5	(27.3-35.6)					
\$25,000-34,999	21.9	(17.1-26.7)					
\$35,000-49,999	18.8	(15.0-22.6)					
\$50,000-74,999	13.2	(11.4-15.0)					
Age (in years)							
18-24	12.6	(8.5-16.7)					
25-34	28.4	(24.1-32.7)					
35-44	28.3	(24.5-32.1)					
45-54	20.6	(17.6-23.7)					
55-64	22.8	(19.8-25.7)					
65+	10.8	(9.3-12.4)					
Education							
Less than high school	35.1	(30.1-40.2)					
High school or GED	24.3	(21.8-26.8)					
Some college	18.4	(16.2-20.6)					
College graduate or higher	8.0	.0 (6.6-9.3)					

### **Adult Nicotine Product Use**

In 2019, the state law was updated to set the minimum age to purchase any tobacco products to 21 years old. Most individuals bought their electronic tobacco devices at specific vape shops, convenience stores, online/internet, and tobacco smoke shop/specialty stores. A significant number of individuals received products from a friend or family member:

- The highest percent of nicotine product use was cigarettes (56.7 percent), followed by cigars (35.1 percent) and smokeless tobacco (22.8 percent).
- Nearly 7 percent of e-cigarette users reported using in the past 30 days. The Adult Tobacco Survey reported that 13.6 percent of AL adults are curious about vaping. One-third of adults described the main reason for trying e-cigarettes was to stop using other nicotine products.

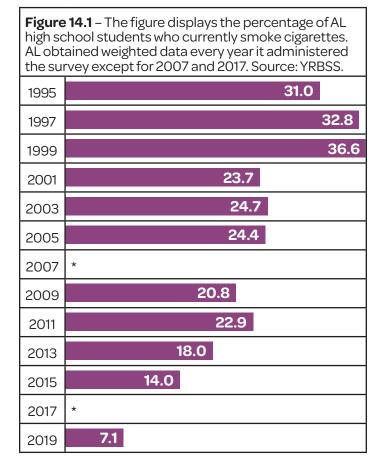
### **Current High School Students Smokers**

Smoking at an early age can have a severe and adverse impact on an individual's health later in life. The 2019 YRBSS included questions about cigarettes, cigars, smokeless tobacco, shisha/hookah, and electronic vapor products usage for high school students. Since 1995, the overall prevalence of current smokers among high school students declined by more than half since 2013:

 In 2019, the prevalence of AL high school students using cigarettes is 7.1 percent, and the prevalence of those using smokeless tobacco products was 8.9 percent.<sup>7</sup>

Table 14.2 – Summary of Nicotine Product Use, 2019							
	Percent of total who ever used	If ever used, percent who use every day	Percent of total who used in past 30 days	If used in past 30 days, percent who used flavored product	If used in past 30 days, percent who tried to quit in past 12 months		
Cigarettes	56.7	27.2	19.4	1.5	42.3		
Cigars	35.1	3.2	5.5	59.0	57.9		
E-cigarettes	21.6	3.0	6.9	59.5	30.6		
Smokeless tobacco	22.8	19.9	4.6	66.2	27.2		
Regular pipe	9.6	10.4	0.9	70.1	81.5		
Water pipe	8.6	8.2	1.1	77.5	75.0		

- Marketing and flavoring of tobacco products make them more appealing to youth. About 16.5 percent of AL high school students reported seeing tobacco products advertised when they use the internet.<sup>7</sup>
- New formulations of these products contain higher levels of nicotine. Nicotine is a highly addictive substance. Almost half (48.2 percent) of AL high school students tried to quit using any tobacco products in the past year.<sup>7</sup>

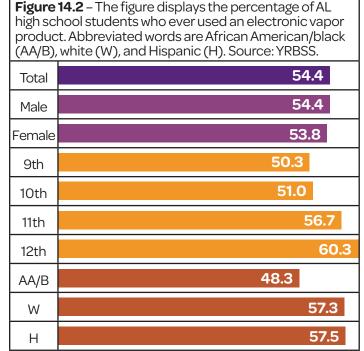


# **High School Students Vaping**

Vaping includes e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens (blue, NUOY, or Starbuzz):

- Approximately 54 percent of high school students reported ever using electronic vapor products at least once, a significant increase from the 41 percent in 2015. No difference was reported between the percentage of male and female vapers.
- Twelfth graders were most likely to have ever used electronic vapor products. Trying electronic vapor products was more prevalent among both Hispanic and White high school students.
- No significant difference was reported with high

- school students who currently use electronic vapor products between 2015-2019.<sup>7</sup>
- In 2019, over 10 percent of high school students obtained their own electronic vapor products by purchasing them in a local store.<sup>7</sup>



### **Data Sources**

**Table 14.1 – Percentage of Adults Who Are Current Smokers, 2019.** ADPH, BRFSS, 2019. Data requested March 2021.

**Table 14.2 – Summary of Nicotine Product Use, 2019.** AL Adult Tobacco Survey, 2019. Data requested July 2020.

**Figure 14.1 – AL High School Students who Currently Smoked Cigarettes, 1995–2019.** ADPH, YRBSS, 2019. Data requested July 2020.

**Figure 14.2 – AL High School Students Using Electronic Vapor Products, 2019.** ADPH, YRBSS, 2019. Data requested July 2020.

### **Written Sources**

- 1. CDC, Smoking and Tobacco Use Health Effects, 2020.
- 2. CDC Newsroom, Cigarette Smoking Among U.S. Adults Lowest Ever Recorded: 14 Percent in 2017, 2018.
- 3. CDC, Youth Tobacco Prevention, 2019.
- 4. CDC, Electronic Cigarettes, 2021.

- 5. CDC, Outbreak of Lung Injury Associated with the Use of E-Cigarette, or Vaping, Products, 2020.
- 6. CDC, Secondhand Smoke, 2021.
- 7. ADPH, AL Tobacco Laws, 2020.
- 8. CDC, Online High School Youth Risk Behavior Survey, 2019.

## **Community Resources**

### **ADPH Tobacco Prevention and Control Program**

Location: Montgomery County, AL Type: State Government Organization

### **American Lung Association®**

Location: Jefferson County, AL Type: Advocacy Program

#### Coalition for a Tobacco-Free AL

Location: Montgomery County, AL Type: Non-profit Organization

### CDC Smoking & Tobacco Use Surveys

Location: Atlanta, GA

Type: Federal Government Organization

### **FDA Tobacco Compliance Check**

Location: Washington, DC Metro

Type: Federal Government Organization

### National Quitline (1-800-QUIT-NOW)

Location: Nationwide Type: Advocacy Program

### **River of Hope Ministries**

Location: Autauga County, AL Type: Non-profit Organization

### **Truth Initiative**

Location: Montgomery County, AL

Type: Advocacy Program