

# A Legal and Practical Guide for Designing Sugary Drink Taxes

Second Edition



**ChangeLab Solutions**  
Law & policy innovation for the common good.



**HEALTHY FOOD  
AMERICA**  
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# Introduction

Sugary drinks are the number one source of added sugars in our diet, representing almost half of all added sugars consumed in the United States.<sup>1</sup> These added sugars are a major contributor to the country's high rates of heart disease, type 2 diabetes, obesity, poor oral health, and other chronic conditions.<sup>2</sup> Meanwhile, availability of sugary drinks has increased dramatically, with the availability of caloric carbonated soft drinks alone – not including sports drinks, sweetened teas and coffees, or non-carbonated fruit-flavored drinks – tripling over the last 70 years.<sup>3</sup>

Recognizing the serious public health implications of these trends, communities across the country have begun implementing a variety of strategies to reduce consumption of these beverages.

In the last few years, one strategy has received growing support from both the public and policymakers: taxing sugary drinks to both reduce consumption and raise revenues that can be invested in promoting healthier communities. Recently enacted sugary drink taxes in Philadelphia; Seattle; Boulder, Colorado; and the San Francisco Bay Area (including Berkeley, Albany, Oakland, and San Francisco) promise to raise over \$132 million annually, with combined estimated health care savings of nearly \$170 million (see [Table 1 on page 6](#) for a summary of sugary drink taxes passed to date).<sup>4</sup>

Initial evidence suggests that taxing sugary drinks is an effective strategy for curbing consumption,<sup>5-8</sup> and communities have used tax revenues to fund a wide



range of programs to support health and address the social determinants of health, including universal preschool,<sup>9</sup> health programming in schools,<sup>10</sup> and access to healthy and affordable food and clean water.<sup>11</sup>

ChangeLab Solutions and Healthy Food America have collaborated to create *A Legal and Practical Guide to Designing Sugary Drink Taxes*, an update of our 2016 *Best Practices in Designing Local Taxes on Sugary Drinks*, reflecting lessons learned from local sugary drink tax efforts over the past two years. **This new and updated guide identifies best practices and potential pitfalls in designing and implementing sugary drink taxes and is intended for use by local officials and advocates interested in pursuing sugary drink taxes.**

This guide begins by answering a critical first question: Why enact a sugary drink tax? It then identifies threshold legal questions to help local policymakers and advocates determine whether their community is legally permitted to adopt a sugary drink tax. The guide continues by focusing on considerations that affect the scope and breadth of the sugary drink tax, as well as the disposition of tax revenue. The guide briefly examines the process for passing and implementing a tax before finishing with a discussion of challenges future tax efforts might face.

## Community Engagement

Community engagement is an essential first step in deciding to develop and implement a sugary drink tax. Robust community engagement enables affected communities to identify problems they wish to address through the adoption of a tax and helps build critical awareness and support for any tax campaign. Those most affected by the health impacts of sugary drinks should play a role in decisionmaking about the tax from the very beginning and should continue to participate as partners throughout the policymaking process to ensure that the tax is both written and implemented to reflect their needs.<sup>12</sup> It is also critical to engage communities during implementation; for example, communities can recommend strategies to mitigate negative effects of the tax and help decide where to allocate the tax revenue.

Community engagement is an essential bulwark against opponents of sugary drink taxes. Genuine

community engagement allows those involved in a sugary drink tax campaign to combat the beverage industry's narratives by providing outreach and education to community members about the inequitable burden of disease associated with sugary drinks and the sugary drink industry's predatory targeted marketing practices, as well as about the potential investment of sugary drink tax revenues in the health and well-being of the communities most impacted by sugary drink consumption.

For more information on the importance of community engagement, how best to engage with a community to promote a sugary drink tax campaign, and how to counter arguments against sugary drink taxes, see ChangeLab Solutions' [Sugary Drink Strategy Playbook](#) and Healthy Food America's [A Roadmap for Successful Sugary Drink Tax Campaigns](#).

# Why Tax Sugary Drinks?

The science is clear: sugary drinks are bad for our health.<sup>13,14</sup> Liquid sugar is easy to consume in large amounts without making people feel full, so they end up consuming more calories in a day overall.<sup>15</sup> Further, a clear and compelling body of evidence shows a relationship between consumption of sugary drinks and chronic diseases such as type 2 diabetes;<sup>16</sup> obesity; and heart, liver, and dental diseases.<sup>17-19</sup> These diet-related diseases are epidemic in the United States. Moreover, they disproportionately affect low-income populations and communities of color.<sup>20</sup> African Americans and Latinxs are 70% more likely to have diagnosed diabetes than non-Latinx white people.<sup>21,22</sup> Low-income people, African Americans, and Latinxs consume more sugary drinks than white and high-income people, driven in part by the predatory marketing of sugary drinks that targets these populations.<sup>23</sup>

Sugary drink taxes can play an important role in improving community health, helping nudge consumers toward healthier options by raising the price of sugary drinks relative to healthier options; raising public awareness of the health risks associated with consumption; and shifting public perceptions, attitudes, and norms about sugary drink consumption. Economists estimate that a tax increasing sugary drink prices by 10%<sup>24</sup> would reduce consumption by 12%.<sup>25,26</sup>

Taxing sugary drinks can also raise much-needed revenue to help address health and social justice issues in underserved communities by funding infrastructure and programming designed to increase health equity and improve the social determinants of health, such as education to help prevent chronic diseases or programs to increase access to healthy foods and safe drinking water. Tax revenues can be directed back to underserved communities, including those that bear a disproportionate burden of diseases associated with sugary drinks, or those that are affected by policies

that have contributed to health disparities and high rates of disinvestment. Revenues can be used to address pressing needs in those communities – for example, by funding early childhood health and education programs, broader education programs, or improvements to community parks and libraries.<sup>27</sup> (See [Table 4 on page 17](#) for more examples.)

Finally, well-designed sugary drink taxes can provide an incentive for the beverage industry to produce healthier beverages that contain fewer added sugars and for distributors and retailers to stock more of these healthier options. Internationally, taxes are increasingly designed using a tiered or sugar content tax base to incentivize recipe reformulations with lower sugar concentrations. For example, in the United Kingdom, sugary drink producers have reduced the sugar content of products like Fanta and Sprite by more than 30% to avoid a sugary drink tax;<sup>28</sup> and only 2 mass-market soft drinks remain subject to the highest tax rate (Coca-Cola Classic and Pepsi-Cola Made with Real Sugar).<sup>29</sup>



Table 1: Sugary Drink Taxes in the United States as of November 30, 2018<sup>30</sup>

Location & Population <sup>A</sup>	Annual Tax Revenue (Millions) <sup>B</sup>	Tax Rate per Ounce	Community Advisory Board	Passage	Effective Date
<b>Berkeley, CA (pop. 122,324)</b> Measure D	\$1.6	1 cent	Yes	76% of voters	1/1/15
<b>Philadelphia, PA (pop. 1,580,863)</b> Council	\$77.3	1.5 cents	No	13-4 council vote	1/1/17
<b>Albany, CA (pop. 20,143)</b> Measure O1	\$0.3	1 cent	No	71% of voters	4/30/17
<b>Oakland, CA (pop. 425,195)</b> Measure HH	\$11	1 cent	Yes	61% of voters	7/1/17
<b>Boulder, CO (pop. 107,125)</b> Measure 2H	\$5	2 cents	Yes	54% of voters	7/1/17
<b>San Francisco, CA (pop. 884,363)</b> Measure V	\$15.3	1 cent	Yes	62% of voters	1/1/18
<b>Seattle, WA (pop. 724,745)</b> Council	\$21.7	1.75 cents	Yes	7-1 council vote	1/1/18
<b>Total</b>	<b>\$132.2</b>				

A. Population based on 2017 Census population estimates

B. Tax revenues as reported by email communication from the municipalities in October and November 2018

## Legislative Findings & Model Language

From both a political and a legal perspective, it is important for sugary drink tax initiatives to include language – often referred to as *legislative findings* – that clearly explains the legislative intent of the jurisdiction in enacting the tax. In addition to serving an educational purpose and building political and popular support for the legislation, the findings can also serve a legal purpose. If the legislation is challenged in court, the findings are an admissible record of the factual determinations made by the legislative body when considering the legislation. Courts will generally defer to legislative determinations on factual issues, which often influence legal

conclusions. Findings also provide a basis for revenue allocation and help ensure that revenues generated by the tax are ultimately spent in a manner that is in alignment with the purpose of the legislation.

**Appendix I** contains model legislative findings establishing the health and equity impacts of sugary drink consumption. **Appendix II** includes sample tax ordinance language concerning common definitions, common tax exemptions, and the establishment of community advisory boards. All model and sample language should be adapted as needed to fit local legal and political circumstances.

