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## **Sugary Sweetened Beverage Taxes Provide Health and Revenue Benefit**

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### **Overview**

In recent years, both public health advocates and policymakers looking for new revenue for public programs and ways to improve health outcomes have focused on a sugar-sweetened beverage (SSB) or “soda tax.” Numerous research studies have linked the excessive consumption of soda and other sugary drinks to the nation’s epidemic of obesity, diabetes, and other diseases.<sup>1</sup> Recently the American Heart Association released preliminary findings that links consuming large amounts of sugary beverages to an increased risk of death from heart disease. A policy report published in the *New England Journal of Medicine* states, “The science base linking the consumption of sugar-sweetened beverages to the risk of chronic diseases is clear. Escalating health care costs and the rising burden of diseases related to poor diet create an urgent need for solutions.”<sup>2</sup> A tax on sugar-sweetened beverages has been proposed as one way to potentially reduce consumption and thus have a positive impact on public health. This tax could also bring new revenues to a county, state, or municipality to fund health promotion efforts, public health insurance programs, or other programs to benefit the population.

West Virginia’s legislature passed its current soft drink tax in 1951 to fund the building and maintenance of the West Virginia University School of Medicine. In recent years, Arkansas, Virginia, and Tennessee, the city of Philadelphia and the country of Mexico passed soda taxes to promote public health and provide funding for a variety of programs. This paper reviews the experience in West Virginia and elsewhere with soda taxes and sugar-sweetened beverage taxes in order to consider the impact of increasing the tax in West Virginia.

### **Key Findings**

- Numerous studies show adverse health effects of overconsumption of sugar-sweetened beverages—including a higher risk of dying from heart disease.
- The increase in consumption since the 1970s is fueling the nation’s health woes.
- The West Virginia legislature enacted the current Soft Drinks Tax in 1951 to fund the West Virginia University School of Medicine, Nursing, and Dentistry.
- Taxing sugar-sweetened beverages can curb consumption while bringing in much-needed revenue to fund health programs and other programs.
- West Virginia already has a tax structure for implementing a sugar-sweetened beverage tax and badly needs revenue to invest in human capital and curtain budget woes.
- Implementing a penny-per-ounce sugar-sweetened beverage tax could bring in upwards of \$98 million in much needed revenue—with a two-cent-per-ounce tax, estimates reach \$142 million.

# Sugary Drinks and Public Health

There is a substantial amount of scientific research that links consumption of sugar-sweetened beverages (SSBs) to overweight, obesity, and chronic illnesses.<sup>3</sup> Sugar-sweetened beverages are more than just sodas and include: sports drinks, pre-made iced teas, juices, vitamin waters, and energy drinks with added sugar. Drinks with naturally occurring sugars like 100 percent fruit juice and milk are not considered sugar-sweetened beverages. Since the 1970s, consumption of SSBs among adults 19 and older has more than doubled, with Americans drinking about 45 gallons per person, per year as of 2011.<sup>4</sup> Some researchers believe the dramatic increase in consumption of SSBs over the past decade is the single-largest contributor to the obesity epidemic.<sup>5</sup> SSB over-consumption is linked most notably to obesity and type 2 diabetes.<sup>6</sup> There is also a risk of high blood pressure, stroke, cardiovascular risk, dental erosion, and even pancreatic cancer.<sup>7</sup> A 2010 study published in the Journal of the American Medical Association found that women who consumed one sugar-sweetened beverage a day had a 75 percent higher risk of gout than women who rarely drank SSBs.<sup>8</sup>

## Diabetes

According to a report by the Harvard CHOICES project, consuming one 8.5-ounce sugar-sweetened beverage a day increases the risk of diabetes by 18 percent.<sup>9</sup> The Center for Disease Control’s 2017 National Diabetes Statistics report states that 9.4 percent of the US population has diabetes.<sup>10</sup> In 2016, West Virginia had the highest rate of diabetes at 15 percent, up from 7.5 percent in 2000.<sup>11</sup> People with diabetes have medical expenses, which are 2.3 times higher—or approximately \$6,649 per year—than those who do not have diabetes.<sup>12, 13</sup> In 2012, direct medical expenses for diagnosed, undiagnosed, prediabetes, and gestational diabetes in West Virginia were estimated to be \$1.9 billion.<sup>14</sup> In the same year, another \$627 million was spent on indirect costs from loss of productivity due to diabetes; which brings the total estimated cost of diabetes per year in West Virginia to \$2.5 billion.<sup>15</sup>

### Harvard CHOICES Summary Results 2015-2025

	\$0.02/oz	\$0.01/oz
# of Cases of Obesity Prevented	34,300	17,700
Health Care Cost Savings per \$1 Invested	\$544	\$275
Cost per Case of Obesity Prevented	Cost-Saving	Cost-Saving
Net Cost (negative means saving)	-\$161 million	\$81.3 million

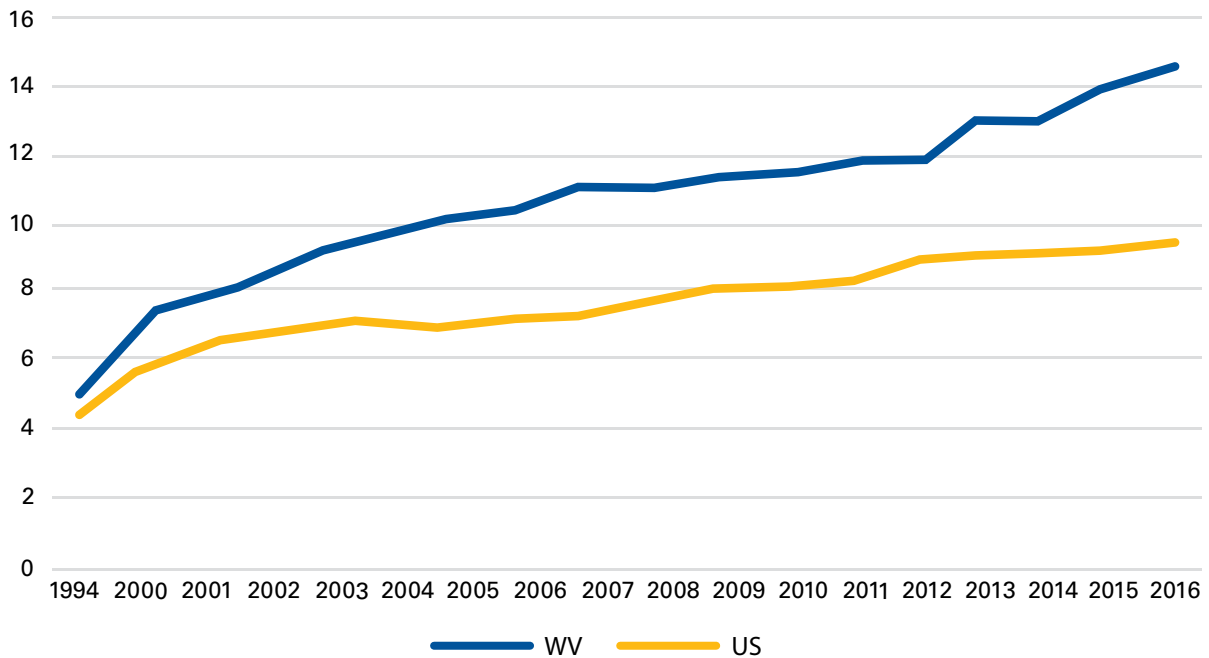
Source: Harvard CHOICES Project<sup>16</sup>

