WEST VIRGINIA

Tobacco Use REDUCTION

State Plan







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Introduction







Problem Statement

The consequences of tobacco use are well known to West Virginians, yet residents continue to use tobacco in alarming numbers. Tobacco use is the number one preventable cause of premature death and disease. While West Virginia is aggressively addressing the problem by implementing evidence-based tobacco control programs through the West Virginia Department of Health and Human Resources, Bureau for Public Health's Division of Tobacco Prevention, annual federal and state funding for these efforts has dramatically decreased over the past five years to \$1.595 million annually. This funding includes a combination of both federal (\$1.095 million and \$500,000 state). This is approximately 5.8% of the Centers for Disease Control and Prevention's (CDC) "Best Practices" recommendations of \$27.4 million annually.

The WV State Legislature decreased state funding by \$3 million during the 2017 Session, resulting in the loss of six tenured Tobacco Prevention Employees. The WV Division of Tobacco Prevention expects to rebuild beginning in 2020.

Project Background

The West Virginia Division of Tobacco Prevention, Office of Community Health Services and Health Promotion, WV Department of Health and Human Resources and its partners sought to update the existing state plan for the West Virginia Tobacco Cessation Program. Stone Strategies, LLC and Thrive Collaborative, LLC were contracted by The Division of Tobacco Prevention to support the work of stakeholders in updating the existing plan (Addressing Tobacco Use and Its Associated Health Conditions in West Virginia—last updated in 2016) utilizing the existing report framework.

The Division of Tobacco Prevention convened a stakeholder meeting on March 11, 2020 to develop and update the recommendations to be included in the report. The participants included: Bruce Adkins, DHHR Bureau for Public Health; Chaste Barclay, American Lung Association; David Bennett, Covenant House of WV; Michele Bowles, Regional Family Resource Network; Ted Cheatham, Public Employees Insurance Agency; Juliana Curry, American Cancer Society Cancer Action Network; Heather McDaniel, DHHR Office of Drug Control Policy; LaDawna Walker Dean, DHHR Office of Minority Health; Lindsy Hatfield, Tobacco Quitline; Cynthia Keely, American Heart Association; James Kerrigan, DHHR Bureau for Public Health: John D. Law, WV State Medical Association; Molly McMillion, WV Perinatal Partnership; Christina Mickey, Coalition for a Tobacco Free WV; Teresa Mills, Cabell-Huntinaton Health Department; Ryann Moore, American Cancer Society Cancer Action Network; Brandi O'Dell, WV Health Right; Greg



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This plan is meant to support the West Virginia Division of Tobacco Prevention in their efforts to:

- Reduce Adult Tobacco Utilization.
- Reduce Youth Tobacco Utilization.
- Focus on Improving Chronic Obstructive Pulmonary Disease and Cancers Associated with Tobacco Use.
- Reduce Exposure to Secondhand Cigarette Smoke.
- Reduce the Utilization of Smokeless Tobacco and Other Nicotine Products.

Relevant Data and Findings

Adult Tobacco Use: Adult tobacco use is measured in different ways in West Virginia. Two key surveys that are well accepted nationwide are the Behavioral Risk Factor Surveillance Survey (BRFSS) and the Adult Tobacco Survey (ATS).

Adult Cigarette Smoking: West Virginia continues to have the highest reported adult smoking rates in the nation: 25.2% of adults living in West Virginia are current smokers - smoking every day or some days. This rate decreased the last eight reported years of BRFSS (from 28.6% in 2011 to 25.2% in 2018). The national smoking prevalence for adults is 15.5% (BRFSS, 2018).

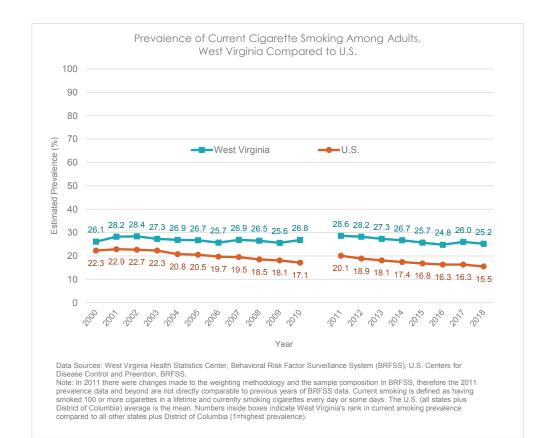


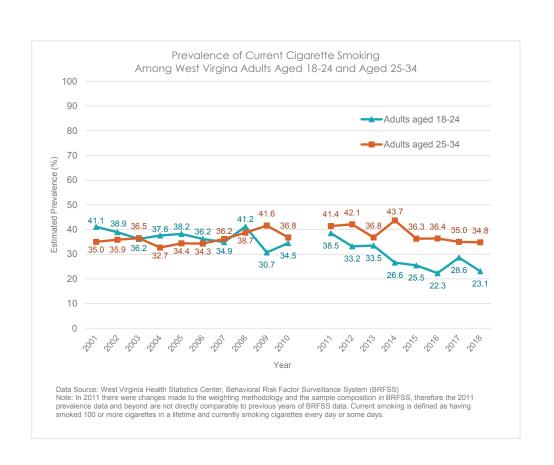
Prevalence of Cigarette Smoking in West Virginia (reference source 2018 WVBRFSS): The prevalence of current adult cigarette smoking is significantly higher than the national prevalence. West Virginia ranked the highest among BRFSS participants.

Age: The prevalence of smoking is higher among those aged 18-54 than those aged 55 and older. The prevalence of smoking is significantly lower among those 55-64 (26.7%) and those aged 65 and older (13.9%) than among any other age group. The prevalence of smoking is highest in the 25-34 age group (34.8%).

Education: The prevalence of smoking is lowest among college graduates (11.3%) and is significantly lower than all other education groups. Adults with less than a high school diploma have the highest prevalence of current cigarette smoking (44.2%), and the prevalence is significantly higher than all other education groups.

Household Income: The prevalence of current smoking decreased as household income increased. The highest prevalence of smoking was among those earning less than \$15,000 per year (41.5%). The lowest prevalence of smoking was among adults earning \$75,000 or more per year (13.7%).





Approximately 55.9% of current smokers tried to quit smoking in the past year which was the 14th lowest in the nation.

Other West Virginia data and facts to consider (from WV SAMMEC data 2006-2010):

- 10 WV residents die each day because they smoked cigarettes.
- 19% of the State's mortality among adults age 35 & older is attributed to smoking
- Smoking and smoking-related illnesses annually cost WV employers \$1,865 per smoker in excess medical expenses.
- Smoking and smoking-related illnesses annually amount to \$2,811 per smoker in lost productivity.

Adult Smokeless Tobacco (ST) Use:

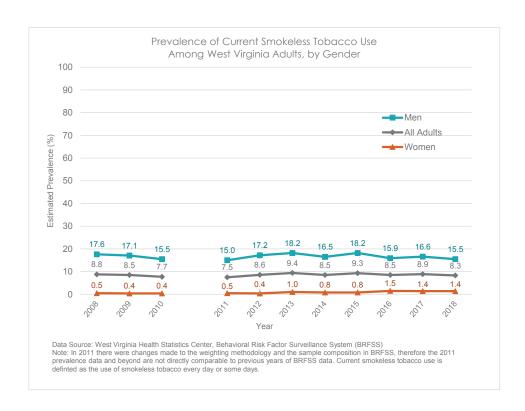
West Virginia is ranked second highest in the nation in the prevalence of smokeless tobacco use (8.9%) among adults.