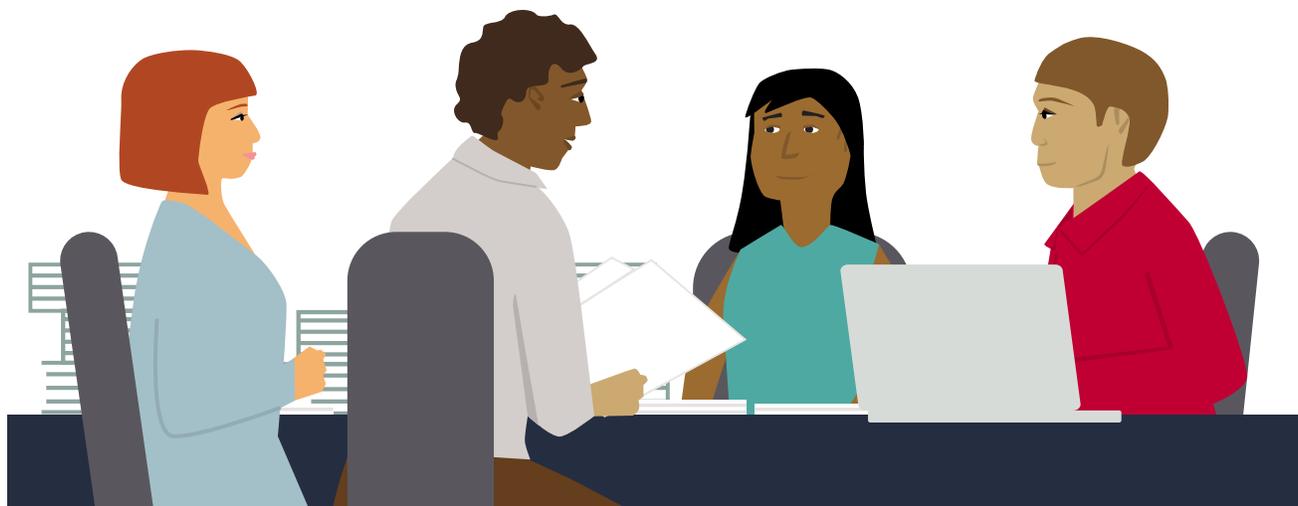
# Legal Authority

Before proceeding with a sugary drink tax initiative, a locality must ensure that it has the authority to enact such a tax. Some local governments have nearly absolute home rule authority, meaning that their state's constitution provides them with powers largely the same as those of the state.<sup>31</sup> Other local governments are only allowed to exercise powers explicitly delegated to them by the state legislature; these states are commonly referred to as *Dillon's Rule* states.<sup>31</sup> These differences in legal authority are particularly pronounced in the context of taxation. Thus, local governments might not have any authority to impose a sugary drink tax or might have limited authority that would affect the structure and scope of any proposed tax.

Understanding local taxation authority generally, and local authority to impose a sugary drink tax specifically, requires a complex, nuanced, and state-specific legal analysis, with outcomes dependent on numerous interconnected variables. A number of individuals, organizations, and resources can conduct or support the legal analysis necessary to determine local taxation authority:

- Local government attorneys – such as city attorneys or county counsels – likely can begin the process of determining local authority, but they may require outside assistance due to the specialized nature of tax law. They also may be risk-averse because of their duty to protect local governments from liability.
- Local municipal leagues often can provide resources on municipal financing options, and legal treatises can provide a high-level overview of constitutional and statutory municipal taxation authority.
- [The Local Solutions Support Center](#) houses [high-level, state-specific summaries of home rule authority](#).

When determining whether a jurisdiction has the legal authority to adopt a sugary drink tax, the authors of this guide recommend consulting with an expert in local municipal finance and taxes.



# Preemption

Related to local authority to tax is the issue of preemption. Preemption occurs when a state affirmatively removes a local government's authority to take a specific action that would otherwise fall within the local government's jurisdiction.<sup>32</sup> For example, while a local government may have the general authority to impose excise taxes, the state legislature could pass a law removing (preempting) this authority as it relates to sugary drink taxes. In some states, preemption may result from a statewide ballot initiative.

As more localities enact sugary drink taxes, the soda industry is increasingly relying on preemption as a legal strategy to block adoption of such taxes. As of 2018, local sugary drink taxes are preempted in California, Michigan, Washington, and Arizona. If a locality wishes to pursue taxation of sugary beverages but finds it is preempted from doing so, it can investigate the nature of the preemption and whether there are potential legal challenges to the state law. The locality could also consider the possibility of working at the state level to repeal or amend the preemptive legislation. Even where localities are not preempted from pursuing sugary drink taxes, advocates and policymakers must remain vigilant about potential preemption efforts. A state legislature may consider preemption concurrently with local efforts to enact a tax, or even after a tax has been enacted.

Industry has also begun disguising preemption efforts. For example, in Washington and Oregon, industry funded ballot measures in the 2018 elections to preempt what they misleadingly termed local *grocery taxes*.<sup>33</sup> Although these preemption campaigns did not mention sugary drinks specifically or use the word *preemption*, they were explicitly designed to prevent

localities in those states from enacting sugary drink taxes. The Oregon measure did not pass, but local sugary drink taxes are now preempted in Washington (although Seattle's existing tax remains in place). Preemptive legislation also is sometimes introduced at the last minute or hidden in seemingly unrelated state legislation. For example, in California, the beverage industry funded a draconian ballot measure that would have significantly limited local revenues, effectively strong-arming the state legislature into passing a last-minute bill that preempted new sugary drink taxes for 12 years in exchange for removal of the industry-funded ballot measure.

As such, even if there is no indication that preemptive legislation is currently pending in the state legislature, it is critically important for advocates and policymakers to monitor what is happening at the state level, both as a local initiative is unfolding and after it has passed. To monitor preemption, connect with state-level advocates who are watching state legislative activities. Organizations such as [Grassroots Change](#) track state-level preemption of nutrition-related policies, including sugary drink taxes; however, they are not monitoring in real time.

If there is a threat of preemption, a rapid response is critical. While the primary concern should be combatting preemptive legislation, jurisdictions that already have taxes in place should also work to preserve their existing taxes. The [Local Solutions Support Center](#), [A Better Balance](#), the [American Heart Association's Voices for Healthy Kids initiative](#), and [ChangeLab Solutions](#) offer technical assistance related to preemption.

For additional information on preemption, how to spot it, and why it matters for public health, see [ChangeLab Solutions' resources](#).

# Sugary Drink Tax Design

When crafting a tax law, local jurisdictions must make numerous policy choices, including what type of tax to pass, what the tax base should be, which products to tax, how high to set the tax rate, and how to use revenues raised by the tax.



## Incorporating Equity into Tax Design

Because most fixed-rate taxes are economically regressive in that they impose greater burdens on low-income households than high-income households in relation to their overall resources, it is important to design tax policies to promote equity by ensuring that they are progressive in their overall impact.<sup>34</sup> Local jurisdictions can work to ensure that the net impact of a tax policy is progressive and promotes equity in three important ways:

- **Community involvement.** Including community members from underserved communities in developing, designing, and implementing the tax proposal provides a means to address their social, economic, and health concerns and helps decisionmakers minimize any unintended negative consequences for community members. Having community leaders as part of the team designing and proposing a tax also helps increase community trust that funds will be directed to the most affected communities.
- **Equity-driven revenue spending.** Tax revenues can be invested in underserved communities that are often targeted by the beverage industry and ultimately **suffer a disproportionate burden of illness caused by sugary drinks**. While tax revenues can be allocated to programs that directly address the health impacts of sugary drinks (like improving access to healthy, affordable beverages and foods),<sup>35</sup> funds can also be

allocated for programs and services that address locally relevant health equity issues and social determinants of health (such as universal preschool education or workforce development). Community advisory boards that include representation from underserved communities (discussed in more detail on [page 19](#)) can make recommendations on how to spend revenues and keep community members engaged in articulating their needs as the tax is implemented.

- **Outreach and education.** Ongoing outreach to affected community members both before and after a tax is passed helps ensure that people are aware of the inequitable burden of disease associated with sugary drinks and the sugary drink industry's predatory marketing practices that target underserved communities. Education efforts can help community members see the benefits of a tax and how the revenue is being used. Finally, ongoing outreach and education programs can hire residents from these communities, increasing the effectiveness of the programs while also offering important employment opportunities.

For more information on how communities can incorporate equity into their tax design, as well as other equity-informed policy options for addressing sugary drink consumption, see ChangeLab Solutions' [Sugary Drink Playbook](#).