In 2015, more than 1 in 7 West Virginia adults had diabetes.<sup>17</sup> According to the West Virginia Department of Health and Human Resources, there are currently an estimated 240,626 West Virginians with diabetes and another 65,210 which are undiagnosed.<sup>18</sup> At the current pace, the projected cases of diabetes in West Virginia in 2030 is 282,164.<sup>19</sup> This would be an increase of over 2,000 newly diagnosed diabetes cases per year. According to estimates from the Harvard CHOICES project, if West Virginia implemented a one-cent-per-ounce tax on SSBs, the diabetes incidence rate could drop by eight percent over the course of 10 years while a two-cent-per-ounce tax could result in a 15-percent reduction over the same period.<sup>20</sup>

FIGURE 1

**Number of West Virginias with Diabetes has Doubled Since 2000<sup>21</sup>**

## Diabetes Rates 1994 - 2016, West Virginia vs United States Average

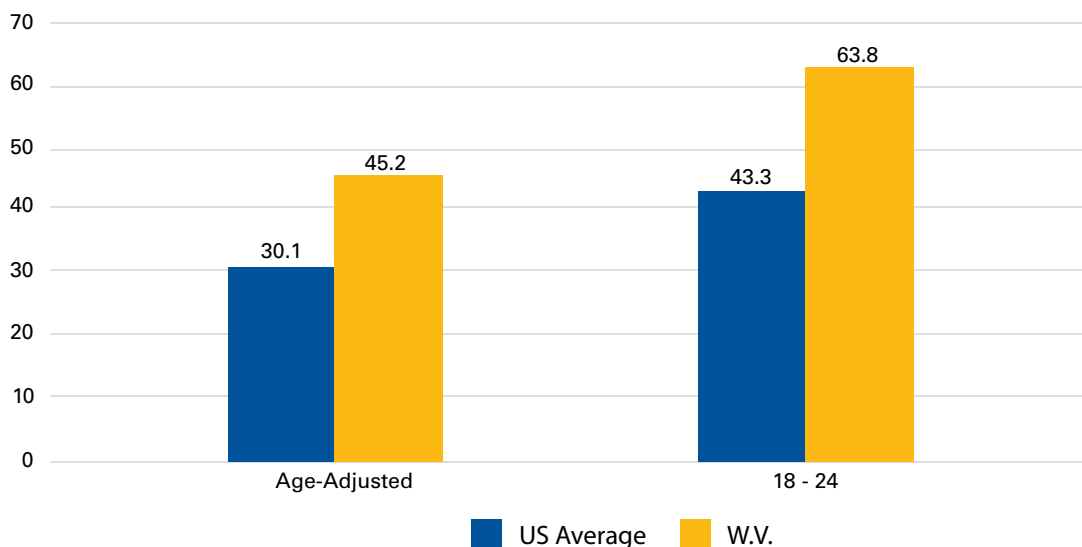


Source: State of Obesity and CDC

## Overweight and Obesity

The prevalence of obesity among certain populations often parallels sugar-sweetened beverage consumption.<sup>22</sup> Studies show that the everyday diets of those who consume sugary drinks are poorer in nutritional quality than those of people who rarely or never drink them, and SSB drinkers consume more calories overall.<sup>23</sup> In 2013, West Virginia ranked third in daily SSB consumption with 45.2 percent of people drinking at least one SSB per day.<sup>24</sup>

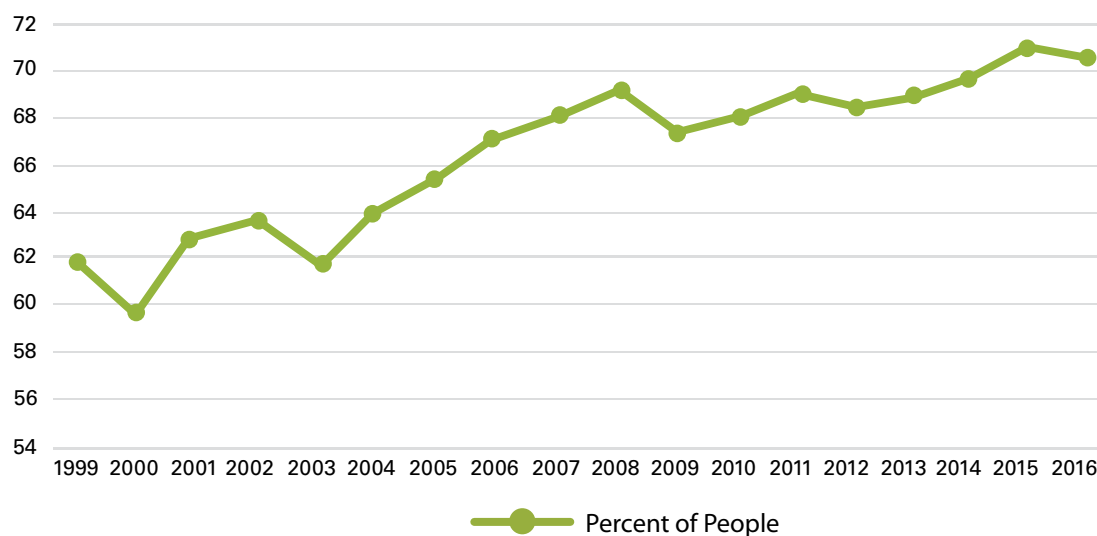
FIGURE 2

**West Virginians Consume More Sugar-Sweetened Beverages than the National Average****Daily Sugar-Sweetened Beverage Consumption  
US Average vs. West Virginia, 2013**

Source: CDC, Morbidity and Mortality Weekly Report

Obesity and overweight in the state is a growing problem. In 2016, nearly 71 percent of West Virginia adults were either overweight or obese,<sup>25</sup> and in the same year West Virginia had the highest adult obesity rate in the nation at 37.7 percent up from 23.9 percent in 2000 and 35.6 percent in 2015.<sup>26</sup> The CDC estimates that persons who are obese have medical costs that are \$1,429 higher than those of normal weight.<sup>27</sup> A recent report by the West Virginia Department of Health and Human Resources estimates that by 2018, health care costs due to obesity in West Virginia could reach \$2.4 million<sup>28</sup> and the state's obesity-attributable health care spending could amount to \$1,736 per adult.<sup>29</sup> According to the Harvard CHOICES study, a penny-per-ounce tax on sugar-sweetened beverages has the potential to reduce adult obesity in West Virginia by 1.5 percent.<sup>30</sup>