Prevalence: West Virginia: 8.3% and U.S.: 3.6% (in 2018)

Gender: Men: 15.5% and Women: 1.4%

There is a significant gender difference in the prevalence of ST use with men having a significantly higher prevalence than women. No further analysis with the female smokeless tobacco use data could be performed due to small sample size.

Age: The prevalence of ST use is highest among adults age 45-54 (12.7%) and lowest among adults aged 65 and older (5.6%).



Education: College graduates have the lowest prevalence of ST use (3.5%). This prevalence is significantly lower than the prevalence among those with less than a high school education (13.2%) and those with a high school degree (10.2%).

Household Income: There was no income difference in ST tobacco use.

Electronic cigarettes: Electronic cigarettes, commonly known as e-cigarettes, have quickly come to prominence in the nation and state. These products are battery-powered devices, often designed to resemble cigarettes, which deliver a nicotine containing aerosol, not just water vapor. E-cigarettes have many names, especially among youth and young adults, such as e-cigs, e-hookahs, hookah pens, vapes, vape pens, vape pipes, or mods.

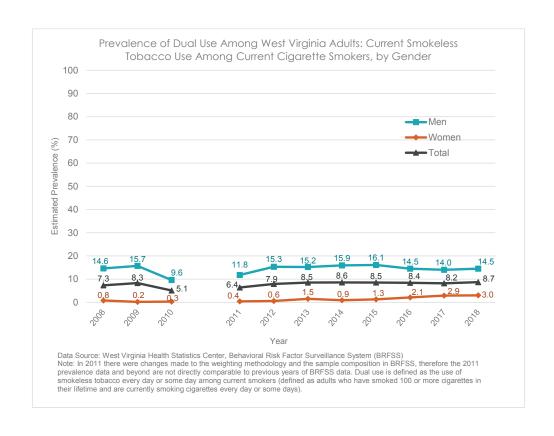
Electronic Cigarette Use among West Virginia Adults (from 2017 WVBRFSS WVATS):

The current use of e-cigarettes by West Virginia adults is 5.7%. (6.5% of men, 4.9% of women)

- o The highest prevalence use is 10.2% in adults 18-24 years old.
 - o The lowest prevalence is in those with a college education (2.4%).

Note: e-cigarette use was not included in 2018 BRFSS.

Dual Tobacco Use Among Adults in West Virginia (from 2018 WVBRFSS): 2.2% of West Virginia adults reported currently smoking cigarettes in addition to smokeless tobacco use. 3.7% of adult male smokers were also using smokeless tobacco; 0.8% of female adults reported dual tobacco use.



SMOKING CESSATION ADULTS IN WV 2018





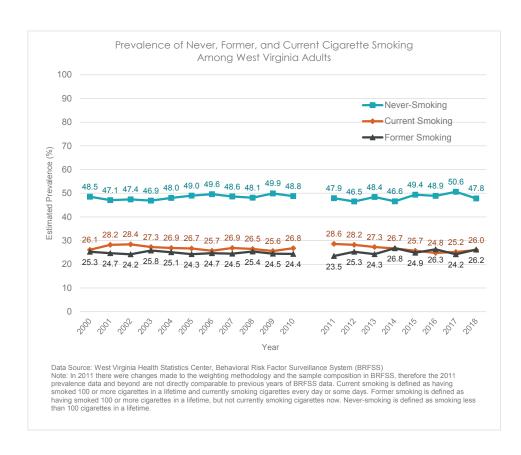
No race/ethnicity analysis was conducted for smoking cessation due to small sample size

Smoking Cessation Among Adults in West Virginia:

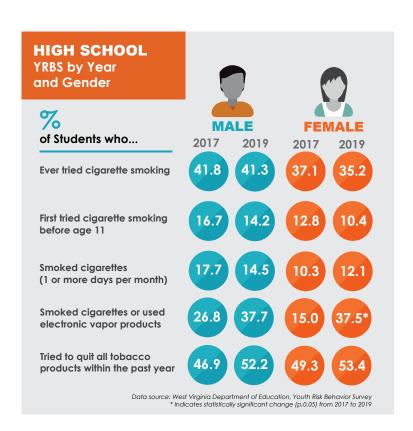
Prevalence: Current smokers who responded that they stopped smoking for 1 day or longer while trying to quit in the past year was 52.1% in WV and 57.3% in the U.S. (2018 WVBRFSS). The U.S. prevalence of smoking cessation was significantly higher than the state rate, as West Virginia ranked the lowest among 53 BRFSS participants in 2018.

Age, Education, and Household Income: No categorical differences in these measures.

Never, Former, and Current Smoking among West Virginia Adults: The prevalence of current adult cigarette smokers has slightly dropped from 2011 (28.6%) through 2018 (25.2%). Additionally, measures for never smokers and former (quit) smokers have remained static for several years. Almost half of West Virginia adults report they have never smoked cigarettes. More than 25% of West Virginia adults are former smokers (See chart below).

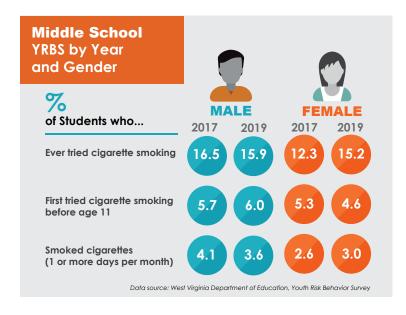


Prevalence of Current Youth Cigarette Use in West Virginia: There has been significant effort made in the past 20 years with on-going youth tobacco prevention efforts in West Virginia. Those efforts have caused consistent declines in the prevalence of youth cigarette smoking in the state. (The reference source for this section is the Youth Risk Behavior Survey.)



High School Population:

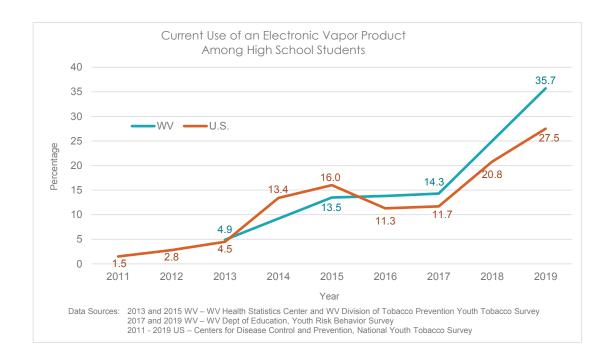
At the time of the last YRBS survey, the percentage of high school students who ever tried and smoked cigarettes decreased slightly from 2017 to 2019.



Middle School Population-(reference source YRBS):

Survey Results from the middle school YRBS indicate that the percentage of high school students who ever tried and smoked cigarettes stayed relatively static.

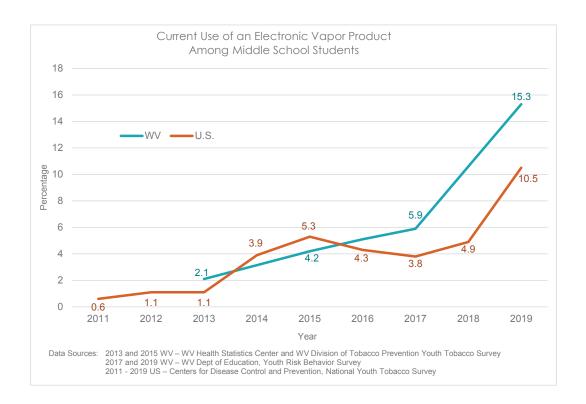
Prevalence of Current Youth Electronic Cigarette Use in West Virginia: E-cigarette use, or vaping, among youth is an epidemic in West Virginia. Vaping use rates are rising faster in West Virginia than rates across the nation. (The reference source for this section is WV Youth and Vaping: A Dangerous Combination).