# What Type of Tax to Pass

The first design consideration for communities is deciding what type of tax to enact. Recent experience with sugary drink taxes indicates that specific excise taxes are the preferred method of taxing sugary drinks. A *specific excise tax* is a direct charge (excise) placed on the manufacture, sale, or use of specific goods or services on a *per-unit* basis. This can be contrasted with an *ad valorem tax*, which is based on the dollar value of an item.<sup>36</sup>

While specific excise taxes can generally be imposed on any party in the sugary drink distribution chain, from manufacturers to retailers, most local jurisdictions tax businesses that distribute sugary drinks to retailers within their borders. This strategy offers a number of advantages:

- **Appropriate instance of taxation.** Taxing distributors allows localities to effectively tax all sugary drinks sold within their borders and provides a jurisdictional basis for their taxes. In contrast, taxing manufacturers would not be effective because the tax would apply only to sugary drinks manufactured within the local jurisdiction's borders.
- **Ease of administration.** It is simpler to administer a tax on distributors than one on retailers because there are generally fewer distributors within a local jurisdiction and distribution businesses are frequently larger and better equipped to compute and pay the tax they owe.
- **Ensures higher shelf prices.** Using excise taxes on distributors helps ensure that price increases resulting from the tax are reflected in the shelf price of sugary drinks, given that distributors tend to pass the taxes on to retailers, who in turn pass their increased costs along to customers.<sup>37</sup> Research shows that higher shelf prices are one of the most effective means of discouraging consumption.<sup>38,39</sup>
- **Political advantages.** Distribution businesses may be seen as part of the beverage industry and as being more able to afford the tax than retailers, which the beverage industry regularly characterizes as local mom-and-pop stores in arguments against sugary drink taxes.

When designing an excise tax, local jurisdictions should be aware of a few key issues:

- **Self-distribution.** Self-distribution can occur within a single company – for example, when store-brand sodas are transferred from a company-owned warehouse to a retail outlet within a large chain. Self-distribution can also occur when retailers travel to neighboring cities or counties without a sugary drink tax to purchase sugary drinks intended for resale. To deal with this issue, the definitions of *distributor* and *retailer* in the tax should be drafted carefully to allow these types of transfers to be taxed. For examples of how this has been done, refer to [Appendix II](#), and see [Philadelphia's Payments, assistance & taxes website](#) and [Oakland's Sugar Sweetened Beverage Tax FAQs](#).
- **Small or local business exemptions.** To offset political concerns about taxing small businesses, small businesses may be exempted from the tax. For example, Seattle's tax exempts manufacturers, who are also distributors, with total gross sales of less than \$2 million<sup>40</sup> and taxes manufacturers, who are also distributors, with total gross sales between \$2 million and \$5 million at a lower tax rate, due to concerns about small sugary drink manufacturers based in the city.<sup>41</sup> While there may be political advantages to creating such exemptions, they reduce total revenue generated and the overall health impact of the tax and may open the tax to criticisms of being arbitrary or playing favorites.
- **Avoiding legal challenges.** While legal challenges to adopted taxes are not common, a few have claimed that sugary drink taxes violate state sales tax laws.<sup>42,43</sup> Accordingly, it is recommended that local jurisdictions include language in the ordinance explicitly stating that the tax they are passing is an excise tax on the distribution of sugary drinks and is not a sales tax. See [Appendix II](#) for model ordinance language that does so.

## Why Not a Sales Tax?

- **Taxes consumers.** *Ad valorem* sales taxes are always imposed on consumers at the point of sale, which means the tax is listed on purchase receipts but does not result in a higher shelf price for the taxed goods.
- **Unpopular.** Sales taxes are one of the most unpopular taxes people pay.<sup>44</sup> Polling suggests that consumers prefer excise taxes on specific products rather than sales tax increases.<sup>45</sup>
- **Less flexible.** Because sales taxes are inherently based on the value of the item being purchased, drinks with higher sugar content cannot be taxed at higher rates.
- **Complex exemptions.** Sales taxes must exempt purchases made with Supplemental Nutrition Assistance Program (SNAP) benefits, due to federal preemption, complicating administration and implementation of the tax and reducing overall tax revenues.
- **Tax caps.** Some states, such as Colorado,<sup>46</sup> New Mexico,<sup>47</sup> and Washington,<sup>48</sup> cap the total amount of taxes (sales or gross receipts) that municipalities or counties may impose. Many local jurisdictions are at that cap, so additional sales taxes would not be legally permissible. Sales tax caps may also limit the size of the tax, thus eliminating the possibility of imposing a tax large enough to meaningfully change consumption.

## Defining the Tax Base

The tax base is the measure on which the tax liability (the amount to be paid) is calculated. A volumetric tax base (eg, a tax per ounce of product) is currently the most common tax base, while a few countries have begun using sugar content (eg, a tax per gram of sugar in the product) or a hybrid tiered model (eg, creating different tiers of products based on sugar content and taxing volumetrically them at different rates). Each type of tax base has advantages and disadvantages (shown in [Table 2 on page 13](#)). Generally speaking, the more complex the tax base is, the harder it is to build popular support for the tax. As such, policymakers and advocates should pay particular attention to how the tax base they are considering would affect their messaging strategy.

### Volume: tax per ounce

All of the recent sugary drink taxes passed in the United States have levied the tax on each ounce of beverage sold, regardless of the amount of sugar, so long as the amount of sugar per ounce is greater than a minimum threshold. A tax based on volume alone is relatively simple to administer.

Distributors and retailers regularly track and invoice products based on volume. Determining the volume of a bottled product is straightforward. In some jurisdictions, basing a tax on volume may reduce legal vulnerability by creating the most robust evidence of a business presence in the jurisdiction, as volume sold reflects the business footprint of the distributor in the jurisdiction. A disadvantage of this approach is that it taxes beverages with high sugar concentrations at the same rate as lower-sugar beverages, which means there is no incentive for consumers to purchase, or manufacturers to produce, lower-sugar beverages. To address this limitation, experts suggest utilizing a tiered tax approach or one based on sugar content.<sup>49</sup>

### Sugar content: tax per gram or teaspoon of sugar

Another alternative is to use the amount of sugar in a beverage as the tax base, as has been done in [South Africa](#). A tax based on sugar content is levied on each gram of sugar in the beverage that exceeds a certain threshold. For example, in South Africa, that threshold is 4 grams per 100ml, which means the first 4 grams per 100ml are tax-free. Basing a tax on the amount of sugar more accurately

reflects the association between the beverage and its health effects; more sugar results in greater negative health effects. Such a tax may provide an incentive for industry to produce products that are lower in sugar and for consumers to choose them. Because taxes based on sugar content are complex to administer, however, they are only recommended for jurisdictions with sufficient tax administration capacity.

Determining the taxable sugar content for some beverages can present challenges. Taxes can be based on overall sugar content or only on sugars added during beverage manufacturing.<sup>50</sup> For the many products that contain no naturally occurring sugars, taxes based on total and added sugars are the same. Juice drinks usually contain a mix of added and naturally occurring sugars, and thus it is reasonable to tax total sugars. Milk products are more challenging, because the naturally occurring sugar is lactose, which is not harmful but is included in the total sugars. If a jurisdiction is considering taxing milk products, options include not taxing them until information on added sugars becomes available on nutrition labels in 2020–2021 or using nutritional data to estimate the amount of lactose and subtracting this amount from total sugars.

Given the complex nature of the issues discussed in this section, communities considering using sugar content as their tax base are strongly advised to consult with a tax expert.

### Tiered volume-based tax

Basing a tax on volume, tiered by concentration of added sugars, is the most complex approach. Products with high sugar concentration (ie, high amounts of sugar per ounce) are taxed at higher rates. This approach requires determining the sugar concentration and a tax rate for each tier. Distributors would then need to accurately assign beverages to tiers. A tiered tax, similar to a tax based on sugar content, provides economic incentives for industry and consumers, who may choose to produce or purchase beverages with lower sugar concentrations or in smaller serving sizes.<sup>28</sup> Most current volume-based taxes exempt low-sugar products and thus are, in effect, two-tier taxes (see “Exemptions” on page 14). However, based on

analysis of the sugar concentration of beverages in the US market, the American Heart Association suggests three tiers:

- low (less than 5 grams of added sugar per 8-ounce serving);
- medium (between 5 grams and 20 grams of added sugar per 8-ounce serving); and
- high (more than 20 grams of added sugar per 8-ounce serving).<sup>49</sup>

Ultimately, policymakers and advocates should choose a tax base for their ordinance by considering the health and revenue goals they are trying to achieve with the tax; the ability of government to administer the tax; what is legal under state law; and what is politically feasible.

Finally, during the adoption process, it is useful to make clear which products will not be taxed. For more on how the tax rate and tax base affect retail prices, see [Table 3 on page 16](#).