FIGURE 3

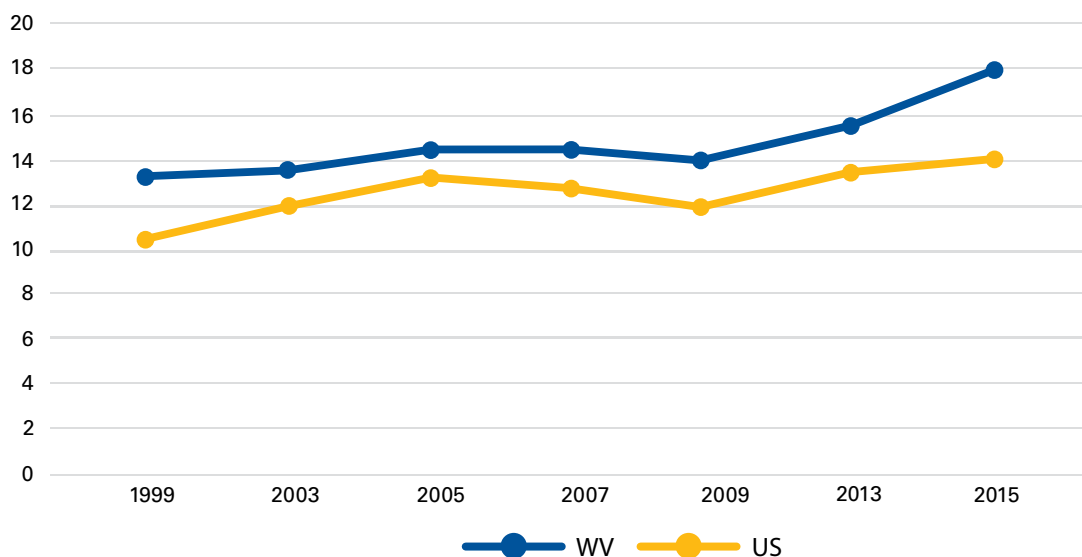
**The Majority of Adult West Virginians are Either Overweight or Obese****Percent of Overweight or Obese Adults in West Virginia, 1999 - 2016**

Source: WV DHHR

**Childhood Health**

SSB overconsumption not only adversely affects adults, but children as well. Studies show that the more sodas children consume, the higher their risk of obesity.<sup>31</sup> The CDC found that in 2015, 30.1 percent of West Virginia high school students drank soda at least once a day—the second highest rate in the nation.<sup>32</sup> In the same year, West Virginia had the fifth highest rate of obese high school students with 17.9 percent, up from 15.6 percent in 2013.<sup>33</sup> As of 2016, 35.1 percent of 10 to 17 year olds in West Virginia were overweight or obese and 16.4 percent of 2-4 year-olds from low-income families were also obese.<sup>34</sup> West Virginia ranked second (63.8 percent) in the nation with the number of people 18-24 years old consuming at least one SSB each day.<sup>35</sup>

FIGURE 4

**West Virginia's High School Obesity Rate Among the Highest in the Nation****West Virginia and United States High School Obesity Rate, 1999 - 2015**

Source: CDC, High School Youth Risk Behavior Survey

The consumption of SSBs also has other adverse health effects on children. Soda consumption is a major contributing factor to tooth decay in children and adolescents.<sup>36</sup> “Mountain Dew mouth,” a term used to describe severely damaged teeth, is seen in many low-income areas in the United States, but is particularly prevalent in Appalachia. The CDC estimated that from 2013-2014, 56 percent of third grade students in West Virginia experience tooth decay compared to 52 percent of third graders nationally.<sup>37,38</sup>

## The Soft Drinks Tax in West Virginia and Other States

Implementing SSB taxes specifically in order to lower consumption rates is relatively new. However, several states including West Virginia have had taxes on soft drinks for quite some time. West Virginia’s tax does not just apply to bottled soft drinks, it also applies to powder mixtures as well as syrups.<sup>39</sup> The soft drinks tax is an excise tax, meaning it is already included in the price of the product as opposed to a sales tax that is applied at the point of purchase.<sup>40</sup>

The West Virginia Soft Drinks Tax went into effect on June 30, 1951.<sup>41</sup> It is an excise tax levied upon the sale, use, handling, or distribution of bottled soft drinks, syrups, and powder bases prepared for mixing soft drinks whether manufactured within or outside of West Virginia. The tax was created, and the generated funds are still reserved, for the sole purpose of the construction, maintenance, and operation of a four-year school of medicine, dentistry, and nursing at West Virginia University. Prior to the creation of the soft drinks tax, West Virginia only had a two-year medical school.



## TAXED



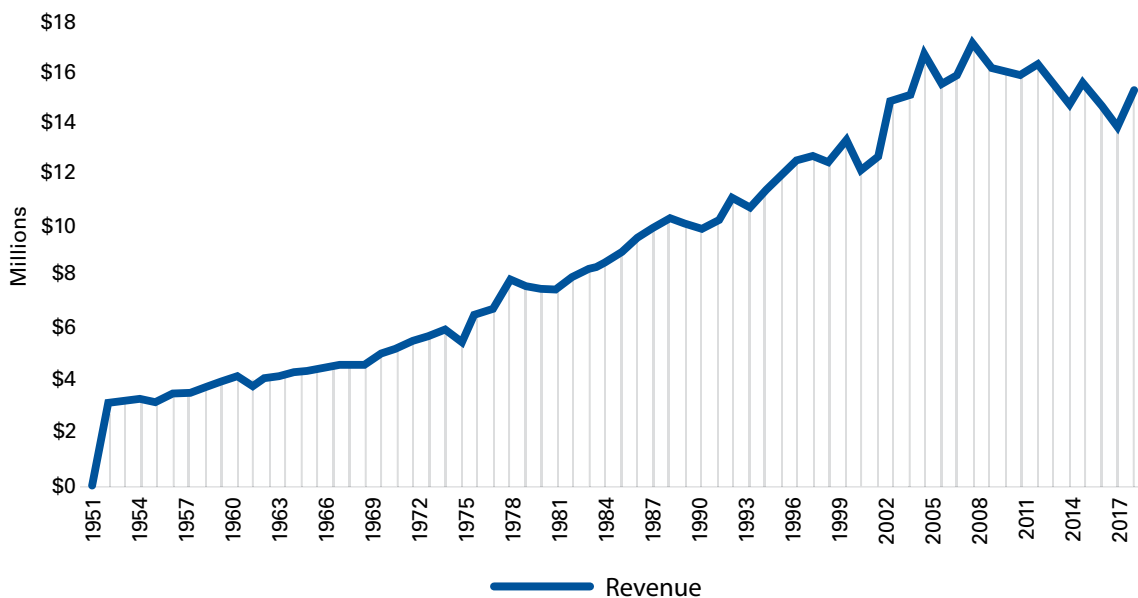
## EXEMPT

Initial estimates suggested the penny-per-bottle tax would yield between \$3 and \$4 million annually<sup>42</sup> These estimates were close to reality; in the first full year of the soft drinks tax, revenues reached \$2.98 million and have only continued to climb. Since its implementation, the state has collected approximately \$592 million from its soft drinks tax.<sup>43</sup> In 2017, West Virginia collected approximately \$15 million (Figure 5). Since 2000, the tax has collected an average of \$14.8 million each year.