High School Population: More than 1 in 3 (35.7%) of West Virginia high school students report current use of e-cigarettes. That is a 150% increase from 2017 to 2019 alone. Since 2017, West Virginia high school students who report frequent use of vaping products (20+ days a month) increased by almost 440% from 3.1% to 16.7%.

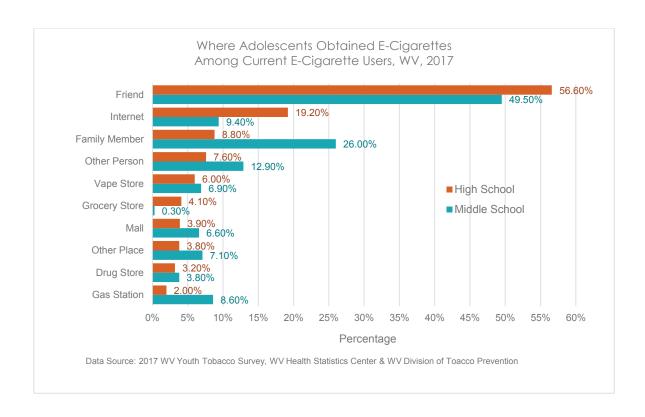


Middle School Population: More than 1 in 6 (15.3%) West Virginia middle school students are current users of electronic vapor products. This is an increase of almost 160% since 2017. Middle schoolers reporting frequent use has also increased more than 260%, from 0.8% to 2.9%.



Gender: Vaping is increasing faster among females than males in West Virginia youth. In 2019, more female high school students reported vaping than male high school students (16.1% vs. 14.4%). However, daily or frequent use is more common among males than females.

Access: Friends are the most common source of vapor products. In 2017 (the most recent survey available), 56% of high school students reported obtaining vapor products from friends. Half (50%) of middle school students obtained their e-cigarettes from friends. The second most common source for high schoolers was the internet (19.2%) while the second most common source for middle schoolers was a family member (26%).



Impact of Tobacco Use: Smoking and Chronic Disease: The epidemic of smoking-caused disease in the 20th century ranks among the greatest public health catastrophes of the century, while the decline of smoking consequent to tobacco control is surely one of public health's greatest successes. The current rate of progress in tobacco control is not fast enough. Much more needs to be done to end the tobacco epidemic. Unacceptably high levels of smoking-attributable disease and death, and the associated costs, will persist for decades without changes in our approach to slowing and even ending the epidemic. If smoking persists at the current rate among young adults in this country, 5.6 million of today's Americans younger than 18 years of age are projected to die prematurely from a smoking-related illness (from "2014 United States Surgeon General Report on The Health Consequences of Smoking").

More than 20 million Americans died as a result of smoking since the first Surgeon General's report on smoking and health was released in 1964. This includes more than 200,000 state residents who died a premature death from cigarette smoking. For example, the risks for smoking-related disease and mortality remain high — with both men and women having a much higher risk for lung cancer and chronic obstructive pulmonary disease (COPD).

Smoking-Related Years of Potential Life Lost (YPLL): Smoking remains the leading cause of preventable death and disease in West Virginia and in the U.S. YPLL is a measure of the number of years of life lost due to death before the age of 75 and is an indicator of premature and preventable mortality.

Analysis by the West Virginia Health Statistics Center of smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC) data (2006-2010) reveals:

West Virginia Smoking-Related Measures Among Adults

(who are age 35 and older) (2006-2010)



Cause of Death	WV Average Annual Deaths	
Smoking-Related Cancers	1,543	
Smoking-Related Heart Disease	1,050	
Smoking-Related Lung Disease	1,183	
Total Smoking-Related Deaths	3,776	

In each year 2006-2010:

- An average of 55,151 YPLL were lost among adults age 35-74 because of premature death caused by cigarette smoking. This is about 44% of all YPLL lost among this group.
- Every smoker who died lost an average of 14.6 years of life due to premature death.

Smoking-Related Economic Costs in West Virginia can be separated into:

- 1) Direct health care costs related to cigarette smoking; and,
- 2) Productivity losses due to smoking-related deaths.
 - During 2006-2010, the estimated annual direct health care costs were \$709 million. The estimated annual lost productivity (lost wages and other economic contributions of those who died early) amounted to \$1.07 billion.
 - Combined, these smoking-related costs totaled \$1.778 billion annually.
 - If viewed as a cost per pack of cigarettes sold in West Virginia, these costs total approximately \$9 per pack.
 - When expressed per smoker, it is approximately \$4,676 per adult smoker (18 and older).

The 2014 Surgeon General's Report provided more evidence that smoking impacts nearly every organ of the body, strengthened that there is no risk-free level of exposure to secondhand smoke, and gave new evidence that liver cancer and colorectal cancer are now added to the long list of cancers caused by smoking.

These 2014 Surgeon General Report findings include:

- Smoking causes general adverse effects on the body.
- Smoking increases the risk of dying from cancer and other diseases; liver cancer and colorectal cancer are caused by smoking.
- Exposure to secondhand smoke is a cause of stroke.
- Smoking causes increased inflammation and impairs the immune system.
- Smoking is a cause of diabetes mellitus.
- Smoking is a cause of rheumatoid arthritis.

The burden of death and disease from tobacco use in the United States (and in West Virginia) is overwhelmingly caused by cigarettes and other combustible tobacco products; rapid elimination of their use will dramatically reduce this burden.

Cigarette smoking is known to be a causative factor among many West Virginia adults who are diagnosed with a chronic disease. In 2018, 25.8% of West Virginia residents having a chronic disease were cigarette smokers.

According to the Chronic Obstructive Disease (COPD) Foundation in 2013, COPD most often occurs in people 40 years of age and older who have a history of smoking. These may be individuals who are current or former smokers. While not everybody who smokes cigarettes gets COPD, most of the individuals who have COPD (about 90% of them) have smoked. According to the 2018 WVBRFSS, 46.2% of WV adults who have COPD are still current smokers.

It is scientifically well known that cigarette smoking is a causative factor for tobaccorelated cancers. Smoking is now known to cause 13 different types of cancer - almost everywhere in the body. One out of three U.S. cancer deaths is tobacco-related. Unfortunately, because of prolonged high smoking rates, West Virginia cancer rates are significantly higher than overall U.S. rates. Two more smoking-related cancers are documented in the new 2014 Surgeon General Report (Colorectal and Liver Cancer the Second Deadliest Cancer Behind Lung Cancer).

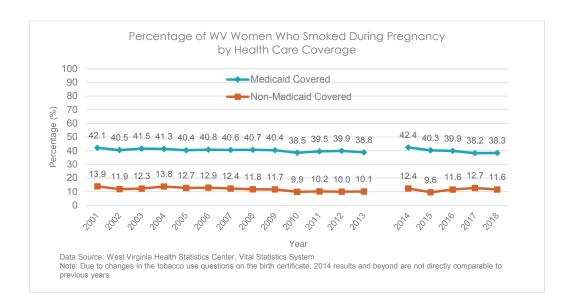
Lung cancer remains one of the most common cancers diagnosed among West Virginia residents and remains the leading cause of cancer-related death in the state. Tobacco use accounts for 30% of all cancer deaths and 85% to 90% of lung cancer deaths in the state.

