

# **Electronic Nicotine Delivery Systems (E-Cigarette) Report**

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**As Required by  
Texas Health and Safety Code,  
Section 161.0902**



**TEXAS**  
Health and Human  
Services

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Texas Department of  
State Health Services

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## Executive Summary

[Texas Health and Safety Code, Section 161.0902](#), requires the Department of State Health Services (DSHS) to report to the Governor, Lieutenant Governor, and Speaker of the House of Representatives on the use of e-cigarettes in Texas, state enforcement efforts, and prevention and control initiatives conducted by DSHS.

Electronic cigarettes (e-cigarettes), also known as Electronic Nicotine Delivery Systems (ENDS), are devices that simulate smoking by using a mechanical heating element, battery, or electronic circuit to deliver nicotine or other substances by inhalation. ENDS are marketed by tobacco companies as a safer alternative to smoking and as a tool to help people quit smoking, but these devices are not approved by the Food and Drug Administration (FDA) to aid in smoking cessation. These products have become popular with youth and have been the most commonly used tobacco product among U.S youths since 2014.

Statewide survey data indicates that the following about e-cigarette use in Texas.

- 3.6 percent of adults in Texas report currently using ENDS in 2019.
- 14.3 percent of high school students, and 7.1 percent of middle school students used ENDS in the past 30 days in 2020.

DSHS updated enforcement practices to align with state and federal law changes regarding the sale of tobacco to persons under age 21. To enforce state law, the Texas Tobacco Enforcement Program conducted 22,659 controlled buy/stings and recorded of 1,198 violations from May 1, 2019 to August 31, 2020. To enforce federal law, DSHS also worked through a contract with the FDA to perform State Retail Compliance Checks. From September 1, 2018 to August 31, 2020, 9,124 retail compliance checks were completed that resulted in 852 violations of federal law.

Between August 2019 to September 2020, 262 cases of probable or confirmed e-cigarette and vaping associated lung illnesses (EVALI) were identified in Texas and four deaths occurred. The Centers for Disease Control and Prevention has identified vitamin E acetate, a thickening agent used in some e-liquids, as a chemical exposure of concern among people with EVALI.

DSHS has worked to include ENDS into its existing comprehensive tobacco prevention and control activities through multiple initiatives. Additionally, DSHS implemented a multimedia awareness campaign in 2020 to promote an ENDS prevention message to Texas youth and young adults. DSHS will continue to implement evidence-based prevention and cessation interventions to address ENDS use in Texas.

# 1. Introduction

[Texas Health and Safety Code, Section 161.0902](#), requires the Department of State Health Services (DSHS) to report to the Governor, Lieutenant Governor, and Speaker of the House of Representatives on the use of e-cigarettes in Texas. The report must be submitted no later than January 5 of each odd-numbered year, and at a minimum, must include the following information:

- A baseline of statistics and analysis regarding retail compliance with Texas statute.
- A baseline of statistics and analysis regarding illegal e-cigarette sales, including sales to minors, enforcement actions concerning minors, and sources of citations.
- E-cigarette controls and initiatives by DSHS, or any other state agency, including an evaluation of the effectiveness of the controls and initiatives.
- The future goals and plans of DSHS to decrease the use of e-cigarettes.
- The educational programs of DSHS and the effectiveness of those programs.
- The incidence of use of e-cigarettes by region in the state, including use of e-cigarettes by ethnicity.

This report provides data on e-cigarette use and retailer compliance, as well as the initiatives carried out by DSHS and other state agencies to prevent e-cigarette use and promote cessation. This report also provides summary information on DSHS' investigation into e-cigarette and vaping associated lung illnesses in Texas.

## 2. Background

The term for e-cigarettes preferred by the Centers for Disease Control and Prevention (CDC) is Electronic Nicotine Delivery Systems (ENDS). An ENDS is any device that simulates smoking by using a mechanical heating element, battery, or electronic circuit to deliver nicotine or other substances by inhalation.<sup>1</sup> Use of an ENDS is called “vaping”, and retailers with a significant focus on selling ENDS are called “vape shops.”

Many ENDS may look like conventional cigarettes, cigars, or pipes, but others resemble pens, USB sticks, highlighters, and other non-tobacco products. ENDS are comprised of three components: a battery; a cartridge containing a fluid called e-liquid or e-juice comprised of propylene glycol and/or vegetable glycerin, nicotine, and various chemicals; and a vaporizer that transforms the e-liquid into an aerosol.<sup>2</sup> As the user draws on the ENDS, the battery heats the e-liquid to produce aerosol, which is inhaled into the lungs.

ENDS were invented in 2003 and several generations of the device have been developed since then. The first generation of ENDS consists of a device that resembles a conventional cigarette and are generally a disposable, closed-system (non-refillable) device. The second generation of ENDS resembles a pen, is typically an open-system (refillable), and is rechargeable. The second generation introduced the sale of e-juice or e-liquids. E-liquids usually contain nicotine and are necessary to use the device. The third generation of ENDS consists of a device with a much larger battery, tank, and heating device. This generation of ENDS is also used to smoke forms of liquid tetrahydrocannabinol (THC) or hash oils.<sup>3</sup>

E-liquid is often flavored, with thousands of flavors available in disposable or refillable devices.<sup>3</sup> Most recent data from the 2020 National Youth Tobacco Survey reported that among current ENDS users in middle and high school, 89.9 percent

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<sup>1</sup> Other common names for ENDS include electronic smoking device, e-cigarette, e-cig, e-cigar, e-hookah, mod, hookah pen, vape pen, vape stick, personal vaporizer, tank system, or by the brand names JUUL, and Puff Bar

<sup>2</sup> Americans for Nonsmokers’ Rights. 2014. Electronic smoking devices and secondhand aerosol. [no-smoke.org/electronic-smoking-devices-secondhand-aerosol/](https://no-smoke.org/electronic-smoking-devices-secondhand-aerosol/)

<sup>3</sup> U.S. Department of Health and Human Services. E-Cigarette Use Among Youth and Young Adults. A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2016.

used flavored ENDS.<sup>4</sup> Recent regulation from FDA restricted the sale of prefilled cartridge ENDS in any flavor other than tobacco or menthol. As a result, some ENDS that are entirely disposable (do not contain a pod cartridge or refillable tank) have become more popular with youth because they are exempt from the federal flavor restriction. CDC reported an increase in sales of disposable ENDS and a decrease in the sale of cartridge-based ENDS between August 2019-May 2020.<sup>5</sup>

ENDS are marketed by tobacco companies as a safer alternative to smoking and as a tool to help people quit smoking. However, these devices are not approved by the Food and Drug Administration (FDA) to aid in smoking cessation. Although ENDS may help some smokers quit, others may transfer their nicotine addiction from cigarettes to ENDS.<sup>6</sup> These products have also become popular with youth and have been the most commonly used tobacco product among U.S youths since 2014.<sup>7</sup>

The research on long-term health and safety consequences of ENDS product use is still unclear. However, ENDS contain nicotine, volatile organic chemicals, and carcinogens, all of which can have negative effects on health. The U.S. Surgeon General reports that 99 percent of ENDS contain nicotine, the same addictive chemical found in conventional tobacco products. Aside from potential addiction, long-term nicotine exposure can lead to increased blood pressure, heart rate, and problems associated with diabetes. E-liquids can have toxic effects, especially to children, and can cause nicotine poisoning if e-liquid is consumed or absorbed through the skin. Preliminary studies have shown that nicotine exposure can harm developing brains and may prime adolescents for addictive behaviors.<sup>3</sup>

In August 2019, a cluster of severe and unusual lung illnesses was reported to the CDC. Similar cases occurred in all 50 states, many resulting in hospitalization and even death. A joint investigation between state and local health departments, with the support of CDC and the FDA, determined that the lung illnesses were likely

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<sup>4</sup> Wang TW, Neff LJ, Park-Lee E, Ren C, Cullen KA, King BA. E-cigarette Use Among Middle and High School Students — United States, 2020. *MMWR Morb Mortal Wkly Rep* 2020;69:1310–1312. DOI: [dx.doi.org/10.15585/mmwr.mm6937e1](https://doi.org/10.15585/mmwr.mm6937e1)