FIGURE 5

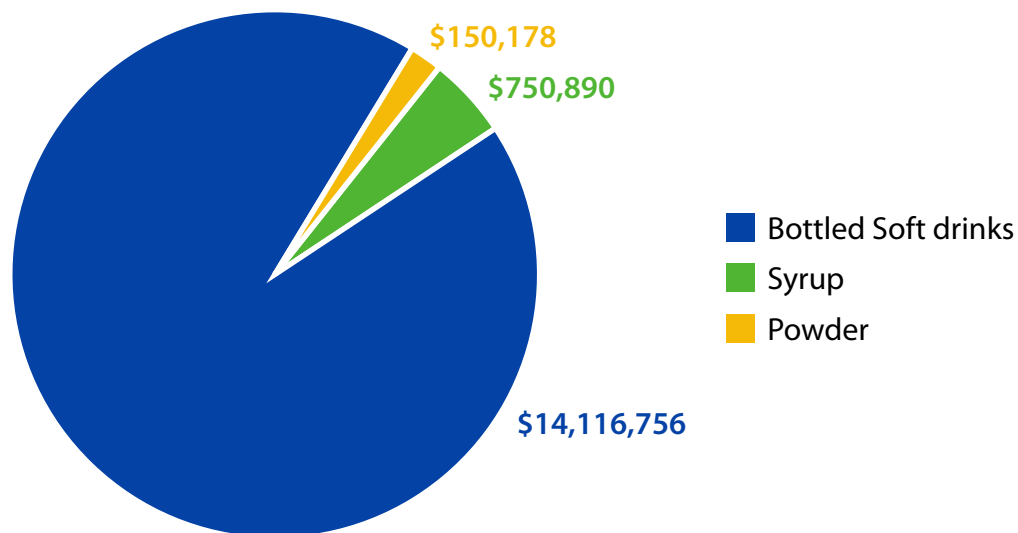
### West Virginia's Soft Drink Tax Revenue Collections, 1951 to 2017

### West Virginia Annual Soft Drinks Tax Revenue, 1951 - 2017



West Virginia defines a soft drink as any and all nonalcoholic beverages that contain natural or artificial sweeteners.<sup>44</sup> This includes, but is not limited to, drinks such as soda water, lemonade, bottled or canned sweet tea, chocolate milk, packets of Kool-Aid, and some fruit juices. It also includes syrups used to flavor coffee-based and tea-based drinks. The only products which are exempt from the soft drinks tax are plain water that is uncarbonated, naturally carbonated water, milk to which no flavoring has been added, and natural or undiluted fruit juice or vegetable juice.

FIGURE 6

**Most of West Virginia's Soft Drinks Tax Comes from Bottled Drinks****Breakdown of Soft Drinks Tax Revenue, 2015**

In addition to West Virginia, Arkansas, Virginia, and Tennessee also have soft drinks taxes. These taxes are specifically used as a revenue source for certain programs, not necessarily to reduce sugary drink consumption but to fund particular programs like Medicaid and litter cleanup. Passed in 1992, Arkansas' soft drink tax was created to support the state's Medicaid program. The tax is \$2.00 per gallon of soft drink syrup and \$.21 per gallon of soda (128 ounces), which is the equivalent of about two cents on every 12-ounce can or bottle.<sup>45</sup> As of 2017, about 912,000 citizens of Arkansas received healthcare through Medicaid.<sup>46</sup> The tax brought in \$47 million in Fiscal Year 2017, and from the years 2003 to 2017, brought in over \$640 million in revenue. As of February 2018, Arkansas has collected \$31.3 million for the current fiscal year, all deposited in the Medicaid Trust Fund and is not available for appropriation for other purposes.<sup>47, 48</sup> In 2016, the Medicaid Trust Fund funded \$44.9 million of the operating budget for Medicaid.<sup>49</sup>

Virginia levies a gross receipt tax on wholesalers and distributors of soft drinks.<sup>50</sup> The funds generated from this tax are deposited into the Litter Control and Recycling Trust Fund along with the revenue from two other taxes: a litter tax and an excise tax on beer. In 2016, the litter taxes have generated \$1.9 million, \$219,000 from the soft drinks tax.<sup>51</sup> Tennessee has a 1.9 percent gross receipt tax on manufacturers, distributors, and bottlers of soft drinks<sup>52</sup> and 21 percent of the revenue is used to fund the Tennessee Department of Transportation's Litter Grant Program.<sup>53</sup>

## Sugar-Sweetened Beverage (SSB) Taxes

In light of links between sugary drinks and adverse health effects, a growing number of localities have recently implemented SSB taxes. The California cities of Berkeley, Oakland, San Francisco, and Albany; Boulder; Philadelphia; and Seattle, and the country of Mexico have an excise tax on soft drinks. The soft drink taxes in Arkansas, Tennessee, Virginia, and West Virginia are not in place to curb consumption. In 2014, however Mexico implemented, a country-wide excise tax on sodas of one peso per liter, or about eight cents. The legislation allows for the tax to be adjusted when the inflation rate, compared to 2014, reaches 10 percent.<sup>54</sup> The goal of Mexico's tax is to reduce obesity while also raising revenues. Revenues raised are specifically earmarked



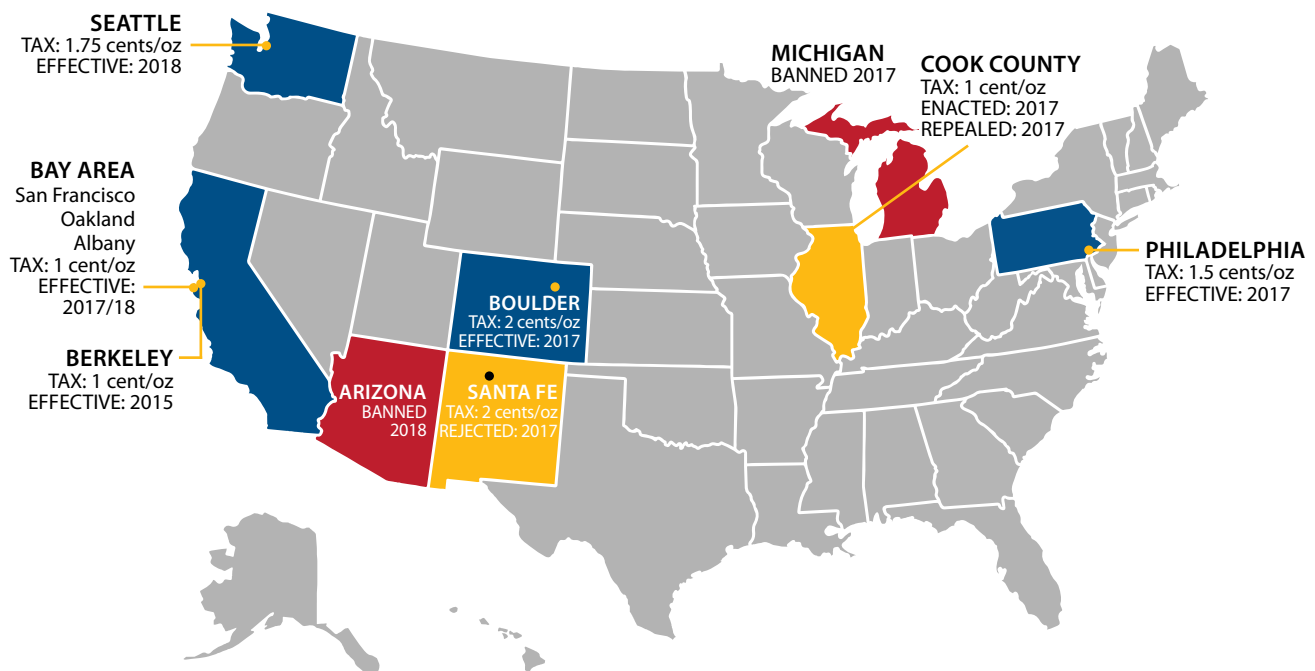
for public health programs to prevent obesity and expand access to clean water in rural areas and schools.<sup>55</sup> In 2012, the prevalence of overweight and obesity in Mexico was almost 70 percent among adults and 30 percent in children.<sup>56</sup> Before the tax, sugar-sweetened beverages accounted for 70 percent of the sugars added to the diet of Mexican residents.<sup>57</sup> A recent study shows that two years after the tax took effect, there was an average decline of 7.6 percent in purchases of taxed beverages with a 2.1 increase in purchases of untaxed beverages over the same two-year period.<sup>58</sup> The study shows that there was a reduction in the purchase of taxed beverages among all socioeconomic levels in 2015, but the reductions were largest in households at the lowest socioeconomic level with a decline of 11.7 percent.<sup>59</sup> While one of the goals of the tax was to reduce consumption of sugar in order to impact the prevalence of overweight and obesity in the country, it is still too early to tell with any certainty if it had an impact.