**Table 2: Comparing Sugary Drink Tax Bases**

	Pros	Cons	Example
<b>Volume</b>	<ul style="list-style-type: none"> <li>• Easy to administer (simple to calculate tax for any product based on its volume)</li> <li>• May reduce legal vulnerability by creating robust evidence of business presence in a jurisdiction</li> <li>• Easy for public to understand</li> </ul>	<ul style="list-style-type: none"> <li>• Taxes beverages with high sugar concentration at the same rate as beverages with low sugar concentration</li> <li>• Does not incentivize customers to purchase beverages with low sugar content unless beverages with low sugar concentration are exempted, as they are in all current taxes</li> <li>• Does not strongly incentivize reformulation for lower sugar content as effectively as taxes based on sugar content or tiered taxes</li> </ul>	<ul style="list-style-type: none"> <li>• Boulder: The tax is 2 cents per ounce on sugar-sweetened beverages, but beverages with less than 5 grams per 12 fluid ounces are exempt.</li> </ul>
<b>Sugar Content</b>	<ul style="list-style-type: none"> <li>• Accurately reflects the association of the amount of sugar in a beverage with negative health effects</li> <li>• May provide incentive for industry to produce low-sugar products if the jurisdiction's market size is very large</li> <li>• May provide consumers with incentive to choose lower-sugar products</li> <li>• Easy for public to understand</li> </ul>	<ul style="list-style-type: none"> <li>• Not as easy to administer as volume-based tax (need to calculate tax on each product based on its specific sugar content)</li> <li>• Politically, may raise issue of why not tax sugar in all products – not just beverages</li> </ul>	<ul style="list-style-type: none"> <li>• South Africa: The tax is 2.1 US cents per gram of total sugar content exceeding 4 grams per 100 ml, which means the first 4 grams per 100 ml are tax-free.</li> </ul>
<b>Tiered</b>	<ul style="list-style-type: none"> <li>• Maintains a volume-based tax while increasing the tax rate on high-sugar products</li> <li>• Provides incentive for industry to produce low-sugar products if the jurisdiction's market size is very large</li> <li>• May provide consumers with incentive to choose lower-sugar products</li> </ul>	<ul style="list-style-type: none"> <li>• Not as easy to administer as volume-based tax (need to calculate tax on each product based on its specific sugar content)</li> <li>• Not as easy for public to understand</li> </ul>	<ul style="list-style-type: none"> <li>• United Kingdom: The tax is 31 US cents per liter for drinks with more than 8 grams of total sugar per 100 ml and 23 cents per liter for drinks with 5 to 8 grams of total sugar per 100 ml. Drinks with less than 5 g of total sugar per ml are not taxed.</li> </ul>

# Which Beverages Are Subject to the Tax?

Another consideration in writing sugary drink tax legislation is defining the sugary drinks that will be subject to the tax. The baseline definition is **“all nonalcoholic beverages with any added caloric sweetener, including those intended to be mixed into an alcoholic drink.”** The definition generally includes sugary sodas, sports drinks, fruit drinks, pre-sweetened teas and coffees, enhanced waters, and energy drinks. Beyond this initial definition, localities will also have to determine how to address beverages made with syrups and powders and whether to carve out any tax exemptions.

## Syrups and powders

Sugary drinks are sometimes made by diluting or reconstituting syrups and powders, as in fountain drinks in restaurants. For taxes based on *volume*, current practice is to calculate the tax based on the largest volume of beverage that would typically be produced from the syrup, powder, or concentrate, based on the manufacturer’s formula or in-house recipe. For example, if the manufacturer’s instructions indicate that a container of a concentrate makes four to six 8-ounce servings (32 to 48 ounces), a volume-based tax on the concentrate would be calculated on 48 ounces. Alternatively, the tax can be calculated based on industry practice for dilution as reasonably determined by a tax administrator.<sup>51</sup>

Flavored syrups used to make other drinks, such as Italian sodas or flavored coffee drinks, present a special challenge. Because the amount of syrup in these drinks can vary depending on customer preference and the size of the drink, it can be hard to calculate the volume of sugary drink produced from a given amount of syrup. Several jurisdictions tax the syrups used in coffee drinks, while others do not.<sup>52,53</sup> Those that include them generally base the tax on a defined dilution standard set by the tax administrator. Syrups that consumers can add themselves at retail stores present a challenge for similar reasons. One option is to exempt consumer-

added syrups altogether. A second option is to tax consumer-added syrups based on a standard dilution formula determined by the tax administrator.

Syrups, concentrates, and powders that are intended for use in the home and sold in grocery stores, such as lemonade powder, generally are not taxed. Because they produce a very high volume of beverage, the tax can easily exceed 100% of the product price. From a health perspective, it makes sense to tax these items, but given their relatively small market share and the dramatic price increase they would see, doing so may not be politically prudent.

## Exemptions

A tax law can include exemptions, so long as there is a reasonable basis for doing so. However the perception that the list of taxed products is arbitrary (for example, if sweetened bottled coffee drinks are taxed but coffee drinks prepared in a coffee shop are not) can present political challenges. The following categories are commonly exempted from sugary drink taxes:

- Medically necessary beverages (eg, nutrition supplements such as Ensure and electrolyte replacements such as Pedialyte)
- Infant formula<sup>54</sup>
- 100% fruit and vegetable juices
- Milk products that are more than 50% milk by volume
- Milk substitutes (eg, soy or nut-based milk products )
- Natural and common sweeteners not in beverages (eg, maple syrup, honey, table sugar)
- Syrups, concentrates, and powders (eg, lemonade) sold for home use (as noted earlier)

Sample definitions for these common exemptions can be found in [Appendix II](#).

## Milk & 100% Juices

Research on the metabolic and health effects of flavored milks and 100% fruit juices is evolving. Recent reviews of the scientific literature have not found compelling evidence that these beverages cause weight gain, diabetes, or heart disease.<sup>55-57</sup> Guidelines from expert committees and professional associations (eg, American Association of Pediatrics) recognize that limited and age-appropriate consumption of 100% juice and flavored milks is reasonable and offers nutritional benefits (ie, fruit juices help people meet daily fruit intake goals, and flavored milk provides Vitamin D and calcium, which are classified as underconsumed nutrients of concern).<sup>14</sup> Additionally, policymakers and advocates must weigh the possibility that taxing milk and 100% juice may cause additional industries to join the beverage industry in fighting sugary drink taxes. It is therefore up to each jurisdiction to make its own judgment about the current evidence and political implications of taxing flavored, sweetened milk and 100% juice.

## Diet Beverages

Most laws also exclude beverages that are low in sugar, as well as diet (zero-calorie) beverages with non-nutritive sweeteners. The rationale is to encourage manufacturers to produce and market low-sugar products and consumers to switch to them. The threshold for exemption in US-adopted taxes ranges from 5 to 10 grams or 20 to 40 calories per 12 ounces; this guide recommends exempting products with less than 7.5 grams of sugar per 12 ounces.

Diet beverages are also generally excluded from taxes because the evidence of adverse health outcomes is mixed (although this is a rapidly evolving area of research) and some studies show benefits for short-term weight loss.<sup>58</sup> However, some argue that they should be included because they increase the overall tax base, thus generating more revenue, and because they spread the tax burden more equitably across socioeconomic lines, given that high-income people tend to prefer diet beverages.<sup>59</sup> In addition, a science advisory from the American Heart Association recently advised against regular and long-term consumption of diet beverages and recommended that people replace them with unsweetened water.<sup>60</sup>

Other exemptions that have been included in some current tax laws include restaurant beverages prepared in-house, such as horchata and other types of aguas frescas, and homemade lemonades, as well as smoothies and other beverages that are more than 50% (by volume) whole fruit or vegetables per manufacturer formula, even if they have added caloric sweetener.<sup>51</sup>

A proposed tax ordinance does not need to define all exemptions up front; the tax administrator can generally address additional exemptions during the rulemaking process once the tax is adopted. If a local jurisdiction has the authority to promulgate nonlegislative rules and regulations, adding a provision to the tax ordinance that authorizes the tax administrator to issue supplementary rules

can provide important flexibility.<sup>61</sup> See [Appendix II](#) for sample language on doing so. Communities pursuing this option should be prepared for local special interest groups to lobby for exemptions during the rulemaking process. For example, in Boulder, Colorado, liquor stores gained an exemption for non-alcoholic sweetened mixers.<sup>62</sup> In addition, kombucha and kefir manufacturers teamed with the Chamber of Commerce to request an exemption for their products.<sup>63</sup>

## Setting the Tax Rate

One of the important decisions in designing a tax is setting a tax rate. The tax rate affects the amount of revenue the tax will generate and its overall impact on consumption. The tax rate may also affect support for the tax among elected officials and the public. While higher tax rates may raise more revenue and are better for discouraging consumption,<sup>64</sup> raising rates too high can be politically risky and may result in lower overall tax revenue due to a larger drop in consumption. The tax rate in the 7 taxes currently implemented in the United States ranges from 1 to 2 cents per ounce (see [Table 1 on page 6](#)). A rate of 1.5 to 2 cents per ounce optimizes revenue generation and impact on consumption while maintaining political feasibility.