<sup>5</sup> Ali FRM, Diaz MC, Vallone D, et al. E-cigarette Unit Sales, by Product and Flavor Type — United States, 2014–2020. *MMWR Morb Mortal Wkly Rep* 2020;69:1313–1318. DOI: [dx.doi.org/10.15585/mmwr.mm6937e2](https://doi.org/10.15585/mmwr.mm6937e2)

<sup>6</sup> Rahman, M.A., Nicholas, H., Wilson, A., Worrall-Carter, L. (2014). Electronic cigarettes: patterns of use, health effects, use in smoking cessation, and regulatory issues. *Tobacco Induced Diseases*, 12(21). [tobaccoinduceddiseases.com/content/12/1/21](https://tobaccoinduceddiseases.com/content/12/1/21)

<sup>7</sup> Wang TW, Gentzke AS, Creamer MR, et al. Tobacco product use and associated factors among middle and high school students—United States, 2019. *MMWR Surveill Summ* 2019;68(No. SS-12). [doi.org/10.15585/mmwr.ss6812a](https://doi.org/10.15585/mmwr.ss6812a)

associated with a chemical exposure linked to ENDS and became known as e-cigarettes and vaping associated lung illnesses (EVALI).<sup>8</sup>

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<sup>8</sup> Perrine CG, Pickens CM, Boehmer TK, et al. Characteristics of a Multistate Outbreak of Lung Injury Associated with E-cigarette Use, or Vaping — United States, 2019. MMWR Morb Mortal Wkly Rep 2019;68:860–864. DOI. [dx.doi.org/10.15585/mmwr.mm6839e1](https://doi.org/10.15585/mmwr.mm6839e1)



## 3. Regulating Tobacco Access in Texas

Health and Safety Code, Chapter 161, Subchapters H and R largely pertain to the regulation of tobacco access and distribution in Texas. [Subchapter H](#) contains provisions related to the legal age of tobacco access, verifying identification, retail warning notices and training, tobacco vending machines, the distribution of free tobacco products, and e-liquid packaging. [Subchapter R](#) relates to delivery sales of tobacco products. The Texas Comptroller of Public Accounts (CPA) is the enforcing agency of these provisions. Statute allows the CPA to work with law enforcement to enforce legal age of access law through unannounced inspections using underage decoys.

More information on the tobacco regulations enforced by CPA can be found at [CPA's Tobacco Enforcement Program website](#).

### Legal Age of Access to Tobacco

The legal age of access to tobacco products is regulated at both the state and federal levels. The following describes how both state and federal agencies enforce tobacco age restrictions and the results of this enforcement since the last iteration of this report in 2019.

As a measure to combat youth tobacco use in Texas, the 86th Texas Legislature passed Senate Bill 21, which increased the legal age for the sale, distribution, possession, purchase, consumption, or receipt of cigarettes, e-cigarettes or tobacco products from 18 to 21 years-of-age in the state. Senate Bill 21 became effective September 1, 2019.

This new state law does have exemptions. For instance, members of the military (at least 18 years old with a valid military ID) and individuals born on or before Aug. 31, 2001 may purchase tobacco products under Senate Bill 21. The new law also removed the provision allowing minors to possess tobacco products in the presence of a parent, a guardian, or a spouse.<sup>9</sup>

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<sup>9</sup> S.B. 21, 86<sup>th</sup> Texas Legislature, Regular Session, 2019.  
[capitol.texas.gov/BillLookup/History.aspx?LegSess=86R&Bill=SB21](http://capitol.texas.gov/BillLookup/History.aspx?LegSess=86R&Bill=SB21)

However, in December 2019, the federal government amended the Federal Food, Drug, and Cosmetic Act and raised the minimum age of sale of tobacco products from 18 to 21 years nationwide.<sup>10</sup> With this new federal regulation, it is now illegal for a retailer to sell any tobacco product—including cigarettes, cigars, and e-cigarettes—to anyone under 21 years. Federal law does not provide any exemptions from the minimum sale age for tobacco products.<sup>11</sup>

## **Enforcement of State Legal Age of Sale Law**

In terms of enforcing state law, the Department of State Health Services is focused on activities related to the legal age of access. Government Code 403.105 allows for this activity. The Tobacco Enforcement Program (TEP) is implemented through contracts with the Texas Department of State Health Services (DSHS), and DSHS and the Health and Human Services Commission (HHSC). Both agencies contract with the Texas School Safety Center (TxSSC) at Texas State University to recruit local law enforcement agencies to conduct controlled buys/stings and follow-up controlled buy/stings of tobacco permitted and ENDS retail outlets statewide.

Controlled buys/stings involve local law enforcement agencies recruiting persons who are younger than the legal tobacco sale age (underage purchasers) to attempt to buy tobacco products or ENDS. If a retailer makes a sale to an underage purchaser during these controlled buy/stings a citation is made by local law enforcement. A report of these citations is sent to the Comptroller's office monthly by TxSSC. From May 1, 2019 to August 31, 2020, the TEP program, with funding from both DSHS and HHSC, contracted with 59 law enforcement agencies that conducted 22,659 controlled buy/stings with a total of 1,198 violations. The overall violation rate was 5.29 percent. Out of those totals, there were 8,864 ENDS buys/stings and 399 ENDS violations. The ENDS violation rate was 4.50 percent.

As the TEP program did not receive funding in FY2018-2019, DSHS is unable to do a comparison of violation rates with previous years.

The majority of retailer compliance and efforts to reduce youth access to cigarettes, e-cigarettes, and other tobacco products is conducted through TEP. The CPA's office does perform some retailer compliance efforts on a limited basis through its Criminal Investigation Division (CID). The CID conducts fewer inspections based on anonymous, public submissions to the E-Cigarette and Tobacco Hotline.

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<sup>10</sup> Family Smoking Prevention and Tobacco Control Act ("Tobacco Control Act"), Title 21 USC § 301

<sup>11</sup> Family Smoking Prevention and Tobacco Control Act ("Tobacco Control Act"), Title 21 USC § 1140

## **Enforcement of Federal Legal Age of Sale Law in Texas**

The Food and Drug Administration (FDA) contracts with states to help enforce federal tobacco regulations through its State Tobacco Retail Compliance Inspection program. In Texas, the FDA program is administered by DSHS through a subcontract with TxSSC. TxSSC hires and trains commissioned inspectors, to perform retail compliance checks at the direction of the FDA. Underage purchasers go with commissioned inspectors to perform unannounced compliance checks to ensure tobacco retailers comply with federal regulations. The underage purchasers will attempt to buy tobacco products and, if a sale is made, FDA may issue penalties including warning letters, civil money penalty complaints, no-tobacco sale order complaints, and seizures, injunctions, and criminal prosecution.

Between September 1, 2018 and August 31, 2020, a total of 9,124 inspections were completed in Texas, resulting in 852 retail violations.<sup>12</sup> Of the 852 retail violations, 212 were charged a civil money penalty based on the number of past violations, 640 were issued a warning letter, and one received a no tobacco sale order. Of the violations, 243 included ENDS and/or e-liquids sold to minors, of which 44 were charged a civil money penalty based on the number of past violations and 199 received a warning letter. No undercover buys/stings resulted in a no tobacco sale order.<sup>13</sup> Between September 1, 2016 and August 31, 2018, 11,357 undercover buy compliance inspections were conducted with 228 ENDS and e-liquid products sold by a retailer to a minor.

DSHS' contract with the FDA for the State Tobacco Retail Compliance Inspection program ended at the end of September 2020. TxSSC was awarded the contract in September 2020.

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<sup>12</sup> Stop work order due to COVID-19 was in place from 3/19/2020-8/31/2020

<sup>13</sup> U.S. Food and Drug Administration (2020, July 24). Compliance Check Inspections of Tobacco Product Retailers. [accessdata.fda.gov/scripts/oc/inspections/oc\\_insp\\_searching.cfm](https://accessdata.fda.gov/scripts/oc/inspections/oc_insp_searching.cfm)

## 4. Prevalence of ENDS Use in Texas

The Texas Department of State Health Services (DSHS) uses multiple data sources to monitor tobacco use trends, including Electronic Nicotine Delivery Systems (ENDS). These sources allow DSHS to track ENDS use among adults, youth, and conventional tobacco users.