FIGURE 7

## Sugary Drink Taxes in the United States

### Public Health-Based SSB Taxes in the United States

While there are some states, including West Virginia, that have taxes on soft drinks, the taxes aren't high enough to reduce consumption. This map shows cities and counties which have instituted taxes with the intent of curbing sugary drink consumption.



Source: WVCBP

### Berkeley CA SSB Tax

In 2015, Berkeley became the first locality in the United States to implement an excise tax on SSBs specifically for public health reasons. Its one-cent-per-ounce tax is levied on the distribution of sugar-sweetened beverages, including soda, energy drinks, and sports drinks but does not include diet drinks. The revenue from the tax goes into the city's general fund where a panel of experts will make recommendations to the city council about establishing or funding programs aimed at reducing the consumption of SSBs in Berkeley.<sup>60</sup> Although the tax has only been in effect for two years, its impact is already visible. Compared to nearby

cities of Oakland and San Francisco, Berkeley's consumption of SSBs decreased by 21 percent and water consumption increased by 63 percent in low-income neighborhoods.<sup>61</sup> As of March 2017, Berkeley's sugar-sweetened beverage tax has brought in over \$3 million to the city's general revenue fund.<sup>62</sup> The tax, however, is set to terminate as of January 2027.<sup>63</sup>

One of the most common arguments against an SSB tax is that it will hurt the economy and people will lose jobs.<sup>64</sup> Early data from Berkeley, however, show that food-sector revenues rose by 15 percent and 469 new food-sector jobs were created—an increase of 7.2 percent.<sup>65</sup>

## Philadelphia, Pennsylvania SSB Tax

Following the successful passage and implementation of the SSB tax in Berkeley, in 2016 Philadelphia became the second and largest city to pass a soda tax. The tax is 1.5 cents-per-ounce and only beverages that are at least 50 percent milk or fresh fruit/vegetables are excluded.<sup>66</sup> This means, contrary to other SSB taxes, diet drinks and artificially sweetened beverages are also included. Rather than justifying the tax by arguing for public health-related results, Mayor Jim Kenney advocated for the tax based on the revenue it would raise for pre-K programs, schools, libraries, recreation centers, and libraries. A main goal of the tax is to create 6,500 seats in pre-K programs by fall 2020.<sup>67</sup> Beginning in 2021, 99 percent of the revenue from the beverage tax will go toward the programs stated above, while the remaining one percent will be spent on the Healthy Beverages Tax Credit, which was passed in order to help small businesses sell healthier items.<sup>68</sup> The first 2,000 pre-K seats were created in 2017 in 88 programs across Philadelphia; however, further expansion was hindered by ongoing litigation.<sup>69</sup>

As of January 2018 the legality of the beverage tax is still under debate.<sup>70,71</sup> The projected revenue for the first year of the tax was \$92.4 million, meaning the collected revenue falls more than \$13 million short of projections. However, because of lack of historical data the initial revenue estimates could still be considered appropriate considering they fall within 85 to 90 percent of the original projections.<sup>72</sup>

TABLE 1: **Philadelphia Beverage Tax Collections, 2017** <sup>73</sup>

MONTH	Revenue Amount
July 2016 - June 2017	\$32,549,120
Fiscal Year-To-Date	\$46,296,522
Total as of January 2018	\$78,845,642

Source: City of Philadelphia Department of Revenue

## Other Cities

In addition to Berkeley and Philadelphia there are several other locations across the U.S. that have recently passed sugar-sweetened beverage taxes. Seattle passed a 1.75-cent tax on sugar-sweetened beverages in June 2017 that applies to any beverage with added caloric sweeteners.<sup>74</sup> Like other SSB taxes, Seattle exempts beverages for medical use, baby formula, beverages consisting of 100 percent natural fruit or vegetable juice, and meal replacements for weight reduction.<sup>75</sup> For the first five years the tax is collected, 20 percent of the revenue will be used to fund the administration of the tax, education, and training programs. Up to \$5 million will go toward the Seattle Colleges 13th Year Promise Scholarship while up to \$1.5 million will be reserved for

job retraining and placement programs for workers who will be negatively impacted by the tax.<sup>76</sup> Beginning in the sixth year of the tax, the revenue will go toward a variety of programs, including expanding access to healthy and affordable foods, closing the food-security gap, public awareness campaigns to highlight the impact of SSB consumption on health, and services that eliminate educational disparities in children.<sup>77</sup>

Following in the footsteps of Berkeley, three more cities in California's Bay Area passed a penny-per-ounce SSB tax in 2016—Albany, Oakland, and San Francisco. In San Francisco, the tax is applied to sugar-sweetened beverages that contain added sugar and more than 25 calories per 12 ounces.<sup>78</sup> In all three cities, the revenue will be deposited into the city's general fund where an advisory committee will submit an annual report evaluating the tax and making recommendations for allocations. Also in each city, beverages containing 100 percent natural fruit or vegetable juice, artificially-sweetened drinks, milk products, and drinks for medical uses are all exempt from the tax.<sup>79</sup>

The largest sugar-sweetened beverage tax of two-cents-per-ounce was passed by Boulder, Colorado in November 2016 that took effect in July 2017. The tax is imposed on all sugar-sweetened beverages that contain at least five grams of added sweetener per 12 ounces.<sup>80</sup> Like most of the previous taxes discussed, Boulder exempts milk-based and 100 percent natural juice beverages. The revenue collected is put toward the administration of the tax as well as general wellness programs and chronic disease prevention.<sup>81</sup> In the first six months of the tax the total amount collected was over \$2.6 million.<sup>82</sup>

While several of these are instances of the effective implementation of a sugar-sweetened beverage tax, there have also been less successful attempts. In 2016, Cook County, Illinois passed a one-cent-per-ounce SSB tax scheduled to go into effect on July 1, 2017. After a months-long battle, in October 2017 a Cook County board committee voted 15-2 to repeal the tax beginning December 1, 2017.<sup>83</sup> In May 2017, voters in Santa Fe, New Mexico rejected a two-cents-per-ounce tax on sugary drinks that was estimated to raise more than \$7 million a year going toward the expansion of pre-K programs.<sup>84</sup> By way of a preemptive strike against sugary drink taxes, in 2017 the Michigan Senate voted to prohibiting taxing food, drinks, or chewing gum.<sup>85</sup> Most recently, in March 2018 Arizona governor Doug Ducey signed a bill prohibiting cities, towns, and counties from imposing taxes on sugary drinks.<sup>86</sup>

## Is a SSB Tax Regressive?

Opponents of a SSB tax often say that it hurts small businesses, causes job losses, represents the government intruding on citizens' lifestyles, and places the burden disproportionately on people in low-socioeconomic groups.