## Reducing consumption

Raising the price of sugary drinks decreases consumption.<sup>6,8,65</sup> Economic models suggest that for every 10% increase in price, consumption drops by 12% (price elasticity of -1.2).<sup>66</sup> While there is no firmly established target for the minimum reduction in consumption needed to measurably improve health outcomes, reducing consumption 20–25% is a reasonable goal.<sup>67</sup> Modeling studies show that a decrease in consumption of 8 ounces a day among people who consume sugary drinks – a 23% decrease in overall consumption – would prevent 26,679 heart disease deaths, 603 stroke deaths, and 6607 diabetes deaths in the United States each year.<sup>68</sup> To achieve a 20–25% reduction, the tax should increase prices by approximately 20%.

**Table 3: Product Price Changes for Volume- and Sugar-Based Taxes**

Product Type, Size, & Sugar Content	Tax on Volume (Ounces of Beverage)					Tax on Amount of Sugar (Teaspoons)				
	Original Price <sup>A</sup>	1 Cent per Oz Tax <sup>B</sup> Price Increase (Percentage Increase)	New Price 1 Cent per Oz	2 Cents per Oz Tax <sup>B</sup> Price Increase (Percentage Increase)	New Price 2 Cents per Oz	Original Price <sup>A</sup>	1 Cent per Tsp Tax <sup>B</sup> Price Increase (Percentage Increase)	New Price 1 Cent per Tsp	2 Cents per Tsp Tax <sup>B</sup> Price Increase (Percentage Increase)	New Price 2 Cents per Tsp
<b>Coca-Cola</b> 20 oz 65g sugar	\$1.99	\$0.20 (10%)	\$2.19	\$0.40 (20%)	\$2.39	\$1.99	\$0.16 (8%)	\$2.15	\$0.33 (16%)	\$2.32
<b>Coca-Cola</b> 2 liter, 72 oz 234g sugar	\$1.99	\$0.72 (36%)	\$2.71	\$1.44 (72%)	\$3.43	\$1.99	\$0.59 (29%)	\$2.58	\$1.17 (59%)	\$3.16
<b>Coca-Cola</b> 12pk, 144 oz 468g sugar	\$6.99	\$1.44 (21%)	\$8.43	\$2.88 (41%)	\$9.87	\$6.99	\$1.17 (17%)	\$8.16	\$2.34 (33%)	\$9.33
<b>Mountain Dew</b> 20 oz 77g sugar	\$1.99	\$0.20 (10%)	\$2.19	\$0.40 (20%)	\$2.39	\$1.99	\$0.19 (10%)	\$2.18	\$0.39 (19%)	\$2.38
<b>Red Bull</b> 12 oz 39g sugar	\$2.99	\$0.12 (4%)	\$3.11	\$0.24 (8%)	\$3.23	\$2.99	\$0.10 (3%)	\$3.09	\$0.20 (7%)	\$3.19
<b>Vitamin Water</b> 20 oz 32g sugar	\$1.67	\$0.20 (12%)	\$1.87	\$0.40 (24%)	\$2.07	\$1.67	\$0.08 (5%)	\$1.75	\$0.16 (10%)	\$1.83

A. Prices and sugar content of beverages collected in Safeway in El Cerrito, CA, in September 2018

B. Price increases assume 100% pass-through

Table 3 shows the impact on prices of a volume-based tax of 1 cent and 2 cents per ounce and of a sugar-based tax of 1 cent and 2 cents per teaspoon of sugar on prices of common sugary drinks, assuming 100% of the tax levied on distributors is passed through<sup>69</sup> to consumers. While the percentage price increases vary by product, a tax of 1.5 to 1.75 cents per ounce or 2.0–2.5 cents per teaspoon (0.5 cents per gram) would produce the desired decrease in consumption.

The best way to get a sense of how a given tax rate might affect prices in a community is to visit local retailers and collect prices, container volumes, and sugar content (from the nutrition label) for popular drinks. By making calculations based on the volume or sugar content of actual drinks, advocates and policymakers can get a sense of how specific volume- or sugar-based rates might affect price.

## Revenue

The revenue a tax generates is a function of sales volume, the tax base, and the tax rate. However, local- or state-level sales data are not generally available. To help policymakers and advocates predict potential tax revenues, the Rudd Center for Food Policy & Obesity at the University of Connecticut developed a [tax calculator](#)<sup>70</sup> that estimates sales volume and tax revenues for volume-based taxes for a variety of tax rates between 0.5 and 3 cents per ounce. For cities and counties not included in the calculator, users should select a place that is demographically and culturally similar to their jurisdiction and use that estimate, adjusted for difference in population size. It is prudent to use conservative revenue estimates to avoid creating unrealistic expectations. Cities considering a sugar content or tiered tax base should consult with an expert.

Because excise tax rates are set at the time they are adopted, they should be increased over time to account for inflation, given that inflation effectively provides a tax cut every year that tax rates are not increased.<sup>71,72</sup> It would be ideal to annually adjust the tax rate for inflation in proportion with changes in the Consumer Price Index (CPI); however, no local sugary drink taxes to date have been indexed for inflation. While it is legal to index taxes for inflation

(many aspects of the federal income tax,<sup>73</sup> social security taxes,<sup>74</sup> and most state income taxes<sup>75</sup> are indexed for inflation, and percentage-based taxes like sales taxes automatically adjust for inflation), most specific excise taxes – such as state alcohol, cigarette, and gas taxes – do not, largely due to political considerations.<sup>72,76,77</sup> Because many states have special requirements for local taxes, any community considering an inflation index for its tax should consult with a local municipal attorney.

## Dedication of Revenues

Another key policy decision in tax design is whether to direct tax revenue to specific purposes. Table 4 lists examples of the activities funded by current sugary drink taxes.

**Table 4: Activities and Programs Funded by Sugary Drink Taxes<sup>78-83</sup>**

- 
- Healthy food access programs
  - Diabetes prevention program
  - Healthy beverage and water promotion and education
  - Hydration stations
  - Oral health access
  - Community education and public awareness or countermessaging campaigns
  - School-based nutrition education and gardens
  - Community gardens
  - Pre-school and early childhood programs
  - Active transportation, physical activity, and recreation programs
  - Community schools
  - High school completion
  - Parks and recreation site repairs and upgrades
- 

One approach is to include dedication of the tax proceeds in the tax legislation to support specific activities and programs. However, some states place conditions on how tax revenues can be used by localities, while others do not allow local jurisdictions to earmark their tax revenues at all. Still others have special voting requirements for local dedicated taxes; for example, California requires a two-thirds supermajority approval for localities enacting dedicated taxes, whether by legislation or ballot initiative, as opposed to the simple majority required for taxes that go into the general fund.

To work around these issues, some cities have passed their taxes as general taxes that go into the general fund while also describing the general intent of what tax revenues should support and creating a community advisory board (CAB) to recommend how tax revenues should be spent. For more on CABs, see the section starting on [page 19](#). Communities interested in dedicating tax revenues should consult with a local tax expert to determine what is legally feasible.

## Why dedicate tax revenues?

Dedication of tax revenues for specific purposes can strengthen tax ordinances in the following ways:

- Specifying the use of tax revenues to promote health and well-being by addressing social determinants of health – for example, through early childhood education, community schools, or tuition support for community college students.
- Directly mitigating the harms of sugary drinks by investing in public awareness and countermarketing campaigns focused on sugary drinks, as well as funding activities that promote healthy eating and active living to prevent conditions like diabetes and obesity caused by sugary drinks.
- Progressively distributing tax revenues to generate support for adopting a tax. A tax can be an overall progressive public policy *if* dedication invests the funds in underserved communities and those most affected by the health problems associated with sugary drinks specifically. Such dedication generates support from leaders and advocates in organizations and sectors that will benefit from the revenues and is a key concern for low-income people and people of color. Polling generally shows that when revenues are dedicated to issues that people care about, voter support for a tax increases by 8–10%.<sup>84</sup>
- Ensuring that revenues are spent as promised once the tax is implemented.
- Directing revenues to activities that are likely to have high impact, based on scientific evidence and what community members have identified as effective based on their lived experiences.