Lung cancer claims more lives each year than colon, prostate, ovarian, lymphoma, bladder and breast cancer combined. High rates of lung cancer speak directly to lifestyle and the associated risk factors for lung cancer. As long as West Virginia continues to have high rates of smoking, the rates of lung cancer will not decrease. Again, the 2014 Surgeon General Report on the Consequences of Smoking points to other parts of the country where there are higher tobacco product prices, strict statewide clean indoor air laws, and significant decreases in personal smoking habits. The rates of lung cancer also decreased; however, this has not happened in West Virginia.

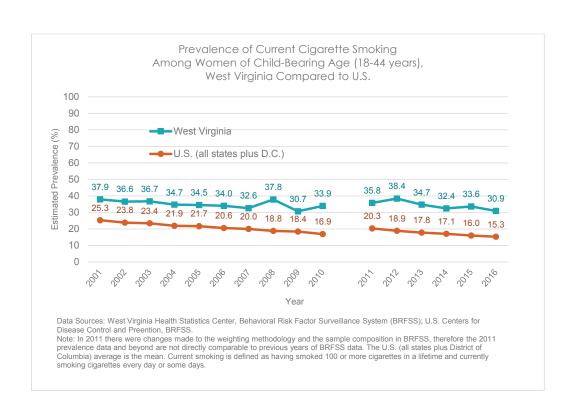
Impact of Tobacco Use: Smoking and Pregnancy: According to the WV Health Statistics Center, Vital Statistics system 2019 data, 23.2% of women reported smoking during pregnancy, which is well above the national rate of 7.2% in 2016 (from CDC NCHS Data Brief No. 305, February 2018). Notwithstanding multiple and varied interventions, this rate has remained stagnant for the past decade (See chart below).



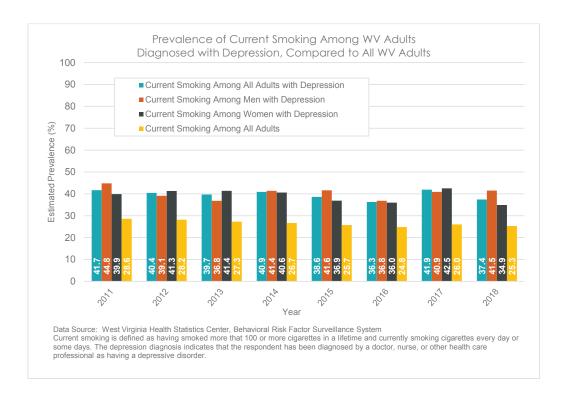
Furthermore, in 2018, 38.3% of women enrolled in Medicaid in West Virginia smoked and (also in 2018), 54% of all live births in the state where insurance status was known were financed by Medicaid (from Kaiser Family Foundation—Births Financed by Medicaid www.kff.org).



According to the 2018 WVBRFSS data, more than 87,187 women (30.8%) of West Virginia's adult women of childbearing age (age 18-44) are current cigarette smokers.



Smoking and Depression among West Virginia Adults: The association between depression and cigarette smoking has been recognized for decades. The following chart (based on 2018 WVBRFSS data) shows the association between current cigarette smoking and those adults diagnosed by a health care provider with depression. More than (37.4%) of West Virginia adults diagnosed with depression report cigarette smoking, and almost 43.0% of this population report current tobacco use (use of cigarettes, smokeless tobacco).



CDC's February 2013 Vital Signs Report on Adult Smoking: Nationally, almost 1 in 5 adults (or 45.7 million adults) have some form of mental illness, and 36% of these people smoke cigarettes. In comparison, 21% of adults without mental illness smoke cigarettes. (Mental illness is defined here as diagnosable mental, behavioral, or emotional conditions and does not include developmental and substance use disorders.)

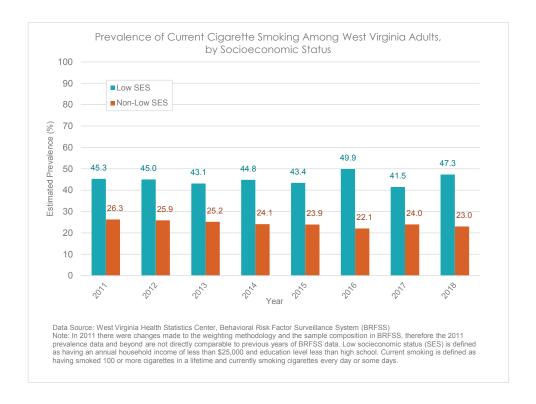
There are other troubling statistics from the report:

- 31% of all cigarettes are smoked by adults with mental illness.
- 40% of men and 34% of women with mental illness smoke.
- 48% of people with mental illness who live below the poverty level smoke, compared with 33% of those with mental illness who live above the poverty level.

Smoking Prevalence and Low Socioeconomic Status (Low SES) (data source from 2018 WVBRFSS): A high percentage of the state's tobacco users remain poor. In 2018, 11.3% of college graduates smoked compared with 44.2% of adults lacking a high school

diploma or GED. Among West Virginia adults in the low SES category (less than a high school/GED education and a household income of less than \$25,000/year), 47.3% are current smokers. This is in comparison to a smoking prevalence of 23.0% for adults who are not in the low SES population. Of those West Virginia adults with incomes less than \$15,000 per year,41.5% were smokers compared to 13.7% of adults with annual household incomes over \$75,000.

Many socioeconomic factors influence behaviors that promote or threaten health, but the greatest predictor for tobacco use is socioeconomic status. Characteristics to define low SES include low income, less than 12 years of education, medically underserved, unemployed, and working poor. They can also be mentally ill, incarcerated, homeless, and a Veteran (25% of homeless adults in the US are Veterans). Low-income people smoke more, suffer more, spend more, and die more from tobacco use (from www.CDC.gov/ncbddd/disabilityandhealth).



It is well known that those enrolled in Medicaid are more likely to smoke than the general population, and that smoking-related disease (i.e., cancer, COPD, and cardiovascular disease) is a significant contributor to increasing Medicaid costs.

"The tobacco industry has succeeded in addicting those who have the least information about the health risks of smoking, the fewest resources, the fewest social supports, and the least access to cessation services. The link between smoking and low income and lower levels of education cannot be over emphasized. Tobacco is not an equal-opportunity killer" (from Reversal of Misforturne: Viewing Tobacco as a Social Justice Issue, Healton, C. DrPH and Nelson, K. MHS).

From the 2014 The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General: The century-long epidemic of cigarette smoking has caused an enormous avoidable public health tragedy. Since the first Surgeon General's report in 1964, more than 20 million premature deaths can be attributed to cigarette smoking. (Unless otherwise cited, this section through page 24 relies on the findings of 2014 The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General.)