While lower-income populations may be disproportionately affected by a soda tax, they are also disproportionately affected by overweight, obesity, and resulting health conditions.<sup>87</sup> If the revenues are earmarked to be put back into these same communities, the results will ultimately be progressive. When used to pay for health programs, soda taxes can help balance the social costs of overconsumption of SSBs in lost productivity and health care.<sup>88</sup> Funds collected from taxes on SSBs can be used to encourage and support physical activity or be applied to childhood obesity prevention programs, oral health programs, school gardens, and parks and recreation. The revenue from soda taxes could also be used to help those most in need by subsidizing the cost of healthier food choices like fruits and vegetables.<sup>89</sup> Overall, voters are more likely to support taxes if they are directly linked to desirable social and health programs.<sup>90</sup> If the revenue generated from a soda tax is earmarked for Medicaid and obesity prevention programs, the lower-income population would be the primary beneficiary while reaping the benefits of better health and reduced risk of chronic diseases associated with overweight and obesity.

## Conclusions and Recommendations

The West Virginia soft drinks tax has not been increased since its implementation and, adjusted for inflation, the \$.01 tax on a bottle of soda in 1951 would be the same as a \$.09 tax per bottle in 2018.<sup>91</sup> Although the tax has not increased over its 65-year history, some members of the legislature have expressed interest in doing so. In the 2018 regular session, House Bill 4344 would have implemented a tiered tax on sugar sweetened beverages. Soft drinks with 10 to 20 grams of added sugars per eight ounces would be taxed at 1 cent per ounce and drinks with more than 20 grams of sugars per eight ounces would be taxed at two cents per ounce. According to the West Virginia State Tax Department, the proposed tax would bring in an estimated \$165.5 million on an annual basis with the first \$18 million dedicated to WVU medical schools and the remaining \$147 million going toward the Public Employees Insurance Agency Stability Fund.

Recently members of the West Virginia PEIA Finance Board voted to place a freeze on PEIA health insurance premiums for the 2018-19 plan, which leaves a \$29 million hole in PEIA's 2018-19 budget.<sup>92</sup> Medical and drug costs have been increasing around 5 to 7 percent per year, which means PEIA would require additional funding of around \$50 million per year to maintain benefits without raising premiums.<sup>93</sup> This means in order to keep on pace with rising health care costs, in five years PEIA could require \$250 million above current revenues.<sup>94</sup> In order to continue to fund PEIA, the state needs a fairly stable source of revenue each year rather than making one-time withdrawals from the Rainy Day Fund. While implementing a sugar-sweetened beverage tax and dedicating most of the revenue to PEIA would not solve all of the state's problems, it would be a much-needed source of income. According to the estimated revenues for HB 4344, if that tax were implemented, there could potentially be a surplus of \$97 million beyond what is needed to fund PEIA each year with no increase in premiums.

**Modernize the State's Soft Drinks Tax and Implement a Penny-per-Ounce Tax on Sugar-Sweetened Beverages.** Unlike other locations, West Virginia already has a tax structure in place to tax soft drinks. Because the state already has this structure, it would be much easier to modernize the tax rather than implementing a new tax all together. As it currently stands, West Virginia's soft drinks applies to a range of beverages, including diet drinks and carbonated water. If the goal is to reduce consumption of sugary drinks, it will be beneficial if the tax was lifted on carbonated water and diet drinks. According to estimates from the Rudd Center for Food Policy and Obesity at the University of Connecticut, the estimated revenue for 2018 would be \$97.5 million and by 2020 increasing to \$98.8 million.<sup>95</sup>

**Expand and Identify Where SSB Revenues Go.** Over the years, West Virginia has constantly faced budget problems, cuts to colleges, schools, and other vital public services. The state is in serious need of stable revenue sources to put toward economic development, teacher salaries, and other financial holes left in this state by the cutting of corporate taxes over the last decade. Not only is important for the state to find a sustainable funding source for PEIA, it is vastly important to continue to fund Medicaid. While passing a soda tax would not solve the problem completely, funds could be specifically earmarked for Medicaid. As of 2018, a third of West Virginians are enrolled in Medicaid<sup>96</sup> and it is estimated that 11.8 percent of all spending on Medicaid is attributable to obesity.<sup>97</sup> The revenues generated from a penny-per-ounce tax on sugar-sweetened beverages could also be earmarked for obesity prevention programs that would likely be cost-effective in the long run.<sup>98</sup> According to a study done by Harvard CHOICES, a one-cent-per-ounce tax on sugary drinks in West Virginia could save \$81.6 million over the course of 10 years while preventing nearly 18,000 cases of obesity.<sup>99</sup>

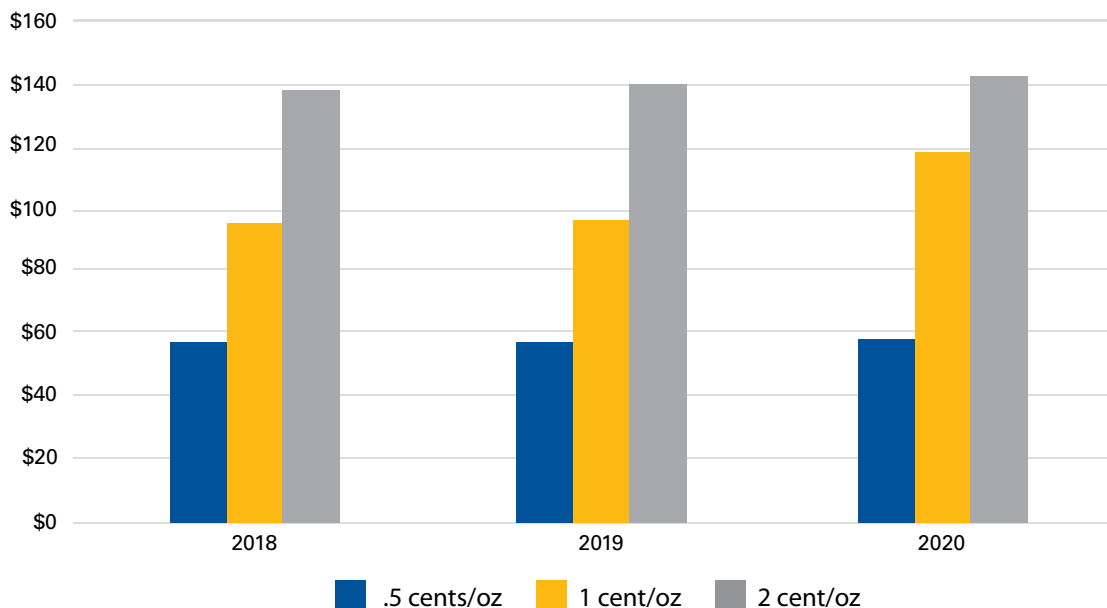
## Estimated Revenue of a Penny-per-Ounce Tax in West Virginia <sup>100</sup>

YEAR	Revenue Amount
2018	\$97,584,863
2019	\$98,195,625
2020	\$98,852,513

FIGURE 8

### Revenue of Sugary Drink Tax

## Estimated Revenue of a Sugary Drink Tax in West Virginia



Taxes are more likely to receive public support if their revenues are used to promote the health of children and underserved populations.<sup>101</sup> A tax is also more likely to be supported if the taxpayer knows exactly where the money is going. Importantly, a sugary-drink tax in West Virginia already seems to have support. According to a poll done by the “A Few Cents Makes Sense” campaign, 53 percent of West Virginians support a sugary drink tax to improve public health while 60 percent support the drink tax to help with the state’s budget shortfall. Similarly, a West Virginia Center on Budget and Policy poll shows that 64 percent of West Virginians support a penny-per-ounce sugary-drink tax. In order to gain even more support, proponents of the tax should be explicit in their suggestions of where the revenue should go.