## Choosing a dedication target

A significant portion, if not all of the tax proceeds should be directed to addressing social and health inequities in low-income communities. Ultimately, each community will decide on the best activities to support with the revenues. In doing so, three key factors should be considered:

- 1. Who has been most adversely affected by sugary drink consumption?** Directing funds to the communities that bear the disproportionate burden of sugary drink consumption and associated diseases and giving those communities a shared leadership role in directing how funds are to be used helps to ensure community support for the tax and provides crucial funding to communities that have seen systematic disinvestment.
- 2. What issues are most important to affected communities, voters, key stakeholders, and elected officials?** Polling, consultation with community members, or other community engagement activities can provide valuable information. Once issues of importance are determined, what are the activities that will have the greatest impact on these issues, based on current evidence and best practices, implementation feasibility, equity considerations, and current community interests, assets, and needs?
- 3. What are the implications of choosing a given revenue target (eg, early childhood education) with respect to building support for the tax?** Which targets generate the most support for the tax in voter polling? Which bring in key allies who will advocate for the tax or address the concerns of those likely to oppose it? How does the choice of target(s) integrate with the communications strategy for passing the tax?

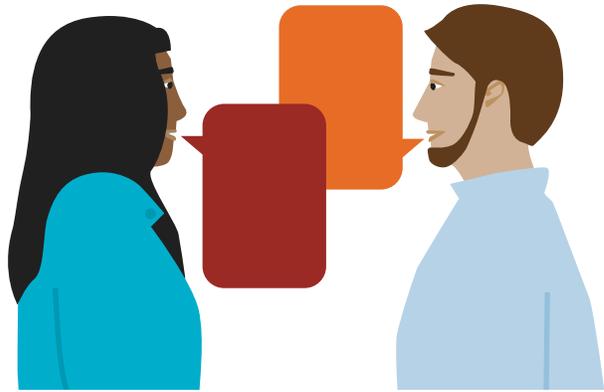
Funds should also be set aside for the administrative costs of the tax, including tax collection, evaluation of the tax's impact, support for community engagement in revenue allocation discussions, and support for an advisory board, if there is one.

## Community advisory boards

Dedication of tax revenues is the most certain mechanism for ensuring that desired initiatives are funded. However, dedication may not be legally feasible, and it may limit flexibility that communities need to address changing priorities over time. A complementary strategy is to create a community advisory board (CAB) to provide input to elected officials on the use of revenues and the process for allocating them. If the tax proceeds are not earmarked, a CAB can make recommendations to the legislative body on how to spend the funds. If the tax proceeds are earmarked, a CAB can still provide recommendations about the specifics of how funds are used and serve as a point of accountability. See [Appendix II](#) for model language for the creation of a CAB.

Many existing tax ordinances include language establishing a CAB. Specificity in the ordinance about the CAB's role is essential to ensure that the CAB is created and enabled to fill its mission. Common key points to address in a tax ordinance include the following:

- **Composition.** The CAB should be large enough to accommodate key stakeholders and include the expertise necessary to fulfill its responsibilities but not so large that processes become cumbersome and decisionmaking difficult. Successful CABs have had an odd number of 7-15 members. Smaller boards are typically more nimble and efficient and easier to administer, while larger boards allow for broader community and stakeholder participation. Members should include representatives of underserved communities, communities affected by the negative health effects of sugary drinks, people with expertise in the activities prioritized by the tax, and public health and nutrition experts.
- **Responsibilities.** Define the general purpose of the CAB – for example, making recommendations on how to allocate tax revenues to address the priority targets defined by the ordinance and prioritized by the community. Bylaws and requirements for meeting frequency can be included in the ordinance or can be established later in regulations adopted by the CAB.



- **Process for appointing members.** Specify who will appoint the members of the CAB (eg, mayor, legislative body, or a combination thereof). The qualifications of members may be described. Terms and term limits can be included. A deadline for appointment (eg, within 3 months of the ordinance's adoption) is useful, to avoid delays.
- **Staffing and support.** Staff should be designated to support the CAB. Costs for staff support and other administrative costs should be supported with tax revenues.
- **Reporting.** The CAB should publish an annual report that includes its recommendations; the extent to which the mayor and council have implemented the recommendations; and information, as available, on the impacts of the tax on indicators of public health and social and health equity. Additional items may include revenues received and allocation of funds as well as evaluation of funded programs.

CABs are defined as “advisory” specifically to avoid some of the legal pitfalls involved in municipal budgeting and dedication of revenues. It is also important to establish the CAB as quickly as possible so that it has sufficient time to organize and make recommendations before revenues begin to come in. CAB members need training on the tax, open public meeting rules, and city processes; staff support to manage board logistics (eg, scheduling meetings, posting notices, note-taking); and technical advice on how to structure their recommendations (eg, what programmatic activities they want to support, how they will select them, and how funds will be disbursed).

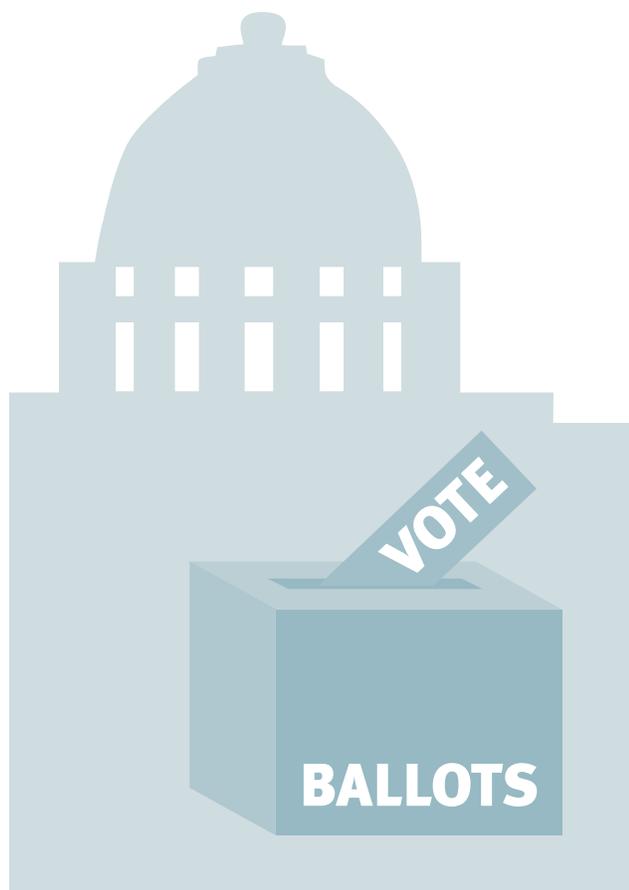
# Ballot Measure Versus Legislation

Passage of a sugary drink tax generally happens in one of two ways: through a legislative process (eg, by a city council) or through a ballot measure. The determination of which of these strategies to pursue may be based on legal requirements; in some places, only one of these mechanisms is available. If both options are available, then the decision will be based on both practical and political rationales. For example, passing a ballot measure may require more funds to educate the voting public about the issue and to counter tax opponent campaign activities but may have the advantage of providing considerable public education on the problems associated with sugary drink consumption, even if the tax does not pass. Using a ballot measure also eliminates the

political dealmaking of the legislative process and ensures that advocates retain control over language. Healthy Food America's [Roadmap for Successful Sugary Drink Tax Campaigns](#) includes an overview of some of the considerations when deciding between a ballot measure and legislation and its website has additional [site-specific profiles](#) that summarize critical lessons from each successful tax campaign. Local attorneys and political consultants will be able to advise on which of these options are available and how the choice may affect tax design elements.

Additional ballot and legislation issues for sugary drink tax advocates to consider with policymakers, political consultants, attorneys, and tax administrators include the legal, political, and strategic implications of the following:

- **Voting threshold.** Tax advocates should consider how the voting thresholds for legislative adoption of the tax and for passing the tax by ballot measure affect the likelihood of passage.
- **Voting timeline.** Legislative tax initiatives are generally more flexible and can take place at any point during a legislative session. In contrast, advocates must align ballot campaigns with their state's election calendar and keep in mind how other potential ballot measures might affect a sugary drink tax measure.
- **Cost and administrative burden.** Legislative measures generally are less costly for advocates, while ballot measures are more expensive and require more ground-level organizing, a stronger coalition, and more grassroots engagement.
- **Political support.** Tax advocates need to gauge how much support for the measure can be anticipated from members of the legislative body; if support is not strong or if industry has significant influence with legislators, then a ballot measure may be preferred.