### Adult Use of ENDS

Centers for Disease Control and Prevention (CDC) estimated that in 2017, 20.4 percent of American adults had used or tried ENDS products and 4.4 percent reported currently using an ENDS product.<sup>14</sup> The most recent national data is from 2017, however, Texas data is available for 2019 and indicates ENDS use in Texas was on par with national use for 2017.

The CDC's 2019 Behavioral Risk Factor Surveillance System (BRFSS) survey provides the latest figures on the prevalence of ENDS use among adults in Texas. [Appendix B](#) references additional survey details.

- In 2019, 18.7 percent of Texas adults had used or tried an ENDS product, compared to the 22.0 percent of Texas adults who had used or tried an ENDS product in 2018. This decrease was not statistically significant.<sup>15,16</sup>
- 3.6 percent of Texas adults reported currently using an ENDS product, which is consistent with previous years.<sup>14,15</sup>
- Males, at 22.8 percent, were more likely to report having ever used an ENDS product, compared to 15.0 percent of females. Males, at 5.0 percent, reported almost double the rate of current ENDS use compared to females (2.5 percent).
- 21.6 percent of white adults in Texas reported ever using or trying ENDS products, compared to 18.2 percent of Black Texans, 16.2 percent of Hispanics, and 15.5 percent of respondents identifying as other/multiracial.

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<sup>14</sup> Behavioral Risk Factor Surveillance System (BRFSS) Web Analysis Tool. Centers for Disease Control and Prevention. [nccd.cdc.gov/weat/#/analysis](https://nccd.cdc.gov/weat/#/analysis)

<sup>15</sup> Texas Behavioral Risk Factor Surveillance Public Use Data File, 2019. Texas Department of State Health Services, Center of Health Statistics, Austin, Texas.

<sup>16</sup> Texas Behavioral Risk Factor Surveillance Public Use Data File, 2018. Texas Department of State Health Services, Center of Health Statistics, Austin, Texas.

- 5.3 percent of white adults and 2.3 percent of Hispanics reported currently using ENDS products. There was not sufficient sample size to yield reliable estimates for Black respondents or respondents identifying as other/multiracial.
- The highest prevalence of ever using ENDS in Texas was among adults ages 18 to 29 years (36.6 percent).
- In Texas, current cigarette smokers were the most likely to report having tried (52.9 percent) and currently using (11.3 percent) ENDS products. Among former smokers, 24.2 percent reported having ever tried ENDS products and 5.5 percent reported currently using ENDS. Among those who never smoked, 9.0 percent reported having tried ENDS and 1.3 percent reported currently used ENDS.

## Youth Use of ENDS

Nationally, in 2018, the CDC estimated that 20.8 percent of high school students and 4.9 percent of middle school students had used ENDS products in the past month.<sup>17</sup>

The 2020 Texas Youth Tobacco Survey (YTS) provides the latest figures, below, on the prevalence of ENDS use among youths in Texas.<sup>18</sup> [Additional data is available in Appendix B.](#)

- 21.1 percent of middle and high school students in Texas reported having used or tried ENDS in 2020. This is similar to the percent of Texas students in 2018 (22.8 percent) and 2016 (25.4 percent).<sup>19,20</sup>
- 11.1 percent of middle and high school students in Texas reported using ENDS in the past month, which is also similar to previous years.
- 27.2 percent of Texas high school students reported ever using ENDS. For students in 12<sup>th</sup> grade, 31.8 percent reported having ever used ENDS.
- The proportion of Texas middle school students ever using ENDS was 13.5 percent.
- The prevalence of having ever used conventional cigarettes was 19.9 percent among high school and 10.0 percent among middle school students.

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<sup>17</sup> Cullen KA, Ambrose BK, Gentzke AS, Apelberg BJ, Jamal A, King BA. *Notes from the Field: Use of Electronic Cigarettes and Any Tobacco Product Among Middle and High School Students — United States, 2011–2018.* MMWR Morb Mortal Wkly Rep 2018;67:1276–1277. DOI: [dx.doi.org/10.15585/mmwr.mm6745a5external\\_icon](https://doi.org/10.15585/mmwr.mm6745a5external_icon).

<sup>18</sup> Texas Youth Tobacco Survey (YTS), 2020, Texas A&M University, College Station, Texas.

<sup>19</sup> Texas Youth Tobacco Survey (YTS), 2016, Texas A&M University, College Station, Texas.

<sup>20</sup> Texas Youth Tobacco Survey (YTS), 2018, Texas A&M University, College Station, Texas.

- 14.3 percent of Texas high school students reported using ENDS in the past month compared to 7.1 percent of middle school students.
- 11.3 percent of males and 10.5 percent of female students in Texas reported use of ENDS in the past month.
- 25.8 percent of white students in Texas reported ever using ENDS, compared to 20.1 percent of Hispanic students, 14.4 percent of Black students, and 21.0 percent of students reporting other race/ethnicity.
- 13.9 percent of white students in Texas reported using ENDS in the past month, compared to 10.7 percent of Hispanic students, 6.7 percent of Black students, and 10.5 percent of students reporting other race/ethnicity.
- Comparatively, the past month use of conventional cigarettes among high school and middle school students in Texas was 5.7 percent and 3.3 percent, respectively.
- Due to the sampling method used to conduct the YTS, regional-level data is not available ([Appendix B, Table 1](#)).

## **ENDS Use Among Conventional Tobacco Users**

DSHS used the 2019 Texas BRFSS survey results to better understand the dual use of ENDS and cigarettes.

- 52.9 percent of current smokers in Texas reported having used or tried an ENDS product.<sup>15</sup>
- The prevalence of current ENDS use was two times higher among current smokers (11.3 percent) than former smokers (5.5 percent).<sup>15</sup>
- Current smokers were significantly more likely to report having used or currently be using ENDS than former smokers or people who have never smoked.<sup>15</sup>

## 5. DSHS E-Cigarette Controls and Initiatives

The Texas Department of State Health Services (DSHS) follows Centers for Disease Control and Prevention's (CDC) [Best Practices for Comprehensive Tobacco Control Programs](#), which treats Electronic Nicotine Delivery Systems (ENDS) the same way as conventional tobacco products in its tobacco control efforts. DSHS also includes ENDS education and prevention in existing outreach efforts.

### Current Initiatives

#### E-Cigarettes and Vaping Associated Lung Illnesses

In August 2019, a cluster of severe and unusual lung illnesses was reported to the Centers for Disease Control and Prevention (CDC). The symptoms of this unknown illness included cough, shortness of breath, chest pain, nausea, vomiting, stomach pain, diarrhea, fever, chills, and weight loss. After the initial reports, similar cases occurred in all 50 states, many resulting in hospitalization and even death. A joint investigation between state and local health departments, with the support of CDC and the Food and Drug Administration, determined that the lung illnesses were likely associated with a chemical exposure. These unknown lung illnesses were linked to ENDS and became known as e-cigarettes and vaping associated lung illnesses (EVALI).<sup>8</sup>

As of September 2020, there have been 262 confirmed or probable EVALI cases reported in Texas. A person with a confirmed case of EVALI must have used an ENDS within 90 days prior to symptom onset and have a chest x-ray that showed an abnormality in the lungs not caused by a lung infection. A person classified as a probable case of EVALI meets the same criteria as a confirmed case, however, a lung infection was also identified. Of the 262 Texas cases, 139 were classified as confirmed cases and 123 as probable cases. Four deaths were reported in Texas.<sup>21</sup> Information on case characteristics and demographic data are in [Appendix A](#).