## Appendix: What Other States are Doing

LOCATION	LEGISLATION & DATE ENACTED	DATE EFFECTIVE	TAX RATE	WHAT IS TAXED	WHAT IS NOT TAXED	HOW REVENUE WILL BE SPENT
Albany, CA	Measure O1 11/8/2016	TBD	1 cent per oz	Any beverage with added caloric sweetener	100% juice, artificially sweetened beverages, beverages with milk as the primary ingredient, infant formula, medical use and weight loss	Revenue will go into city's general fund. The city council will conduct an annual session to receive input on the expenditure of the tax proceeds and solicit recommendations from an informal advisory committee
Arkansas	1992		2 cent per 12oz			Helps fund Medicaid
Berkeley, CA	Measure D 11/4/2014	3/1/15	1 cent per oz	Any beverage with added caloric sweetener	A beverage where milk is the primary ingredient, infant formula, 100% fruit or vegetable juice, artificially sweetened beverages, beverages for weight loss or meal replacement	Goes into city's general fund. Currently, community health and nutrition efforts, including school garden programs, are being supported
Boulder, CO	Measure 2H 11/8/2016	7/1/17	2 cents per oz	Sugar-sweetened beverages containing at least 5 grams of added sweetener per 12oz	Any beverage where milk is the primary ingredient, infant formula, drinks taken for medical reasons, artificially sweetened beverages, 100% juice, meal replacement or weight reduction	Revenue will be dedicated to the administrative cost of the tax, as well as health promotion, general wellness programs, and chronic disease prevention
Cook County IL	Board of Commissioners 11/10/2016	7/1/17	1 cents per oz	Non-alcoholic beverages, carbonated or non-carbonated, containing any caloric or non-caloric sweetener	100% juice, like products with majority milk, beverages that can be sweetened by adding sweetener, drinks for medical reasons, for weight loss, any syrup or powder that the purchaser combines to make a drink	Revenue will cover the remaining \$74.6 million deficit for 2017 and address various public safety and health funding needs
Oakland, CA	Measure HH 11/8/2016	7/1/17	1 cent per oz	Sugar-sweetened beverages, including but not limited to: sodas, sports drinks, sweetened teas, energy drinks, and non-10% fruit juice	Milk products, 100% juice, infant formula, artificially sweetened beverages, drinks for medical reasons	City's general fund, the community advisory board will give recommendations to the city council on ways to spend the funds

LOCATION	LEGISLATION & DATE ENACTED	DATE EFFECTIVE	TAX RATE	WHAT IS TAXED	WHAT IS NOT TAXED	HOW REVENUE WILL BE SPENT
Philadelphia PA	City Council 6/16/2016	1/1/17	1.5 cents per oz	Non-alcoholic beverages sweetened by any form of caloric, sugar-based sweetener or any form of artificial-sugar substitute	Infant formula, drinks for medical purposes, beverages with more than 50% milk, products with more than 50% fresh fruit or vegetable juice, unsweetened drinks that the purchaser can sweeten	Revenue funds pre-K, as well as the rebuilding of parks and libraries
San Francisco CA	Proposition V 11/8/2016	1/1/18	1 cent per oz	Sugar-sweetened beverages containing added sugar and more than 25 calories per 12 oz	100% juice, artificially sweetened beverages, infant formula, milk products, beverages for medical purposes	City's general fund. An advisory committee will submit an annual report evaluating the impact of the tax on beverage prices, consumer purchasing behavior, and public health, and make recommendations on the potential establishment and or funding of programs to reduce the consumption of SSBs
Seattle, WA	Council Bill 118965 6/5/2017	7/6/17	1.75 cents per oz	Beverages with caloric sweeteners	Beverages that contain fewer than 40 calories per 12oz serving; milk as the principle ingredient, 100% juice, weight loss, infant formula, sweetened medications.	or the first five years, 20 percent of funds will be set aside for one-time expenditures, then this allotment will cease. The remainder of the funds will support public health, nutrition education, food security, and healthy affordable food access; evidence-based programs that address disparities, administration of the tax and advisory board, and program evaluation
Tennessee			1.9 % gross receipts tax			Litter Grant Program
Virginia			Tiered gross receipts tax			Litter Control and Recycling Program