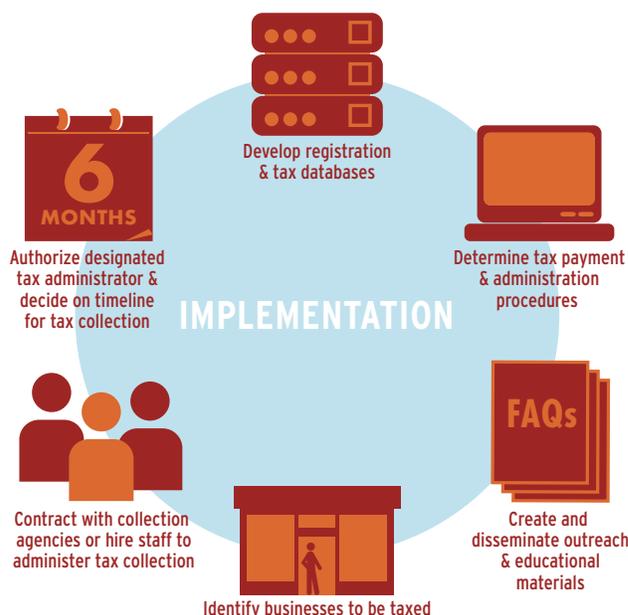
# Implementing the Tax

To ensure that tax revenue starts to flow in a timely fashion, advocates and policymakers should work with tax administrators while drafting the tax to outline the process for implementation and collection.

## Key Implementation Steps

Some key implementation steps should be addressed in the tax ordinance:

- **Designating the party, agency, or office responsible for administration of sugary drink taxes.** That agency will need to undertake a number of key steps, including developing registration and tax databases, procedures for tax payment and administration, and websites, FAQs, and other outreach and educational materials; identifying businesses subject to taxation; and signing contracts with collection agencies or hiring staff to help administer the tax.



- **Authorizing the designated tax administrator to enact necessary rules and regulations.** Such rules and regulations may concern how the tax administrator monitors compliance, what records and documents are required to be filed with the tax administrator, defining with more specificity which beverages are subject to the tax and which are exempt, and creating procedures for taxing products with unknown ingredients and volumes as well as newly introduced products.
- **Specifying when collection of the tax will start.** Regardless of whether a local jurisdiction chooses to undertake tax collection itself or contract such activities out to third parties, the jurisdiction will need time to develop the administrative infrastructure before collection can begin. Beginning collection of revenues at least 6 months after adoption allows sufficient time to develop effective implementation processes and educate affected businesses.

## Timeline for Adopting and Implementing a Sugary Drink Tax

Adopting and implementing a sugary drink tax is a long process. It can take years for the political or policy environment to present a favorable window of opportunity. Passing a ballot measure can take 2 years or more, due to the time needed to lay the political groundwork. It is wise to require implementation of the tax no earlier than six months after adoption, to allow time for necessary start-up planning and activities.

# Tax Education and Community Outreach Activities

In addition to planning for implementation in the tax ordinance, advocates and policymakers should develop an outreach, education, and communications plan for distributors and retailers (self-distributors) that will be paying the tax; advocates and partners that supported passage of the tax; and local residents, especially in underserved communities, to explain the purpose and benefits of the sugary drink tax, when it goes into effect, and the process for collecting it:

- **Distributors and retailers** need to be educated about the sugary drink tax, since they will be on the front lines of answering consumer questions about the tax. Given that most excise taxes are likely to fall on distributors, local jurisdictions will need to identify a strategy for ensuring that distributors register with the tax administrator before tax collection begins. It is particularly important to educate affected businesses about how the tax will be implemented and collected. Outreach should be done prior to the effective date of the tax and early in the implementation process.

- **Advocates and partner organizations** will also play an essential role in helping with continuing local education and outreach on the benefits of the tax, will likely play a key role in community advisory board activities, and are key allies in helping a jurisdiction defend the tax against legal and political challenges.
- **Consumers** must be made aware of when they are likely to see price increases go into effect. Beyond avoiding the political consequences of beginning to collect the tax without giving notice to the public, setting a timeline for collection of the tax and commencement of CAB activities lets residents know how to continue to participate on the issue and when they can expect to start seeing the benefits derived from the new tax revenue. Similarly, it is important to make sure the public is aware of the purpose of the tax and how the funds are being used.

For examples of how communities are administering their sugary drink taxes and the communication materials they have developed to support tax collection, see [Philadelphia's Payments, assistance & taxes website](#), [Berkeley's Frequently Asked Questions \(FAQ\) for the Sweetened Beverage Tax](#), and [Boulder's sugar sweetened beverage tax education materials](#).



# Potential Challenges to Tax Efforts

The most challenging aspect of any sugary drink tax campaign is staving off opposition efforts from the beverage industry.<sup>85</sup> Tax opponents, including the beverage industry, have the capacity not only to outspend advocates in order to fight passage of a tax<sup>86</sup> but also to use the legal system to challenge and repeal proposed and enacted laws. To date, the beverage industry has funded unsuccessful legal challenges seeking to prevent the adoption of sugary drink taxes in Berkeley<sup>87</sup> and Oakland<sup>88</sup> and to invalidate taxes that were successfully enacted in Cook County (Illinois)<sup>89</sup> and Philadelphia.<sup>90</sup> Beyond that, the beverage industry has increasingly begun working to change the rules of the game by lobbying state legislatures to pass preemption bills or launching ballot initiatives that prevent local jurisdictions from passing their own sugary drink taxes. When that hasn't worked, industry has even resorted to legislative coercion (as discussed in the [Preemption section on page 8.](#))

Given the beverage industry's formidable opposition to taxes, it is essential for advocates and local policymakers to know what types of challenges the beverage industry might bring against the tax. Legal challenges to date have focused on the following issues:

- **Whether the tax is illegal under state law.** The beverage industry has challenged sugary drink taxes based on how they interact with state laws. For example, in Philadelphia, the industry sued the city, alleging that their sugary drink tax violated the state's Sterling Act, a Pennsylvania law that enables large cities to enact certain taxes as long as doing so doesn't amount to a double tax. The beverage industry argued, unsuccessfully, that Philadelphia's tax on sugary drink distributors amounted to double taxation.<sup>90</sup>
- **Whether the tax is illegal under federal law.** The beverage industry has also challenged sugary drink taxes based on how they interact with federal laws. In both Philadelphia and Cook County, the industry alleged that the tax violated a federal law mandating that a tax cannot be collected on Supplemental Nutrition Assistance Program (SNAP) purchases at the point of sale.<sup>89,91</sup> Industry was unsuccessful in Philadelphia, which passed an excise tax, while Cook County amended its sales tax to exempt SNAP purchases.
- **Whether the tax is unconstitutional.** The beverage industry has challenged some sugary drink tax laws on the basis that they violate state constitutional requirements for tax uniformity. Most state constitutions contain some kind of tax uniformity requirement,<sup>92</sup> which generally requires that similar things be taxed similarly, using the same mode of assessment and rate of taxation across taxpayers.<sup>93</sup> In Cook County, retailers unsuccessfully argued that under the Illinois Constitution, similar objects must be taxed uniformly and that the sugary drink tax would tax bottled drinks and drinks from fountain machines differently from on-demand, custom-sweetened beverages, such as those mixed by a server or barista.<sup>89</sup> A similar unsuccessful challenge was brought in Philadelphia, claiming that the tax violated the state constitution's uniformity provision.<sup>92</sup>
- **Whether the wording of the sugary drink tax ballot measure is sufficiently clear.** In Oakland, soda companies unsuccessfully sued the city over the wording of the ballot measure and accompanying rebuttal language (language that is included with ballot measures in California, summarizing arguments submitted in support

of and opposition to the ballot measure), alleging that several claims made in the tax proponents' rebuttal argument were false and misleading.<sup>88</sup> Similarly, in Berkeley, the beverage companies unsuccessfully alleged that the ballot language adopted by the city council as well as the city attorney's analysis of the issue were "false, misleading, and illegally biased."<sup>94</sup>

Despite these arguments, courts generally have held that taxes are legal so long as the government has a reasonable basis for grouping taxpayers into different

classes and the tax classifications have a reasonable connection to a legitimate government interest.<sup>92</sup> **Legislative findings and statements of purpose can provide essential support for the reasonableness of the tax classifications as they relate to the government interest in establishing the tax.** For example, in Cook County, the appellate court cited legislative findings explaining the health consequences of sugary drink consumption as a basis for holding that the tax classifications reasonably related to a legitimate government interest.<sup>92</sup>



# Conclusion

This guide reflects lessons learned from sugary drink taxes that have been passed and implemented to date in the United States. When pursuing a sugary drink tax, policymakers and advocates face numerous legal and policy considerations concerning the tax rate, tax basis, what beverages to tax, how to dedicate tax revenues, and how to implement the tax. By engaging with the community to think through these key policy questions and working with local tax law experts, attorneys, and national experts with experience in sugary drink taxes, advocates and policymakers can craft well-designed tax ordinances that reflect local needs and values and are likely to withstand industry opposition.