The CDC has identified vitamin E acetate as a chemical exposure of concern among people with EVALI. CDC testing of lung fluid samples from 51 patients with EVALI

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<sup>21</sup> Regional and local health departments, and medical facilities reported possible cases of EVALI to DSHS Environmental Surveillance and Toxicology Branch (ESTB). ESTB staff reviewed EVALI case report forms and patient medical records, and conducted follow-up with the reporting person or health department or medical facility for additional information. DSHS followed CDC surveillance case definitions to classify reported cases as confirmed or probable EVALI.

from 16 states found vitamin E acetate in 94 percent of the samples. In comparison, no vitamin E acetate was found in 99 samples submitted from nicotine e-cigarettes users, tobacco smokers, and nonusers enrolled in a separate tobacco study. Vitamin E acetate might be used as an additive, most notably as a thickening agent in THC-containing e-cigarette, or vaping, products.<sup>22</sup>

DSHS continues to receive reports of possible EVALI cases. Staff evaluate case reports and conduct follow-up to request missing information or medical records necessary to determine a probable or confirmed case.

### **DSHS-Funded Community Coalitions**

In 2018, DSHS awarded funds to three organizations to organize and operate comprehensive community coalitions in six counties for five years, from September 1, 2018, to August 31, 2023. Comprehensive community coalitions follow the CDC's [Best Practices for Comprehensive Tobacco Control Programs](#) and the Substance Abuse Mental Health Services Administration's [Strategic Prevention Framework](#) to create the following six goals:

- Prevent tobacco use among young people
- Ensure compliance with state and local tobacco laws with adequate enforcement
- Increase cessation among young people and adults
- Eliminate exposure to secondhand smoke
- Reduce tobacco use among populations with the highest burden of tobacco related health disparities
- Develop and maintain state and community capacity for comprehensive tobacco prevention and control

The coalitions have adapted their outreach to integrate ENDS education into various platforms and tailor their strategy based on the audience. The total impact of the coalitions outreach efforts is outlined in [Appendix C, Table 1 and Figures 1-3](#). In Fiscal Year 2019, the coalitions adopted the [Stanford Prevention Toolkit curriculum](#). This curriculum focuses on both conventional and emerging tobacco products including ENDS.

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<sup>22</sup> Blount, B. C., Karwowski, M. P., Shields, P. G., Morel-Espinosa, M., Valentin-Blasini, L., Gardner, M., & Corstvet, J. (2020). Vitamin E acetate in bronchoalveolar-lavage fluid associated with EVALI. *New England Journal of Medicine*, 382(8), 697-705.



## Regional Coordinators

DSHS has eight Regional Tobacco Coordinators, covering all DSHS Public Health Regions (PHRs) who work to promote Tobacco Prevention and Control branch programs to areas without a local health department. Regional Tobacco Coordinators are tobacco subject-matter experts and provide education on ENDS to PHR staff, including nurses and community health workers, at local health departments. They also provide education to multiple community-based stakeholder organizations, including school districts, School Health Advisory Councils, worksites, youth organizations, healthcare organizations, community-based coalitions, and law enforcement.

## Local Policies and Environmental Strategies

DSHS contracts with the University of Houston to maintain the [Texas Smoke-Free Ordinance Database website](#). This website tracks and details all known Texas municipal ordinances enacted to reduce or eliminate exposure to secondhand smoke. Local communities may create reports from the database when reviewing local ordinances.

The University of Houston examines the five general settings that local ordinances may cover: municipal worksites, private worksites, restaurants, bars in restaurants, and bars not in restaurants. Ordinances designating all five settings as smoke-free are categorized as strong or 100 percent smoke-free; those with three or more smoke-free settings are classified as moderate smoke-free; and no smoke-free settings or lack of an ordinance are classified as not smoke-free. The rating process also examines ordinances to see if their definition of smoking includes ENDS.

Currently, there are 90 cities in Texas that have comprehensive smoke-free ordinances as evaluated by the University of Houston.<sup>23</sup> At the end of fiscal year 2020, 60 percent of the Texas municipal population live in communities with strong smoke-free policies, and 69 percent of the population live in areas with moderate smoke-free policies.

The DSHS-funded community coalitions have educated their local communities about comprehensive local ordinances. Since September 2019, 14 cities in coalition areas have passed ordinances, and all include language regarding ENDS.

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<sup>23</sup> University of Houston Law Center Health Law & Policy Institute. (2020). Texas Smoke-Free Ordinance Database. [shsordinances.uh.edu/](https://shsordinances.uh.edu/)

## **Texas Tobacco Quitline**

The Texas Tobacco Quitline (TTQL) is a free cessation hotline offered to all Texans. TTQL offers phone and web counseling support to Texans 13 years of age or older and free nicotine replacement therapy to select participants 18 years of age and older. TTQL is available to help Texans quit all tobacco products, including ENDS.

## **Texas Youth Tobacco Prevention – Say What!**

DSHS funds the Texas School Safety Center at Texas State University to lead the *Say What!* (Students, Adults, and Youth Working Hard Against Tobacco) program that is implemented in 344 middle and high schools. Developed in 2011, *Say What!* has several initiatives that have incorporated ENDS education and awareness. *Say What!* works with a Texas Youth Advisory Board (Teen Ambassadors) made up of 15-25 high school and college students from across Texas. Teen Ambassadors provide guidance to the statewide *Say What!* program and educate peers, adults, and stakeholders on the harmful effects of tobacco and ENDS use. *Say What!* also offers several free resources to assist registered *Say What!* groups in their local tobacco and ENDS prevention efforts. These resources include mini-grant kits, or projects-in-a-box, consisting of educational materials that connect tobacco and ENDS prevention messages with the overall statewide prevention messaging.

The free resources offered by *Say What!* are supported by regional, statewide, and online trainings. Regional Action Summits focus on training youth to create change by improving health and well-being while gaining experience and skills to become leaders in their communities. Summit participants received prevention training to guide youth and adult partners in increasing awareness and addressing ENDS use within the community and social settings, including schools. [Appendix D, Table 3](#) outlines total training participants per year.

The annual statewide summer conference focuses on advancing the work of community and school-based youth groups around tobacco and ENDS prevention. Educational workshops emphasized educating participants about the emerging body of research on ENDS. The 2020 annual summer conference was hosted virtually and primarily focused on ENDS prevention. Throughout the year, online trainings were focused on ENDS, and *Say What!* also provided online training modules on the [Say What!](#) website.

## **Texas College Student Tobacco Prevention - Peers Against Tobacco**

Peers Against Tobacco (PAT) is a tobacco prevention program for colleges and universities in Texas. Also referred to as the College Initiative, the program is funded by DSHS and is coordinated by The University of Texas at Austin Tobacco Research and Evaluation Team (UT Austin). PAT aims to reduce the use and initiation of all tobacco, combustible and alternative tobacco products, including ENDS, among college and university students ages 18-25 in Texas. The project works to achieve this by raising awareness about the potential dangers of ENDS, correcting misperceptions, and improving upon current tobacco-free campus policies.

During the 2018-2019 school year, 21 schools (19 campuses; two schools have two participating campuses each) participated in PAT implementation. During the 2019-2020 school year, 20 schools (22 campuses; two schools each have two participating campuses) participated in PAT implementation.

The program implements a media campaign to bring awareness to the dangers of ENDS and other emerging tobacco products. [Appendix E, Figure 1](#) provides an example of this PAT outreach. Additionally, a college survey is administered every year to participating schools to assess students' knowledge, attitudes, and behaviors related to commercial tobacco products and alternative tobacco products, including ENDS. The survey was sent to 17 colleges in 2019, and 18 colleges in 2020. See Appendix E.

The [Texas College Tobacco Policy Database](#), maintained by UT Austin, lists the campus tobacco policies of all institutions of higher education in Texas and rates each policy based on level of comprehensiveness. Specifically, each school's policy is broken down into several smaller components, including if the policies reference conventional cigarettes, smokeless tobacco, and ENDS, and if advertising/sales were comprehensively addressed (i.e., prohibited on campus completely). Policies are also assessed on whether they prohibit ENDS in all indoor areas of any campus building, on all campus outdoor grounds, and in campus-owned vehicles.