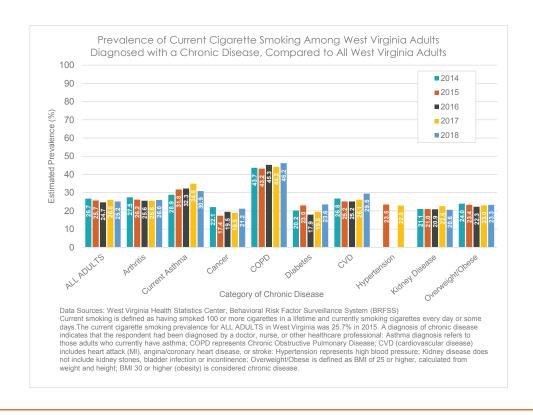
The Effects of Smoking on Cancer and Other Chronic Diseases: The report showed that smoking impacts nearly every organ of the body and reemphasized the conclusion that the scientific evidence indicates that there is no risk-free level of exposure to secondhand smoke. Even 50 years after the first Surgeon General's report, research continues to newly identify diseases caused by smoking, including such common diseases as diabetes mellitus, rheumatoid arthritis, and colorectal cancer.

Exposure to secondhand tobacco smoke has been causally linked to cancer, respiratory and cardiovascular diseases, and to adverse effects on the health of infants and children.

The disease risks from smoking by women have risen sharply over the last 50 years and are now equal to those for men for lung cancer, chronic obstructive pulmonary disease, and cardiovascular diseases.

In addition to causing multiple diseases, cigarette smoking has many adverse effects on the body, such as causing inflammation and impairing immune function.

The burden of death and disease from tobacco use in the United States is overwhelmingly caused by cigarettes and other combusted tobacco products; rapid elimination of their use will dramatically reduce this burden.



Impact of Nicotine and Addiction: Nicotine was found to be addicting in the prior Surgeon Generals' reports. Nicotine is a pharmacologically active agent with acute toxicity that readily enters the body and is distributed throughout. Beyond causing addiction, it activates multiple biologic pathways relevant to carcinogenesis, fetal growth and development, immune function, the cardiovascular system, the central nervous system, and the respiratory system.

Nicotine exposure during fetal development, a critical window for the brain, has lasting adverse consequences for brain development. Nicotine exposure during pregnancy also contributes to adverse reproductive outcomes, such as preterm birth and stillbirth.

Impact of Cigarette Smoking on General Health: The report noted that smokers suffer from poorer general health than nonsmokers, beginning at an early age and extending throughout adult life. Although emphasis has been given to smoking as a cause of specific and avoidable diseases, it is a powerful cause of ill-health generally. These health deficits not only reduce the quality of life of smokers but affect their participation in the workplace and increase their health care costs.

Impact of Cigarette Smoking on Cancer: Lung cancer, the most well-known of many deadly diseases to be identified in a Surgeon General's report as being caused by smoking, is the nation's most common cancer killer among both men and women. The report evaluated the evidence on other cancers and concluded that smoking is a cause of liver cancer and of colorectal cancer, the fourth most diagnosed cancer in the U.S. and the cancer responsible for the second largest number of cancer deaths annually. The report found that the evidence is suggestive but insufficient to conclude that smoking and exposure to secondhand smoke causes breast cancer, and that smoking is not a cause for prostate cancer. The report also found that smoking increases the risk of dying from cancer and other diseases in cancer patients and survivors, including increased risks in breast and prostate cancer patients.

Impact of Cigarette Smoking on Respiratory Diseases: Smoking is well-established as the main cause of chronic obstructive pulmonary disease (COPD). Because smoke is inhaled into the lungs and its components are deposited and absorbed in the lungs, it has long been linked to adverse effects on the respiratory system, causing malignant and nonmalignant diseases, exacerbating chronic lung diseases, and increasing the risk for respiratory infections.

For asthma, another obstructive lung disease, the evidence is sufficient to infer that smoking worsens asthma in adults who smoke. The report comments on benefits of implementing smoke-free policies for workers with asthma. Evidence points to a reduction in hospital admissions for respiratory diseases following the enactment of a smoke-free policy.

Tuberculosis was once a leading cause of death in the United States. Now, far less frequent in the United States, it remains prominent worldwide. Evidence reported over the past two decades is sufficient to lead to a conclusion that smoking increases the risk for tuberculosis and for dying from tuberculosis.

The Impact of Cigarette Smoking on Cardiovascular Diseases: Although lung cancer is often assumed to be the largest smoking-attributable cause of death in the United States, cardiovascular disease actually claims more lives of smokers 35 years of age and older every year compared with lung cancer.

Exposure to secondhand smoke causes significantly more deaths because of cardiovascular disease than because of lung cancer. This new report finds exposure to secondhand smoke is a cause of stroke. Exposure to secondhand smoke increases the risk for stroke by an estimated 20 to 30 percent. The evidence is clear, reductions in smoking and exposure to secondhand smoke have contributed to the decline in death rates from cardiovascular diseases since the late 1960s. Smoke-free laws and policies are proven to reduce the incidence of heart attacks and other coronary events among people younger than 65 years of age. Evidence suggests there could be a relationship between such laws and policies and a reduction in cerebrovascular events. Other heart disease outcomes, including angina, circulatory dysfunction, and out-of-hospital sudden coronary death also are reduced.

The Impact of Cigarette Smoking on Diabetes: Previous Surgeon Generals' reports have found smoking complicates the treatment of diabetes and smokers diagnosed with diabetes are at a higher risk for blindness, circulatory complications leading to amputations, and kidney disease. This report concludes smoking causes type 2 diabetes mellitus, and that the risk of developing diabetes is 30-40% higher for active smokers than nonsmokers. The risk of developing diabetes increases as the number of cigarettes smoked escalates.

The Impact of Cigarette Smoking on Immune and Autoimmune Disorders: Smoking is a cause of general adverse effects on the body, including systemic inflammation and impaired immune function. One result of this altered immunity is increased risk for pulmonary infections among smokers. For example, risks for mycobacterium tuberculosis and for death from tuberculosis disease are higher for smokers than nonsmokers. Smoking is known to compromise the equilibrium of the immune system, increasing the risk for several immune and autoimmune disorders. Smoking is a cause of rheumatoid arthritis, and that smoking interferes with the effectiveness and attainment of certain treatments for rheumatoid arthritis.

The Impact of Cigarette Smoking on Reproduction: Several additional adverse reproductive effects are attributable to smoking. One is ectopic pregnancy, in which the embryo implants in the Fallopian tube or elsewhere outside the uterus. Ectopic pregnancy is rarely a survivable condition for the fetus and is a potentially fatal condition for the mother. Maternal smoking during early pregnancy is causal for orofacial clefts in infants, and evidence suggests that smoking could be associated with certain other birth defects. Evidence is now sufficient to conclude there is a causal relationship between smoking and erectile dysfunction in men.

The Impact of Cigarette Smoking on Eye Disease: Cigarette smoking has an adverse effect on the anatomical function of the eye. The retina is a delicate, light-sensitive

tissue that lines the inside of the eye. The macula is the most sensitive part of the retina and is the part of the eye that supplies sharp vision. Age-Related Macular Degeneration (AMD) gradually destroys the macula and can ultimately lead to loss of vision in the center of the eye. Smoking is a cause of AMD. Evidence suggests quitting smoking may reduce the risk for AMD but the reduced risk may not appear for 20 or more years after smoking cessation.

The Effect of Cigarette Smoking on All-Cause Mortality: Smoking is a major cause of premature death. During the past 50 years, as generations of men and women who began smoking in adolescence and continued to smoke into middle and older ages have been stricken with the health consequences of lifetime smoking, the relative risk for all-cause mortality associated with current cigarette smoking has increased.

The age-standardized relative risk, comparing the all-cause death rate in current smokers to that of never smokers, has more than doubled in men and more than tripled in women during the years since the release of the first Surgeon General's Smoking and Health report.