<https://cspinet.org/sites/default/files/attachment/localsugarydrinks.pdf>



## Endnotes

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- <sup>2</sup> Brownell, K.D., Farley, T., Willet, W.C., Popkin, B.M. (2009, October). The Public Health and Economic Benefits of Taxing Sugar-Sweetened Beverages. <http://www.nejm.org/doi/full/10.1056/NEJMHpr0905723>
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- <sup>5</sup> Wang, Y., Coxson, P., Shen, Y., Goldman, L., & Bibbins-Domingo, K. (2012). A Penny-Per-Ounce Tax On Sugar-Sweetened Beverages Would Cut Health And Cost Burdens of Diabetes. *Health Affairs*, 31(1), 199-207.
- <sup>6</sup> Nestle, M. (2015). *Soda Politics: Taking on Big Soda and Winning* (p. 64). New York, NY: Oxford University Press. It is also important to note that while there are certainly some studies that do not find a link between soda consumption and adverse health, these studies are invariably paid for by soda companies or their trade associations. The studies that do find that soda adversely affects one's health were funded by grants for government agencies or private foundations.
- <sup>7</sup> Friedman, R. R., & Brownell, K. D. (2012, October). Sugar-Sweetened Beverage Taxes: An Updated Policy Brief. Rudd Report
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- <sup>10</sup> CDC National Diabetes Statistics Report; <https://www.cdc.gov/diabetes/data/statistics-report/index.html>
- <sup>11</sup> Trust for America's Health and Robert Wood Foundation. (2016). The State of Obesity in West Virginia. In *The State of Obesity: Better Policies for a Healthier America*. Retrieved June 16, 2017, from <http://stateofobesity.org/states/wv/>
- <sup>12</sup> Economic Costs of Diabetes in the U.S. in 2007 American Diabetes Association *Diabetes Care* Mar 2008, 31 (3) 596-615; DOI: 10.2337/dc08-9017
- <sup>13</sup> <http://main.diabetes.org/dorg/PDFs/Advocacy/burden-of-diabetes/west-virginia.pdf>
- <sup>14</sup> Ibid.
- <sup>15</sup> Ibid.
- <sup>16</sup> [http://choicesproject.org/wp-content/uploads/2017/03/BRIEF\\_Cost-Effectiveness-of-a-Sugary-Drink-Excise-Tax-West-Virginia.pdf](http://choicesproject.org/wp-content/uploads/2017/03/BRIEF_Cost-Effectiveness-of-a-Sugary-Drink-Excise-Tax-West-Virginia.pdf)
- <sup>17</sup> [https://dhhr.wv.gov/hpcd/data\\_reports/Pages/Fast-Facts.aspx](https://dhhr.wv.gov/hpcd/data_reports/Pages/Fast-Facts.aspx)
- <sup>18</sup> West Virginia Department of Health and Human Resources: <https://dhhr.wv.gov/hpcd/FocusAreas/wvdiabetes/Pages/DiabetesinWestVirginia.aspx>
- <sup>19</sup> <http://stateofobesity.org/states/wv/>
- <sup>20</sup> Harvard CHOICES, Sugary-Drink Excise Tax in West Virginia
- <sup>21</sup> <http://www.diabetes.org/diabetes-basics/statistics/?referrer=https://www.google.com/> and CDC
- <sup>22</sup> Nestle, M. (2015). *Soda Politics: Taking on Big Soda and Winning* (p. 67). New York, NY: Oxford University Press.
- <sup>23</sup> Ibid.
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- <sup>25</sup> <http://www.wvdhhr.org/bph/hsc/statserv/BRFSS.asp>
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- <sup>32</sup> Centers for Disease Control and Prevention (CDC). 1991-2013 High School Youth Risk Behavior Survey Data. Available at <http://nccd.cdc.gov/youthonline/>. Accessed on May 24, 2016.
- <sup>33</sup> Centers for Disease Control and Prevention (CDC). 1991-2013 High School Youth Risk Behavior Survey Data. Available at <http://nccd.cdc.gov/youthonline/>. Accessed on May 24, 2016.
- <sup>34</sup> <http://stateofobesity.org/states/wv/>
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- <sup>38</sup> While this report is specifically about Arizona, it uses national data for comparison <http://www.azdhs.gov/documents/prevention/womens-childrens-health/reports-fact-sheets/oral-health/healthy-smiles-healthy-bodies-data-brief-2015.pdf>
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- <sup>42</sup> Charleston Gazette, Feb. 2, 1951 Administration Bills Call for Medical School Levy Penny-a-Bottle Excise Proposed; Fountain Syrup Would Be Taxed
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- <sup>44</sup> WV Code §11-19-1
- <sup>45</sup> AR Code §26-57-901 (2012)
- <sup>46</sup> <http://files.kff.org/attachment/fact-sheet-medicaid-state-AR>
- <sup>47</sup> Talk Business & Politics staff. (2013, July 10). Jim Guy Tucker: For Two Decades, The Soda Tax Has Served Arkansas Well. In Talk Business & Politics The City Wire. Retrieved May 23, 2016, from <http://talkbusiness.net/2013/07/jim-guy-tucker-for-two-decades-the-soda-tax-has-served-arkansas-well/>
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- <sup>56</sup> Cochero, M.A., Rivera-Dommarco, J., Popkin, B.M., Ng, S.W. In Mexico, Evidence of Sustained Consumer Response Two Years After Implementing a Sugar-Sweetened Beverage Tax. *Health Affairs*. 107; 36(2): 1-8.
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- <sup>58</sup> Ibid.
- <sup>59</sup> Ibid.
- <sup>60</sup> Ordinance 7388-NS, City of Berkeley. [http://www.cityofberkeley.info/uploadedFiles/Health\\_Human\\_Services/Level\\_3\\_-\\_Public\\_Health/SSB%20Tax%20Ordinance%207,388-N.S..pdf](http://www.cityofberkeley.info/uploadedFiles/Health_Human_Services/Level_3_-_Public_Health/SSB%20Tax%20Ordinance%207,388-N.S..pdf)
- <sup>61</sup> Falbe, J., Thompson, H.R., Becker, C.M., et al. Impact of the Berkeley Excise Tax on Sugar-Sweetened Beverage Consumption. *American Journal of Public Health*. 2016; 106(10): 1865-1871. The study does not make a difference between the consumption of bottled and tap water—"water consumption" in this study refers to both.
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- <sup>63</sup> Ordinance 7388-NS, City of Berkeley. [http://www.cityofberkeley.info/uploadedFiles/Health\\_Human\\_Services/Level\\_3\\_-\\_Public\\_Health/SSB%20Tax%20Ordinance%207,388-N.S..pdf](http://www.cityofberkeley.info/uploadedFiles/Health_Human_Services/Level_3_-_Public_Health/SSB%20Tax%20Ordinance%207,388-N.S..pdf)
- <sup>64</sup> Powell, L.M., Wada, R., Persky, J.J., Chaloupka, F.J. Employment Impact of Sugar-Sweetened Beverage Taxes. *American Journal of Public Health*. 2014; 104:672-677.
- <sup>65</sup> <http://www.phi.org/uploads/application/files/zq8houfhy138b4rggefjpaj7t2s7k2hpjfpjofgin6pw2tp77h.pdf>
- <sup>66</sup> City of Philadelphia, Bill No. 160176
- <sup>67</sup> <https://beta.phila.gov/departments/mayors-office-of-education/quality-pre-k/>
- <sup>68</sup> <http://www.phillybevtax.com/Consumers/Frequently-Asked-Questions>
- <sup>69</sup> Ibid.
- <sup>70</sup> While the tax was to officially take effect in January of 2017, the American Beverage Association, in conjunction with retailers, distributors, and consumers, filed a lawsuit in September 2016 challenging the tax. As of January 2018, the Pennsylvania Supreme Court voted in favor of hearing a case brought by distributors, small retailers, and the American Beverage Association questioning the legality of the tax. If the tax is found to be illegal it could have ramifications for other cities and states that are thinking of adopting a beverage tax as well as those that already have.
- <sup>71</sup> A longer discussion of the initial litigation of the tax: A judge ruled in favor of the tax, but the beverage industry filed a second appeal. In February, a coalition of state legislators and senators filed an amicus brief opposing the Philadelphia beverage tax. The coalition argues that the tax is unlawful because it applies to products that are already subject to the state sales tax. The legislators also argue that the tax is unconstitutional in that it violates the Pennsylvania Constitution's Uniformity Clause. Examples are cited from places throughout Philadelphia where the tax rate varies according to the particular product: "At the Collins Shop Rite a Coca-Cola six pack is at 57%. At the Fresh Grocer a 15 pack Gatorade is taxed at 42%, 12 pack of Ginger Ale is at 21%..." It is also argued that the tax is imposed on at the sales point rather than the point of distribution because of the pass-through rate. Lastly, they argue that the tax will ultimately result in lost revenue in the state sales tax and that it "violates the overarching and dominant public policy to pass a budget by June 30." The legislators argue that the tax "creates a budgetary nightmare...by decreasing revenues in sales no longer collected when people go to other states to purchase the products or stop purchasing them altogether." The Legislators argue that the soda tax violates the Sterling Act which "expressly prohibits Philadelphia from taxing any subject already subject to taxation by the Commonwealth 53 P.S. §15971. Pennsylvania law states that the Appellee may not levy or collect any tax on any subject preempted by a state tax. Sweetened beverages – the object of the tax imposed by the Philadelphia sweetened beverage tax, are already subject to the Commonwealth of Pennsylvania 6% sales and usage tax on beverages." [http://www.khlaw.com/Files/31925\\_State\\_Soda.pdf](http://www.khlaw.com/Files/31925_State_Soda.pdf).
- The uniformity clause states: "All taxes shall be uniform, upon the same class of subjects, within the territorial limits of the authority levying the tax, and shall be levied and collected under general laws". Article VIII § 1. <http://www.legis.state.pa.us/cfdocs/legis/LI/consCheck.cfm?txtType=HTM&ttl=00&div=0&chpt=8>.
- [http://www.khlaw.com/Files/31925\\_State\\_Soda.pdf](http://www.khlaw.com/Files/31925_State_Soda.pdf)
- See also: <https://qz.com/1198484/the-philadelphia-soda-tax-will-be-considered-by-pennsylvanias-supreme-court/>

- <sup>72</sup> <https://www.bizjournals.com/philadelphia/news/2017/05/31/soda-beverage-tax-pbt-revenue-collect-prek-rebuild.html>
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- <sup>79</sup> Ibid.
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