### **Tobacco Prevention Awareness Campaign**

To increase the awareness of dangers associated with ENDS products among youth and young adults, DSHS Tobacco Prevention and Control Branch (TPCB), with funding from the Health Services Research Administration and Title V Maternal and Child Health Services Block Grant Program, implemented a multimedia campaign. The primary goal of this media campaign was to increase the awareness of the

dangers of vaping among youth, encourage youth to quit vaping, and raise awareness of the change in tobacco minimum purchase age from 18 to 21 years.

The media campaign began in November 2019 and ran through August 2020. Messages were created and disseminated about the ingredients found in a vape, the unknown health effects of vaping, and the realities of nicotine addiction that come with vaping. The campaign reached youth with a multipronged approach that included ads on social media platforms, television, radio, and in-person outreach events at middle schools, high schools, and colleges across the state. In addition to ad buys and outreach, this campaign also partnered with social media influencers to create authentic anti-vaping messages and promote peer-to-peer messaging. Specific tobacco 21 messages were featured at convenience stores to reach the target populations at point of purchase. These ads ran as pump toppers and in-store window displays.

Highlights from the media campaign include the following:

- Television ads generated 5,078,000 impressions and total of 9,584 spots aired during this 8-week media buy.
- 43,563,018 overall campaign social media involvements (i.e., the combination of clicks on a digital ad or social media post, comments made on a social media post, shares of a digital ad or social media post, or when a user watches an entire video on social media).
- 73 percent of young Texans surveyed recalled one of the campaign spots. Digital ads and influencer postings had the most reach. Of the teens and young adults surveyed, 75 percent recalled one of the key messages of the campaign.
- Purchased ads on mobile devices and social media platforms were viewed over 12 million times and clicked on over 50,000 times.
- Social media posts by influencers garnered almost 60 million views, and their posts were interacted with (liked, shared, or commented on) over 26 million times.
- Outreach at schools in all 11 regions was planned but cut short by the ongoing COVID-19 pandemic. Before school shut downs began, almost 140,000 students and family members were reached at 10 schools and a University Interscholastic League event.
- Event reach totaled 138,120 people from February 19 through March 12, 2020. Due to the ongoing COVID-19 pandemic, all events after March 13, 2020, were canceled. An example outreach event set up is in [Appendix F](#).

Campaign materials and information about hosting outreach events are available for public use on the [DSHS website](#). All campaign ads are also available on the [DSHS YouTube](#) channel.

## **Future Goals and Plans**

DSHS TPCB will continue to address ENDS as part of its comprehensive tobacco control efforts. Specific plans include the following:

- Continue to monitor the tobacco use prevalence to recognize emerging tobacco products, including ENDS.
- Continue to implement initiatives focused on youth and young adults, such as *Say What!* and PAT, to reduce the initiation of all tobacco products in Texas.
- Continue to share information and resources from the state-wide *Vapes Down* media campaign on the [DSHS vaping website](#).
- Continue to educate the public on the changes in state and federal law to the minimum purchase age to buy tobacco products.
- Tobacco prevention and control coalitions and Tobacco Regional Coordinators will continue to engage trusted adults in their community to discuss the danger of e-cigarettes and vaping. The coalitions will continue to train schools to use the Stanford Prevention Toolkit.
- To address current youth tobacco prevalence rates, DSHS will monitor the available youth cessation services to find an evidence-based program to aid in youth cessation.

## 6. Conclusion

Research has yet to identify the long-term health effects of Electronic Nicotine Delivery Systems (ENDS) use. However, due to increased use among Texas youth and the potential harms posed by nicotine and other ENDS ingredients, many national and local public health agencies have implemented policies and programs to prevent youth use and encourage cessation.

Laws to prevent underage access to ENDS are enforced at the federal level by the Food and Drug Administration (FDA) under the Tobacco Control Act. The FDA contracts with states, including Texas, to help enforce federal regulations. At the state level, retailer inspections for the Tobacco Enforcement Program are conducted by the Texas Department of State Health Services (DSHS). The Comptroller's Criminal Investigation Division (CID) also conducts a limited number of retailer inspections based on anonymous complaints.

Municipal ordinances place restrictions on exposure to secondhand smoke. The University of Houston tracks and evaluates these ordinances. DSHS funded coalitions work to increase the number of cities and municipalities within their service areas to pass a comprehensive secondhand smoke ordinance.

DSHS supports state and local efforts to educate youth, parents, and young adults about potential harmful health effects of ENDS use. This is accomplished through engaging with community coalitions and regional coordinators, education on local ordinances, coordinating the youth prevention initiatives such as *Texas Say What!* program, and Peers Against Tobacco on college campuses and use of media campaign.

DSHS will continue to make progress to address ENDS use as a part of its comprehensive tobacco control efforts.

## List of Acronyms

<b>Acronym</b>	<b>Full Name</b>
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
CID	Criminal Investigative Division
DSHS	Department of State Health Services
ENDS	Electronic Nicotine Delivery Systems
EVALI	E-cigarette and Vaping Associated Lung Illness
FDA	Food and Drug Administration
PAT	Peers Against Tobacco
PHR	Public Health Region
<i>Say What!</i>	Students, Adults, and Youth Working Hard Against Tobacco!
TEP	Tobacco Enforcement Program
THC	Tetrahydrocannabinol
TPCB	Tobacco Prevention and Control Branch
TxSSC	Texas School Safety Center
UT	University of Texas
YTS	Youth Tobacco Survey

## Appendix A. EVALI Data

### E-cigarette and Vaping Associated Lung Illness (EVALI) Case Characteristics

The following statistics further describe the characteristics of the 262 confirmed or probable cases of EVALI in Texas.

- In 26 percent of cases, those affected were under 18 years of age.
- Cases ranged in age from 13 through 75 years old, with a median age of 22 years.
- Males made up 71 percent of cases.
- Of cases with available substance use information, 89 percent of cases reported vaping products containing tetrahydrocannabinol (THC), the primary psychoactive ingredient in marijuana.
- Hospital length of stay ranged from 1 through 87 days, with a mean length of stay of 8 days.

**Table 1: Severe Pulmonary Illness among People Who Report Vaping, by Public Health Region**

Public Health Region	Number of Cases	Percentage
Region 1	6	2.3
Region 2/3	142	54.2
Region 4/5N	6	2.3
Region 6/5S	43	16.4
Region 7	34	13.0
Region 8	14	5.34
Region 9/10	3	1.2
Region 11	14	5.3



**Table 2. Severe Pulmonary Illness among People Who Report Vaping, by Demographics**

<b>Demographics</b>	<b>Number</b>	<b>Percentage</b>
<b>Sex</b>		
Female	75	28.6
Male	187	71.4
<b>Race</b>		
American Indian or Alaskan Native	2	.76
Asian	3	1.2
Black or African American	5	1.2
Native Hawaiian or Other Pacific Islander	0	0
White	183	69.9
Other	6	2.3
Unknown	63	24.1
<b>Hispanic Ethnicity</b>		
Yes	61	23.3
No	96	36.6
Unknown	5	1.2
<b>Age Group</b>		
<=12	0	0.0
12-17	67	25.6
18-23	86	32.8
24-44	96	36.6
>= 45	13	5.0

**Table 3. Severe Pulmonary Illness among People Who Report Vaping: Admission to Hospital**

<b>Admission to hospital</b>	<b>Number</b>	<b>Percentage</b>
Yes	258	98.5
No	4	1.5
Unknown	0	0.0

**Table 4. Severe Pulmonary Illness among People Who Report Vaping: Admission to Intensive Care Unit**

<b>Admission to Intensive Care Unit</b>	<b>Number</b>	<b>Percentage</b>
Yes	93	36.1
No	118	45.7
Unknown	47	18.2

## Appendix B. Youth and Adult ENDS Prevalence Rates

**Table 1. Percentage of Youth, Grades 6 to 12, who Report Ever and Past Month Use of Electronic Nicotine Delivery System (ENDS) Products, by Demographic Characteristics, Texas, 2020.**

Demographics	Percent of Ever ENDS Use <sup>a</sup>	Percent of Past Month ENDS Use <sup>b</sup>
All Youth (Grades 6-12)	21.1	11.1
<b>Sex</b>		
Male	20.7	11.3
Female	21.1	10.5
<b>Race/Ethnicity</b>		
White	25.8	13.9
Hispanic	20.1	10.7
Black	14.4	6.7
Other	21.0	10.5
<b>School Level</b>		
Middle School	13.5	7.1
High School	27.2	14.3
<b>Grade</b>		
Grade 6	7.6	11.1
Grade 7	13.9	4.0
Grade 8	19.0	7.3
Grade 9	26.3	10.1
Grade 10	27.0	16.0
Grade 11	24.4	11.6
Grade 12	31.8	15.9

Data Source: Texas Youth Tobacco Survey (YTS), 2020, Texas A&M University, College Station, Texas

<sup>a</sup> Students reporting ever having used tried an electronic cigarette.