The lives of smokers are cut short by the development of the many diseases caused by smoking and by their greater risk of dying from common health events, such as complications of routine surgeries and pneumonia. Smoking shortens life far more than most other risk factors for early mortality; smokers are estimated to lose more than a decade of life.

Smoking cessation by 40 years of age reduces that loss approximately 90%. Even stopping by about 60 years of age reduces that loss approximately 40%. Reducing the number of cigarettes smoked per day is much less effective than quitting entirely for avoiding the risks of premature death from all smoking-related causes of death.

Social Determinants of Tobacco Use, Smoking: Since the first Surgeon General's Report on Smoking in 1964, the number of smoking-related deaths in West Virginia alone is at least 190,000 – equal to over 10% of our current total population. Achieving social justice in the arena of tobacco control remains a mammoth task. Each day, 2400 young people in the United States are offered their initial cigarette. Of these, 12 West Virginia youths will become daily smokers. These youth represent "replacement smokers" for the tobacco industry, consequently becoming the substitutes for the 11-12 smoking-related deaths that occur daily in the State.

It cannot be assumed that the war on tobacco has been won, especially in West Virginia where nearly 4,300 residents die prematurely to their own smoking each year, and unnecessarily spend billions of dollars to treat smoking-related diseases and suffer occupational losses annually.

Key Tobacco Use Related Health Indicators

- Decrease the prevalence of current cigarette smoking among adults from 24.8% in 2019 to 22.6% in 2025 (BRFSS).
- Increase the prevalence of adult smokers who have tried to quit smoking in the past 12 months from 52.3% in 2019 to 53.6% in 2025 (BRFSS).
- Increase the prevalence of never smoking among:
 - o High school students from 61.5% in 2019 to 66.9% in 2025 (YTS); and
 - o Middle school students from 84.3% in 2019 to 90.6% in 2025 (YTS).
- Decrease the prevalence of current tobacco use of any kind (any of 13 types of products) among:
 - o High school students from 13.5% in 2019 to 11.7% in 2025 (YTS); and
 - o Middle school students from 3.5% in 2019 to 2.4% in 2025 (YTS).
- Decrease the prevalence of current use of e-cigs among:
 - o High school students from 35.7% in 2019 (YTS) to 30.7% in 2025; and
 - o Middle school students from 15.3% in 2019 (YTS) to 10.7% in 2025.
- Decrease the prevalence of smokeless tobacco use among adult males from 15.4% in 2018 to 15.2% in 2025 (BRFSS).
- Reduce the prevalence of current smoking among West Virginia adults in the low socioeconomic status population from 47.6% in 2018 to 44.9% in 2025 (BRFSS).
- Decrease the percentage of West Virginia women who smoked during pregnancy from 23.2% in 2018 to 19.7% in 2025 (VSS).

The Division of Tobacco Prevention has multiple key tobacco-related health measures that are followed and updated either annually or semi-annually. A chart of these indicators) is attached at the end of this report.

Proven and Effective Tobacco Control Interventions

In 1996, the U.S. Department of Health and Human Services established the *Task Force* on *Community Preventive Services (Community Task Force)* to identify population health interventions that are scientifically proven to save lives, increase lifespans, and improve the quality of life. *The Community Task Force* produces recommendations (and identifies evidence gaps) to help inform the decision making of federal, state, and local health departments, other government agencies, communities, health care providers, employers, schools and research organizations.

The Community Task Force developed The Guide to Community Preventive Services (The Community Guide) which addresses the effectiveness of community-based interventions for three strategies to promote tobacco use prevention and control—prevent tobacco product use initiation, increase cessation, and reduce exposure to environmental tobacco smoke.

The Community Task Force strongly recommends:

- Increasing the unit price of tobacco products.
- Comprehensive smoke-free policies and regulations.
- Community mobilization with additional interventions.
- Conducting mass media education campaign combined with other proven community interventions.
- Providing telephone-based cessation counseling.
- Reducing out-of-pocket tobacco cessation costs for patients.
- Implementing health care provider reminder systems (either alone or combined with provider education).
- Incentives and competitions to increase smoking cessation attempts (when done in combination with additional recommendations).

The Community Guide stresses that comprehensive tobacco control programs are to be well coordinated, population-level interventions to reduce appeal and acceptability of tobacco use, increase tobacco use cessation, reduce secondhand smoke exposure, and prevent initiation of tobacco use among young people. These programs should combine and integrate evidence-based educational, clinical, regulatory, economic, and social strategies.

The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014 calls for increased and sustained action to rapidly eliminate the use of cigarettes and other forms of combustible tobacco products. This report calls for the following:

- Raising the average excise cigarette taxes to prevent youth from starting smoking and encouraging smokers to quit.
- Fulfilling the opportunity of the Affordable Care Act to provide access to barrier-free proven tobacco use cessation treatment including counseling and medication to all smokers, especially those with significant mental and physical comorbidities.
- Expanding smoking cessation for all smokers in primary and specialty care settings by having health care providers and systems examine how they can establish a strong standard of care for these effective treatments.
- Effective implementation of FDA's authority for tobacco product regulation in order to reduce tobacco product addictiveness and harmfulness.
- Fully funding comprehensive tobacco control programs at CDC recommended levels.
- Extending comprehensive smoke-free indoor protections to 100% of the population.

The CDC's 2014 Best Practices: Comprehensive Tobacco Control Programs remains the key research on what works to improve adverse health effects related to tobacco use. A comprehensive tobacco control program is a statewide, coordinated effort to establish smoke-free policies and social norms, to promote quitting and help tobacco users quit, and to prevent tobacco use initiation. These programs are designed to reduce tobacco-related disease, disability, and death.

The Bureau for Public Health's Division of Tobacco Prevention has an established infrastructure for implementing evidence-based comprehensive tobacco control program for West Virginia. The five key elements to support comprehensive tobacco control programs from the Best Practices report are titled:

- State and Community Interventions.
- Cessation Interventions.
- Mass-Reach, Health Communication Interventions.
- Surveillance and Evaluation Interventions.
- Administration, Management, and Infrastructure.
- * All elements address tobacco-related disparities.

Comprehensive tobacco control programs are designed to reduce tobacco-related disease, disability, and death, are research-proven to work if well-funded and sustained over time. Comprehensive tobacco control programs are a public health "best buy." It is known that:

- Funding comprehensive tobacco control programs result in a high return on investment; and
- Sustained funding for these programs improves health and leads to even greater returns on investment.

Among tobacco control interventions, the most effective include:

- Sustained best practices funding for comprehensive programs.
- Tobacco product excise tax increases.
- Comprehensive, 100% smoke-free policies.
- Sustained, aggressive media campaigns.
- Access to tobacco cessation services.

Well-funded, sustained comprehensive tobacco control programs are founded on strong evidence of effectiveness in reducing tobacco use and secondhand smoke exposure. Evidence indicates these programs reduce the prevalence of tobacco use among adults and young people, reduce tobacco product consumption, increase quitting, and contribute to reductions in tobacco-related diseases and deaths. Economic evidence indicates that comprehensive tobacco control programs are costeffective, and savings from averted health care costs far exceed program costs.

The key to reducing West Virginia's rate of tobacco use is implementing proven tobacco cessation policies and ensuring funding at the CDC's recommended level for comprehensive tobacco control programs. The following section will provide detailed goals, strategies, and recommendations relating to these components.

Note: Programs funded at the higher recommended level see the greatest return on investment and population health effect. The Division of Tobacco Prevention is currently funded at \$1.595 million annually. The CDC recommended annual funding level for West Virginia's tobacco education and control programs is \$27.4 million.