<sup>b</sup> Students reporting use of an electronic cigarette in the past 30 days.

**Table 2. Percentage Number and Percentage of Adults, 18 Years and Older, Who Report Ever and Current ENDS Use, by Demographics, Texas 2019.**

Demographics	Ever ENDS Use <sup>a</sup>			Current ENDS Use <sup>b</sup>		
	Estimated No. of Adults	Percent	95% CI <sup>c</sup>	Estimated No. of Adults	Percent	95% CI <sup>c</sup>
All Adults	2,912,773	18.7	17.2 – 20.3	566,003	3.6	3.0 – 4.4
<b>Sex</b>						
Male	1,684,187	22.8	20.3 – 25.4	365,419	5.0	4.0 – 6.2
Female	1,228,585	15.0	13.3 – 16.9	200,583	2.5	1.8 – 3.3
<b>Age Group</b>						
18 to 29	1,079,391	36.6	31.7 – 41.8	268,356	9.2	7.0 – 12.0
30 to 44	1,017,355	25.6	22.1 – 29.5	182,529	4.6	3.2 – 6.5
45 to 64	606,228	11.7	10.0 – 13.6	80,220	1.6	1.1 – 2.2
65 and older	196,503	6.1	4.7– 7.7	30,501	0.9	0.6 – 1.6
<b>Race Ethnicity</b>						
White	1,460,446	21.6	19.5 – 23.7	360,337	5.3	5.3 – 8.6
Black	281,483	18.2	13.4 – 24.2	-	-	-
Hispanic	988,455	16.2	13.7 – 19.1	142,425	2.3	2.2 – 5.0
Other/ Multiracial	143,716	15.5	9.9 – 23.5	-	-	-

Data Source: Texas Behavioral Risk Factor Surveillance Public Use Data File, 2019. Texas Department of State Health Services, Center of Health Statistics, Austin, Texas.

<sup>a</sup> Respondents who answered “yes” to the question, “Have you ever used or tried an e-cigarette, vape pen, or e-hookah?”

<sup>b</sup> Ever ENDS users who answered “every day” or “some days” to the question “Do you currently use this/these products every day, some days, or not at all?”

<sup>c</sup> CI: (Confidence Interval) Statistical significance is based upon evaluation of overlap among the 95% confidence intervals, which are defined as a range of values where there is a specified probability that the value of a parameter lies within it.

**Table 3. Number and Percentage of Adults, 18 Years and Older, Who Report Ever and Current ENDS Use, by Demographics, Texas 2019.**

Place of Residence	Ever ENDS Use <sup>a</sup>			Current ENDS Use <sup>b</sup>		
	Estimated No. of Adults	Percent	95% CI <sup>c</sup>	Estimated No. of Adults	Percent	95% CI <sup>c</sup>
<b>All Adults</b>	2,912,773	18.7	17.2 – 20.3	566,003	3.6	3.0 – 4.4
<b>Health Service Region</b>						
<b>1</b>	91,565	19.1	12.5 – 28.2	-	-	-
<b>2/3</b>	762,450	20.1	16.7 – 24.0	170,500	4.3	3.1 – 5.9
<b>4/5N</b>	165,220	17.3	12.9 – 22.8	35,618	4.4	2.6 – 7.5
<b>6/5S</b>	645,809	17.0	13.8 – 20.9	153,822	6.3	3.5 – 11.2
<b>7</b>	479,650	24.1	20.7 – 27.8	166,852	8.1	5.9 – 11.0
<b>8</b>	319,475	19.2	15.1 – 24.2	-	-	-
<b>9/10</b>	124,432	15.9	11.5 – 22.5	-	-	-
<b>11</b>	237,901	18.9	15.2 – 23.3	-	-	-

Data Source: Texas Behavioral Risk Factor Surveillance Public Use Data File, 2019. Texas Department of State Health Services, Center of Health Statistics, Austin, Texas.

<sup>a</sup> Respondents who answered “yes” to the question, “Have you ever used or tried an e-cigarette, vape pen, or e-hookah?”

<sup>b</sup> Ever ENDS users who answered “every day” or “some days” to the question “Do you currently use this/these products every day, some days, or not at all?”

<sup>c</sup> CI: (Confidence Interval) Statistical significance is based upon evaluation of overlap among the 95% confidence intervals, which are defined as a range of values where there is a specified probability that the value of a parameter lies within it.

**Table 4. Number and Percentage of Adults, 18 Years and Older, Who Report Ever and Current ENDS Use, by Smoker Status, Texas 2019.**

Smoker Status	Ever ENDS Use <sup>a</sup>			Current ENDS Use <sup>b</sup>		
	Estimated No. of Adults	Percent	95 % CI <sup>c</sup>	Estimated No. of Adults	Percent	95 % CI <sup>c</sup>
<b>All Adults</b>	2,912,773	18.7	17.2 – 20.3	566,003	3.6	3.0 – 4.4
<b>Smoker Status</b>						
<b>Current Smoker</b>	1,217,551	52.9	47.7 – 58.1	256,691	11.3	8.5 – 14.7
<b>Former Smoker</b>	805,236	24.2	21.0 – 27.8	181,709	5.5	4.0 – 7.5
<b>Never Smoker</b>	887,978	9.0	7.6 – 10.6	126,363	1.3	0.9 – 1.8

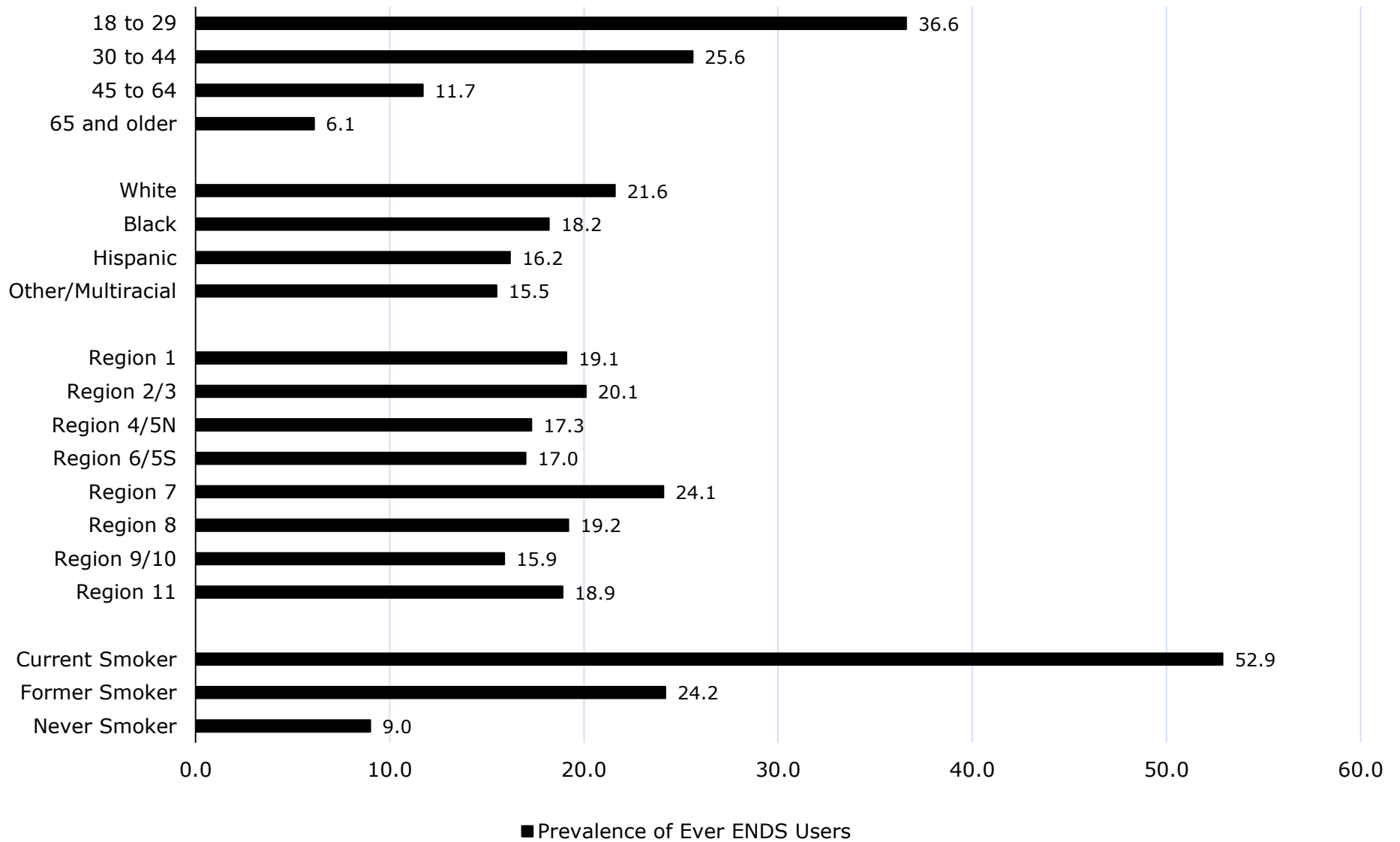
Data Source: Texas Behavioral Risk Factor Surveillance Public Use Data File, 2019. Texas Department of State Health Services, Center of Health Statistics, Austin, Texas.

<sup>a</sup> Respondents who answered “yes” to the question, “Have you ever used or tried an e-cigarette, vape pen, or e-hookah?”

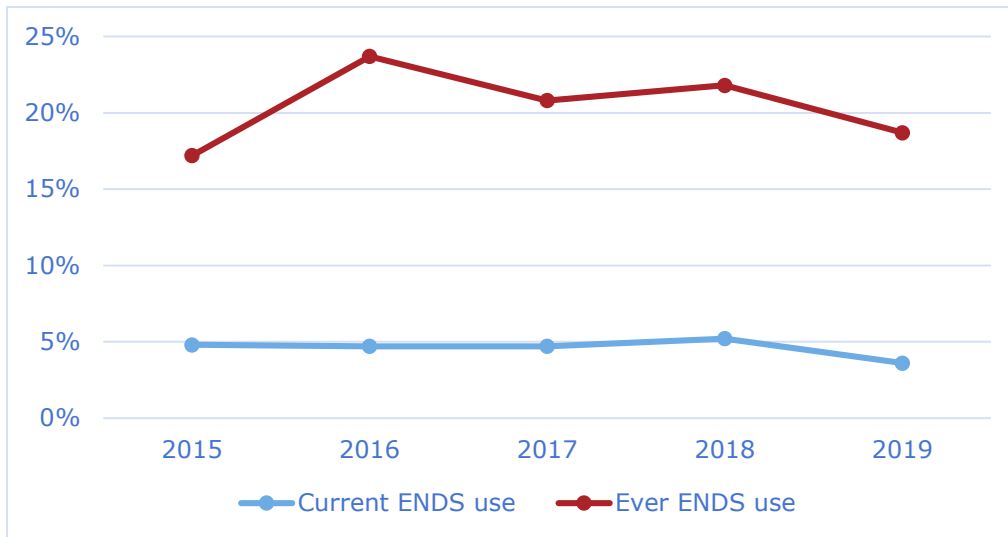
<sup>b</sup> Ever ENDS users who answered “every day” or “some days” to the question “Do you currently use this/these products every day, some days, or not at all?”

<sup>c</sup> CI: (Confidence Interval) Statistical significance is based upon evaluation of overlap among the 95% confidence intervals, which are defined as a range of values where there is a specified probability that the value of a parameter lies within it.

Graph 1. Percentage of Adults, 18 Years and Older, who Report Ever ENDS Use, by Demographics, Place of Residence, and Smoker Status, Texas 2019

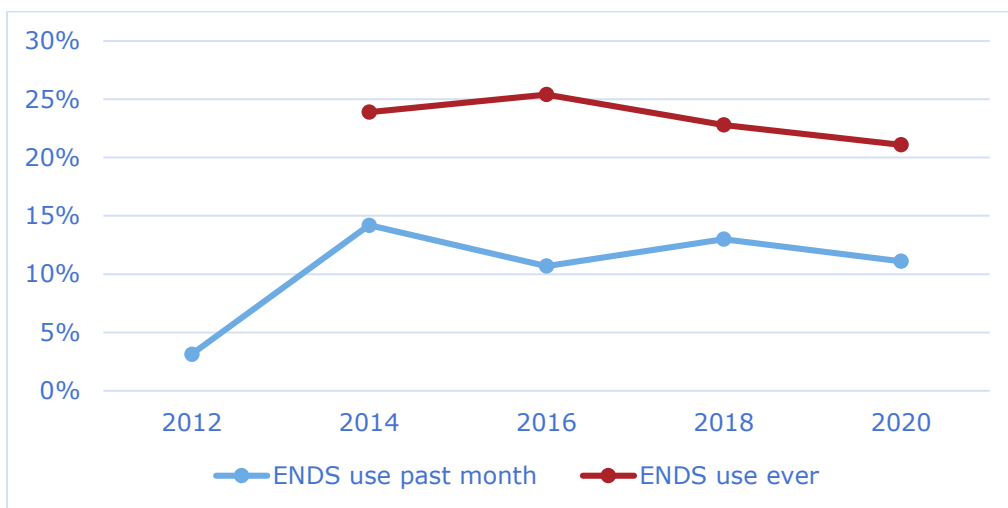


**Graph 2: Trends in use of Electronic Nicotine Delivery Systems Texas Adults, 2015-2019**



Source: Texas Behavioral Risk Factor Surveillance Public Use Data File, 2015-2019. Texas Department of State Health Services, Center of Health Statistics, Austin, Texas.

**Graph 3: Trends in Use of Electronic Nicotine Delivery Systems among Texas Youth, 2012-2020**



Source: Texas Youth Tobacco Survey (YTS), 2012-2020, Texas A&M University, College Station, Texas



## Appendix C. Tobacco Prevention and Control Coalitions

 **BACODA's Tobacco Prevention Task Force** August 5 at 4:38 PM · 🌐

The reasons for those who either smoke or vape to have lower sports performance are:


- Lesser muscular strength and flexibility
- Increased heart rate and blood pressure
- Restless sleep patterns, even insomnia sometimes
- Less effect from training
- Being more prone to injuries and fractures, and possible sprains, bursitis, or tendonitis
- More time spent recovering from an injury
- Possible lung inflammation but also in bones and joints
- Problems with weight gain and weight loss
- The distribution of fat in mainly abdominal or "central, apple-shaped" zone;
- Lower physical endurance
- Nicotine withdrawal makes you less active and impairs training
- Short breath and smaller lung capacity
- Dehydration is one of the possible effects of vaping, which is caused by some special elements found in e-liquid;
- The last, but not least is nicotine addiction – the possible problem that would remove you from the sport you love to play.