Goals, Strategies, and Recommendations to Reduce the Prevalence of Tobacco Use in West Virginia

To enhance understanding, terms related to plan components are defined below.

PLAN DEFINITIONS

<u>Goals</u> - Goals are end results, desired states that will be present in 2025. **The two (2)** Goals appear in bold font.

Goal #1: Enhance West Virginia's tobacco cessation and prevention evidence-based efforts as recommended by the 2014 CDC Best Practices for Comprehensive Tobacco Control Programs, the 2014 Surgeon General's Report on Smoking, and the Community Preventive Services Task Force's Community Guide.

Goal #2: All West Virginia health insurers (including Medicaid) will provide comprehensive tobacco cessation services as an essential health benefit for all eligible enrollees.

<u>Strategies</u> - Strategies are high level plans of action used to reach a goal. **Strategies** appear in bold under each goal.

<u>Recommendations</u> – Recommendations are the best course of action, put forward by an authoritative body, to accomplish identified strategies that are believed will result in goals achieved. **Recommendations appear as bullets under each strategy.**

Goal #1: Enhance West Virginia's tobacco cessation and prevention evidence-based efforts as recommended by the 2014 CDC Best Practices for Comprehensive Tobacco Control Programs, the 2014 Surgeon General's Report on Smoking, and the Community Preventive Services Task Force's Community Guide.

This goal includes strengthening and sustaining the following recommendations:

A. Comprehensive statewide tobacco control infrastructure

- Sustain comprehensive CDC Best Practices recommended programs and funding.
- Develop a fully functioning state, regional, and community infrastructure to achieve the capacity to implement effective interventions.

- Collaborate and communicate with new and existing agencies, entities, and partners to avoid duplication and integrate efforts that create broad-based healthier communities.
- Provide for strong leadership, and foster collaboration among the state, regional, and local tobacco control and other health promotion communities.
- Encourage coalitions to monitor and explore subsectors of the 12 required sectors when adding members to their coalitions.

B. Proven interventions that prevent initiation of tobacco and vaping use among youth/ young adults

- Ensure tobacco/vaping-free youth education programs in schools and communities.
- Enforce tobacco/vaping policies in public schools and on college/university campuses.
- Establish and expand tobacco/vaping-free policies on college/university campuses.
- Restrict minors' access to all tobacco and vaping products.
- Enforce, expand, and strengthen local clean indoor air regulations and other smoke-free, tobacco-free, and vaping-free policies.

C. Proven interventions that promote cessation, quitting among youth and adults

- Require clinician and provider education and training in proven cessation treatment to increase provider knowledge of existing cessation services.
- Improve provider reminder systems and effective patient referral for quit services.
- Ensure expanded, readily available statewide Tobacco and Vaping Cessation Quitline services.
- Require all West Virginia health insurers to provide coverage for tobacco and vaping cessation services.
- Expand and strengthen local clean indoor air regulations and other smoke-free, tobacco-free, and vaping-free policies.
- Develop and promote the use of in-depth tobacco curricula as alternatives to inschool suspensions for youth tobacco use.
- Develop and continually adjust cessation resources (apps, peer-to-peer coaching models, etc.) for youth designed by former youth users.

D. Proven interventions that eliminate nonsmoker's exposure to secondhand and thirdhand smoke

- Maintain and strengthen local clean indoor air regulations and other policies.
- Enforce tobacco/vaping-free policies in public schools, college/university campuses and other public venues (i.e. hospitals, health departments, ballgames, fairs, flea markets).
- Increase and enforce policies for smoke/vape-free multi-unit and public housing.

E. Proven surveillance and evaluation system

• Essential monitoring and reporting that is necessary to fully understand program effectiveness, make decisions, and ensure accountability.

- Grow and advance tobacco control surveillance and evaluation system that can monitor and document key short-term, intermediate, and long-term outcomes within populations.
- Assure that data from surveillance and evaluation systems can be used to inform program and policy directions.
- Report and demonstrate program effectiveness, monitor progress on reducing health disparities.
- Ensure fiscal accountability/oversight and engage stakeholders.

F. Supportive mass media outreach campaigns (combined with other recommended interventions and efforts):

Note: Mass-reach health communication interventions can prevent initiation, promote cessation, and shape social norms about tobacco and vaping use. Evidence shows that hard-hitting ads work best and the longer/more intense the campaign, the greater the decline in tobacco use. These campaigns are proven to be effective in countering pro-tobacco advertising and promotion, especially among youth and young adults.

- Promote and develop public support and culturally relevant knowledge of state and national tobacco prevention data and issues and enhance public understanding of the importance of directing resources into tobacco prevention initiatives, policies, and activities.
- Develop and employ uniform signage and messaging including information sheets and social media posters for Boards of Health, housing units, boards, councils, community buildings, and community groups.
- Work with others in the field to develop and provide cessation-specific resources and education for providers and healthcare workers that are specifically focused on the needs of health disparity populations. Engage target populations and communications expertise throughout the process.
- Partner with Safe Sleep, American Academy of Pediatrics, American Academy of Family Physicians, WV Perinatal Partnership, and Our Babies Safe and Sound on toolkit messaging and distribution addressing prenatal moms and postnatal parents.
- Develop and provide local health departments with uniform signage in support of clean indoor air regulations.
- Promote media coverage in support of local health departments improving clean indoor air regulations.

<u>Goal #2:</u> All West Virginia health insurers (including Medicaid) will provide comprehensive tobacco cessation services as an essential health benefit for all eligible enrollees.

Cigarette smoking is one of the greatest drivers of adverse health outcomes and costs for the state's Medicaid program and other state and private insurers. Tobacco treatment is one of the most cost-effective preventive services with as much as a \$4 return on every dollar invested.

West Virginia can reduce smoking rates and health care costs and improve health outcomes by investing in comprehensive smoking and other tobacco/nicotine product cessation programs. Tobacco dependence treatment is also one of the most cost-effective preventive services, providing substantial return on investment in both the short and long term.

It is known that every West Virginia smoker costs an additional \$4,700 annually (\$1,865 per smoker in smoking, smoking-related medical expenses plus \$2,811 per smoker in lost productivity). These additional annual economic costs of smoking-related diseases (health care costs plus lost wages due to death) amount to about \$9 per pack of cigarettes sold.

Some examples of specific State Health Improvement Plan efforts addressed by this plan:

A. Public health policies

- Adhere to research-proven, evidence-based tobacco control programs and policies.
- Enhance local clean indoor air regulations and other smoke-free/tobacco-free policies.
- Ensure enforcement and compliance with tobacco-free policies including electronic smoking devices in public schools, college/university campuses and other public venues.
- Promote and increase policies for smoke-free multi-unit and public housing.
- Ensure that the updated definitions of "tobacco products" and "electronic smoking devices" are regularly reviewed and updated as new laws, models, policies, and regulations are developed. Definitions should be sufficiently broad to include all types of tobacco products, including dissolvable tobacco products, e-cigarettes, and vaping products, and other tobacco delivery methods.
- Enforce policies and implement programs to reduce youth access to tobacco products including electronic cigarettes (e.g., Synar and Food Drug Administration inspection programs, state laws).
- Ensure essential monitoring and reporting that is necessary to fully understand program effectiveness, make decisions, and ensure accountability.
- Raise West Virginia's tobacco products excise taxes to current (2019-2020) national average of all state excise taxes (with an equivalent tax on all tobacco/nicotine products) based on CDC Best Practices recommendation.
 Note: West Virginia cigarette tax is currently \$1.20 per pack (last raised in 2016).
 *US National Average Cigarette Tax is \$1.78 per pack (as of 03/19/20).
 - o Significantly raising the price of tobacco products has been shown to reduce tobacco consumption in both youth and adults.
 - o Tobacco taxes are the single most effective component of a comprehensive tobacco control program.