**Don't be out because you vape!**

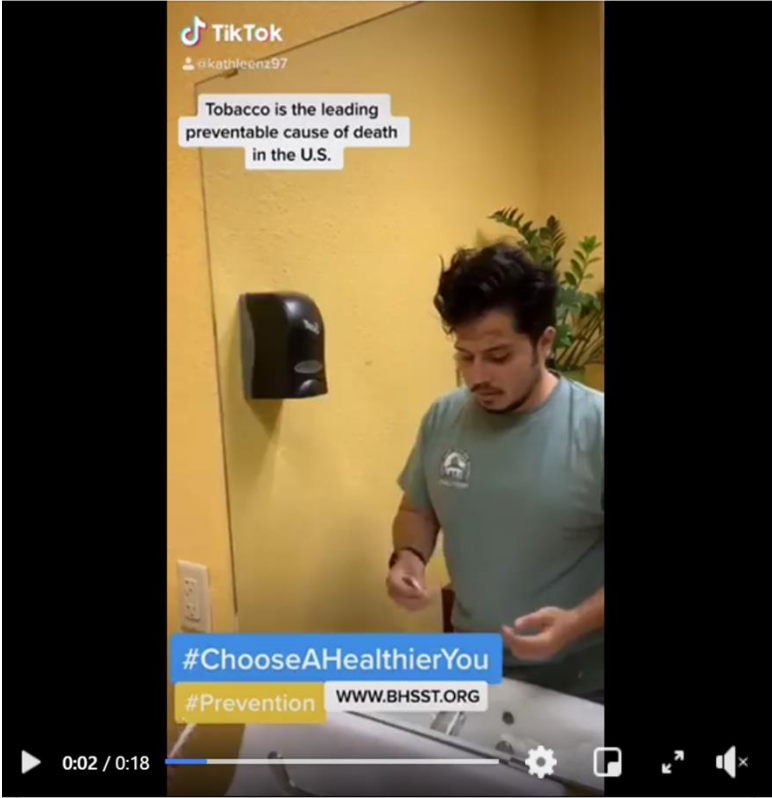


 **Vaping can affect your performance.**  
**YESQUIT.ORG**

**Figure 1: Coalition Social Media Screenshot**

 Behavioral Health Solutions of South Texas  
August 14 at 11:25 AM · 🌐

TPCC is back in action on their facebook. Go give them a Like if you haven't!



Tobacco Prevention & Control Coalition-Cameron & Willacy Counties  
August 10 at 12:11 PM · 🌐

WE'RE BACK EVERYBODY!!!



The Coalition

Posted by Sharon Hartley Kruk

May 14 · 🌐

It's National Prevention Week! Today we are focusing on the prevention of vaping and e-cigarette use. One of The Coalition's staff members, [JP Heath](#), is especially passionate about this topic because of how it impacts the youth in our county. Thank you for supporting prevention efforts in Angelina County! [#PreventionHappensHere](#)



👍 9

7 Shares 🌐

Figure 2 and 3: Coalition Print Media



**Table 1: Coalition ENDS Outreach Impact**

List of Activities	Reporting Year	
	September 1, 2018 - August 31, 2019	September 1, 2019 - August 31, 2020
<b>Goal 1: Prevention</b>		
# of ENDS educational materials disseminated to the public	5,553	13,177
# of in-person ENDS presentations conducted for youth	95	203
# of youth attending ENDS presentations	2,789	13,058
# of in-person ENDS presentations conducted for adults	29	77
# of adults attending ENDS presentations	899	1,891
# of unique media messages have been created for the public	188	291
<b>Goal 2: Enforcement &amp; Compliance</b>	<b>May 1, 2019* - August 31, 2019</b>	<b>September 1, 2019 - August 31, 2020</b>
# of total controlled buys conducted (any tobacco product purchase attempted)	4,241	13,276
# of controlled buys conducted (ENDS purchase attempted)	1,755	5,161
<b>Goal 3: Increase Cessation</b>	<b>September 1, 2018 - August 31, 2019</b>	<b>September 1, 2019 - August 31, 2020</b>
# of worksite consultations conducted that included information about ENDS	104	67
# of healthcare consultations conducted that included information about ENDS	67	54
<b>Goal 4: Secondhand Smoke</b>	<b>September 1, 2018 - August 31, 2019</b>	<b>September 1, 2019 - August 31, 2020</b>
# of communities educated about including ENDS in their smoke-free policies	3	11
# of communities that have adopted a smoke-free ordinance that includes ENDS	3	11
# of worksites have adopted a new policy to include ENDS	2	3

<b>List of Activities</b>		<b>Reporting Year</b>
# of worksites have changed their existing worksite policy to include ENDS	3	2

## ***Appendix D. Say What!***

**Table 1: *Say What!* ENDS Social Media Reach 1/1/2019 - 8/31/2020\***

<b>Platform</b>	<b>Total Reach (Youth and Adults Combined)</b>
<b>Instagram</b>	5652
<b>Facebook</b>	17214
<b>Twitter</b>	439
<b>YouTube</b>	672

**\* *Say What!* does not promote any social media posts; all reported reach is earned without monetary sponsorship (organic reach).**

**Figure 1: Say What! Social Post**



**TxSayWhat**

Published by Hanna Traphagan [?] · March 29, 2019 ·



Join us April 2nd as we discuss how youth groups, school staff and administration can work together to keep e-cigarettes out of schools and help you #LiveTheLife tobacco-free. Register at [www.txsaywhat.com/webinars](http://www.txsaywhat.com/webinars) #LiveTobaccoFree #BeTheFirst #TobaccoFreeGeneration #NotTheNextVictim



**Table 2: Say What! Action Summit Metrics by Year**

<b>Description</b>	<b>September 1, 2018 – August 31, 2019</b>	<b>September 1, 2019 – August 31, 2020</b>
Number of summits conducted	5	2*
Number of youth attending the summits	594	207
Number of adults attending the summits	148	94
Total number of summit participants	742	301

\*one in-person event and one virtual event to account for the four scheduled Action Summits that were canceled due to COVID-19 restrictions.

**Table 3: Texas Tobacco-Free Conference Metrics by Year**

<b>Conference Metric</b>	<b>2019 Conference (July 28-31, 2019)</b>	<b>2020 Virtual Conference (July 26-27, 2020)</b>
Number of Youth Groups	33	75
Number of Youth Participants	161	158
Number of Adult Participants	118	175
Total number of Participants	279	333



## **Appendix E. Peers Against Tobacco**

### **College Survey**

A college survey is administered every year to participating schools to assess students' knowledge, attitudes, and behaviors related to tobacco products and alternative tobacco products, including ENDS. The survey was sent to 17 colleges in Spring 2019, and 18 colleges in Spring 2020. In academic year 2018-2019, a total of 8,363 complete responses from students ages 18-29 were received. Participants were predominately female (63.1 percent), white (66.5 percent), and 1<sup>st</sup> year undergraduates (27 percent).

- In 2018-2019 academic year, 32.2 percent of students reported ever having used ENDS.
- In academic year 2019-2020, a total of 17,156 complete responses from students ages 18-29 were received. Participants were predominately female (61.4 percent), white (65.3 percent), and 1<sup>st</sup> year undergraduates (25.5 percent).
- In 2019-2020 academic year, 49.3 percent of students reported ever having used ENDS.
- For current use (in the last 30-days), in 2018-2019 academic year the most prevalent products used by respondents were ENDS (45.6 percent), cigars (26.9 percent), conventional cigarettes (26.6 percent), and smokeless tobacco (21.9 percent).
- For current use (in the last 30-days), in 2019-2020 academic year the most prevalent products used by respondents were ENDS (46.1 percent), smokeless tobacco (31.6 percent), conventional cigarettes (30.8 percent) and cigars (25.2 percent).

**Table 1: Peers Against Tobacco ENDS Social Media Reach 1/1/2019 - 8/31/2020**

<b>Platform</b>	<b>Organic Reach (prior to 9/1/2019)</b>	<b>Promoted Reach (after 9/1/2019)</b>	<b>Total Reach</b>
<b>Instagram</b>	835	73,000	73,835
<b>Facebook</b>	947	400,000	400,947
<b>Twitter</b>	--	86,000	86,000

Figure 1: Peers Against Tobacco (PAT) Better Bad Habit Campaign Print Ad



## Appendix F. Vapes Down Media Campaign

Figure 1. Picture of Vapes Down Campaign School Outreach Tour at Westlake High School in Austin, Texas