Monitor changing health trends and funding across sectors and disciplines. Use overarching themes and teams to address tobacco as an addiction that crosses all disciplines and impacts health in all sectors. Include key performance indicators in multiple state plans.

B. Prevention and health promotion efforts

• Sustain and enhance a fully functioning infrastructure to achieve the capacity to implement effective tobacco prevention and control programs and policies.

- Develop sufficient capacity to enable the program to plan on-going strategic efforts and sustainability.
- Reinstate and maintain efforts of the Regional Tobacco Prevention Network with well trained, skilled Regional Tobacco Prevention coordinators strategically and geographically located throughout the state.
- Develop supportive, paid media advertising to educate about illness caused by tobacco use and encourage tobacco and nicotine cessation and tobacco-free living.
- Promote access to free or reduced cost cessation programs (i.e., West Virginia Tobacco Quitline) and encourage use of these services.
- Educate youth (pre-k to high school), caregivers of youth and other adults about the health risks (premature death, COPD, emphysema, various cancers, etc.) associated with the use of nicotine and tobacco products including e-cigarettes.
- Maintain, sustain, and expand the youth empowered, youth driven Raze tobacco prevention program.
- Develop resource materials to summarize cessation options and programs across West Virginia.
- Develop and use prevention messaging relevant to specific health disparity populations (youth, ethnic, gender, cultural, pregnant mothers, parents of young children, etc.)

C. Access to comprehensive, integrated health care

- Partner with health and dental care providers, prevention lead organizations, state medical schools, the West Virginia Prevention Research Center, and other qualified agencies to provide population-specific training to screen, counsel, and refer tobacco users to cessation programs.
- Enhance school health coordination through self-assessment tools to examine school policies, activities, and programs in physical activity, nutrition, and tobacco use prevention.

D. Supporting West Virginia's health care system

- Increase the percentage of healthcare providers educated on evidence-based tobacco cessation guidelines who are advising patients on risks associated with tobacco use.
- Maintain public health surveillance systems monitoring the burden of tobacco usage among special populations and produce regular surveillance reports based on collected data.
- Decrease gaps in the referral to and utilization of cessation programs and resources that can improve cessation rates and help tobacco users quit.
- Increase the percentage of tobacco users who enroll in and utilize cessation programs.

When this plan for West Virginia is fully implemented and all goals, strategies, and recommendations are fully funded and partners actively engaged, the prevalence of tobacco use will be reduced. It is then that West Virginia will see significant and substantial health improvements for all its citizens.

Conclusion

West Virginia has made considerable strides in addressing the prevalence of tobacco usage in the form of cigarettes over the past decades. It remains an overwhelming and ongoing health crisis for the state. That, in addition to the growing e-cigarette usage among our youth, requires renewed focus and a significant increase in funding to address.

Raising the West Virginia tobacco product excise taxes to the current national average of \$1.78 per pack (with an equivalent tax on all other tobacco products) would have proven, targeted health effects and lower tobacco use by both adults and youth. It is of vital importance that the state implements this plan that incorporates the CDC's Best Practices. This will allow for a far-reaching, fully comprehensive state tobacco control initiative that promotes quitting among adult tobacco users and reduces of tobacco use initiated by West Virginia youth.

These wide-ranging programs reduce tobacco-related disease. The research has proven that comprehensive tobacco control programs have a high return on investment. Sustaining and enhancing these best practice programs will improve health and lead to even greater returns on investment.

Additionally, encouraging all West Virginia insurers and Medicaid to implement tobacco cessation coverage will promote, enable, and encourage many more of the state's tobacco users to quit. Insurers and the state as a whole will see lower costs and a high return on investment by helping tobacco users to quit.

It is simple: Comprehensive tobacco control programs save lives and save money. Implementing and funding this plan will ensure that West Virginia sees significant progress in addressing this tobacco epidemic and in reducing its devastating economic and health impact.

The Division of Tobacco Prevention has multiple key tobacco-related health measures that are followed and updated either annually or semi-annually. The following appendix includes a chart of these indicators. (including measures at 2019 through 2025).

	INDICATORS: Population Measures	Baseline Statistic	2025 Target Statistic
Re	duce tobacco use by adults		
1	Reduce the prevalence of current cigarette smoking among adults.	24.8% (2018)	22.6% [†]
2	Reduce cigarette smoking during pregnancy.	23.2% (2018)	19.7%"
3	Reduce the prevalence of current cigarette smoking among West Virginia African American adults.	34.7% [†] (2017- 2018)	32.9% ⁱ
4	Reduce the prevalence of current cigarette smoking among West Virginia adults who identify as LGBT.	38.6% (2018)	36.7% [†]
5	Reduce the prevalence of current cigarette smoking among West Virginia adults in the Low SES (socioeconomic status) population.	47.6% [†] (2018)	48.5% [†]
6	Increase the prevalence of adult smokers who have tried to quit smoking in the past 12 months.	52.5% [†] (2018)	53.6% [†]
7	Reduce the prevalence of current smokeless tobacco use among male adults.	15.4% [†] (2018)	15.2% [†]
8	Reduce the prevalence of smokeless tobacco use by male young adults aged 18 to 24 years.	10.2% [†] (2018)	8.9% ⁱ
9	Reduce the prevalence of smokeless tobacco use by male young adults aged 25 to 34 years.	15.5% [†] (2018)	13.3% [†]
Reduce the initiation of the use of tobacco products among children and adolescents aged 12 to 17 years			
10	Increase the prevalence of never-smoking among high school students.	61.5% (2019)	66.9% ⁱⁱⁱ
11	Increase the prevalence of never-smoking among middle school students.	84.3% ^{III} (2019)	90.6% ⁱⁱⁱ

INDICATORS: Population Measures		Baseline Statistic	2025 Target Statistic
Reduce tobacco use by adults			
12	Increase the prevalence of never-smokeless tobacco use among male high school students.	85.5% iii (2019)	93.2% "
13	Increase the prevalence of never-smokeless tobacco use among male middle school students.	94% [™] (2019)	95% ⁱⁱⁱ
14	Increase the prevalence of never e-cigarette use among high school students.	55.6% (2019)	60.6%
Reduce tobacco use by adolescents aged 12 to 17 years			
15	Reduce the prevalence of current tobacco use of any kind (any of 13 types of products) among public high school students.	13.5% ^{III} (2019)	11.7%"
16	Reduce the prevalence of current tobacco use of any kind (any of 13 types of products) among public middle school students.	3.5% ^{III} (2019)	2.4% "
17	Reduce the prevalence of current use of e-cigs among public high school students.	35.7% ^{III}	30.7%
18	Reduce the prevalence of current use of e-cigs among public middle school students.	15.3% ⁱⁱⁱ (2019)	10.3%

ⁱ Data Source: West Virginia Health Statistics Center, Behavioral Risk Factor Surveillance System ⁱⁱ Data Source: West Virginia Health Statistics Center, Vital Statistics System ⁱⁱⁱ Data Source: West Virginia Department of Education, Youth Risk Behavior Survey