# Appendix I: Model Findings

This appendix provides model legislative findings for a sugary drink tax. While findings are not generally codified in a municipal code, they are an important part of any tax ordinance. In addition to building political and popular support for the legislation, findings also serve a legal purpose. If the legislation is challenged in court, the findings are an admissible record of the factual determinations made by the legislative body when it is considering the legislation. Courts will defer to legislative determinations of factual issues, which often influence legal conclusions. Findings can also provide a basis for revenue allocation and help ensure that revenues generated by the tax are spent in a manner that is aligned with the purpose of the legislation.

The findings presented below were developed through substantial research and include the core justifications for adopting sugary drink taxes, including:

- the health impacts of sugary drink consumption;
- how much sugar people consume through sugary drinks;
- the economic impacts of chronic diseases associated with sugary drink consumption;
- the targeted marketing of sugary drinks to underserved populations;
- the effectiveness of taxing sugary drinks to reduce consumption and generate revenues for public health work; and
- the role of local government in addressing those health impacts.

Much of the language included in this appendix has been successfully adopted by jurisdictions with existing sugary drink taxes; users are encouraged to use findings that are relevant and compelling for their community. Note that while this appendix generally utilizes the term Latinx, many scientific studies do not. Accordingly, some of the findings use the term Hispanic.

In some instances, [*italicized language*] will prompt users to customize the information to fit their community's needs. In the case of state or local data, this may require making choices based on what type of information has been collected at the state or local level. For example, if local data on heart disease rates are unavailable, users may instead include the relevant data from the state level. To the extent that local or state data is available for any given finding, such data should be utilized rather than the national data identified herein.

Some degree of customization is always necessary to make sure that a sugary drink tax ordinance is consistent with a community's existing laws. Consulting with a city attorney or county counsel is essential.

# Health Impacts of Sugary Drink Consumption

## General Diet-Related Disease/Chronic Disease and Morbidity and Mortality

- Our nation, our state, and our community face a major public health crisis in the form of rising rates of chronic diseases, including type 2 diabetes, cardiovascular disease, and liver disease; adult and childhood obesity; and tooth decay and poor oral health.<sup>1</sup>
- Half of all American adults – 117 million individuals – have one or more preventable chronic diseases, many of which are related to unhealthy diets and physical inactivity.<sup>1</sup>
- Poor diets are a leading cause of chronic diseases (including type 2 diabetes, cardiovascular diseases, and liver disease), adult and childhood obesity, and oral health problems.<sup>1</sup> Consumption of added sugars is a major contributor to poor diets.<sup>1</sup>
- According to the U.S. Burden of Disease Collaborators, dietary risks, including cardiovascular disease and diabetes, were associated with 529,299 deaths in 2016 in the United States, making them the leading risk factor for mortality.<sup>95</sup>

## Chronic Disease

### Type 2 Diabetes

- Consuming 1 sugary beverage a day significantly increases the risk of developing type 2 diabetes.<sup>96</sup> In *[insert name of jurisdiction]*, *[insert adult type 2 diabetes prevalence percentage]* of adults suffer from type 2 diabetes.<sup>97</sup>
- Consumption of 1 sugary drink per day increases the risk of developing type 2 diabetes by 26% among both men and women.<sup>98</sup>
- Forty percent of all children and over half of African-American and Latinx children are predicted to develop diabetes in their lifetimes.<sup>99</sup>
- If the current trends are not reversed, it is predicted that a Latinx child born today will have a 50% chance of developing diabetes in his or her lifetime.<sup>51</sup> *[Insert similar local data, if available.]*<sup>97</sup>

## Cardiovascular Disease

- Regular consumption of sugary drinks has been associated with increased risk of high blood pressure, stroke, and premature death from heart disease.<sup>96</sup> In *[insert name of jurisdiction]*, *[insert percentage of residents afflicted with heart disease]*<sup>100</sup> of residents have been diagnosed with heart disease and *[insert percentage of residents afflicted with hypertension]* of residents have been diagnosed with high blood pressure.
- Regular consumption of sugary drinks increases the risk of:
  - ▶ dying from heart disease by almost a third;<sup>101</sup>
  - ▶ heart attack by 19%;<sup>102</sup>
  - ▶ stroke by 22%;<sup>103</sup> and
  - ▶ high blood pressure by 12%.<sup>104,105</sup>
- Consumption of 2 sugary drinks per day raises low-density lipoprotein (LDL) cholesterol and triglycerides by 20% in only 2 weeks;<sup>106</sup> an increase of LDL cholesterol and triglycerides can increase the risk of cardiovascular disease.<sup>107,108</sup>
- Cardiovascular disease is the leading cause of death in the United States, accounting for nearly 1 in 3 deaths annually.<sup>109</sup>
- Cardiovascular disease affects nearly half of all non-Hispanic black adults.<sup>109</sup>

## Liver Disease

- Consumption of sugary drinks is significantly associated with nonalcoholic fatty liver disease (NAFLD) in adults.<sup>110</sup>
- Daily consumers of sugary drinks are 61% more likely to develop non-alcoholic fatty liver disease (NAFLD) than non-consumers.<sup>111</sup>
- Nonalcoholic fatty liver disease (NAFLD) is the most common form of liver disease in children and has doubled among U.S. adolescents (ages 12–19) over the past 20 years.<sup>6</sup>
- As of 2010, nearly 11% of U.S. adolescents were suspected to have NAFLD, putting them at increased risk of liver failure, cardiovascular disease, and liver cancer in adulthood.<sup>112</sup>

## Adult and Childhood Obesity

- Consumption of sugary drinks is one of the top 3 dietary predictors of weight gain among adults.<sup>113</sup>
- For every additional serving of sugary drinks per day, the likelihood of a child becoming obese increases by 60%.<sup>114</sup>
- The adult obesity rate in the United States has more than doubled since the 1960s.<sup>96,99</sup> In *[insert name of jurisdiction]*, the adult obesity rate has *[insert change in obesity rate]* since *[insert reference date]*.<sup>115</sup>
- The rate of obesity among children and adolescents, currently at 18.5%, has more than doubled since the late 1970s.<sup>116</sup> In *[insert name of jurisdiction]*, the child and adolescent obesity rate has *[insert change in obesity rate]* since *[insert reference date]*.<sup>115</sup>
- Adult obesity in the United States rose 30% between 2000 and 2016, while youth obesity rose 33% over the same period.<sup>117,118</sup>
- In 2016, more than one-third of adults and more than one-sixth of children and adolescents in the United States were obese.<sup>118</sup>
- In *[insert name of jurisdiction]*, *[insert obese population percentage]* of adults and *[insert obese population percentage]* of children were obese in *[insert year of measurement]*.<sup>115</sup>
- Obese children are approximately 5 times more likely to be obese as adults than non-obese children.<sup>119</sup>
- Approximately 85% of obese teenagers remain obese in adulthood.<sup>120</sup>
- In 2015–2016, the prevalence of obesity among Hispanic and black adults was nearly 50%, a rate much higher than among Asian (12.7%) and white (14.1%) adults.<sup>118</sup> In *[insert year]*, the prevalence of obesity among Hispanic and black adults in *[insert name of jurisdiction]* was *[insert rate of obesity]*, while the rate for Asian adults was *[insert rate of obesity]* and the rate for white adults was *[insert rate of obesity]*.<sup>115</sup>
- In 2015–2016, the prevalence of obesity among Hispanic (25.8%) and black (22%) children was significantly higher than among Asian (11%) and white (14.1%) children.<sup>118</sup> In *[insert year]*, the

prevalence of obesity among Hispanic and black children in *[insert name of jurisdiction]* was *[insert rate of obesity]*, while the rate for Asian children was *[insert rate of obesity]* and the rate for white children was *[insert rate of obesity]*.<sup>115</sup>

- Obesity impacts the U.S. population unequally by income and education level. Among U.S. adults, rates of obesity are lower in the highest income group than in other income groups, and are lower among college graduates than among those who have only a high school degree or did not graduate from high school.<sup>121</sup>

## Oral Health

- Tooth decay is the most common childhood disease<sup>122</sup> and is experienced by 45% of youth nationwide,<sup>123</sup> as well as *[insert number or percentage of children with tooth decay in jurisdiction]* in *[insert name of jurisdiction]*.<sup>115</sup>
- Soda consumption is associated with nearly twice the risk of dental cavities in children.<sup>124</sup>
- Adults who drink sugary drinks daily have a 30% increased risk of tooth decay.<sup>125</sup>

## Sugary Drink Consumption

- Sugary drinks are uniquely harmful because when sugar is consumed in liquid form it does not trigger a sensation of fullness (satiety) and thus bypasses the body's defense against consuming too many calories.<sup>15</sup>
- Almost half (46%) of all added sugars consumed in the United States come from sugary drinks, such as soft drinks, energy drinks, fruit drinks, sweetened teas and coffees, and sports drinks,<sup>1</sup> which offer little or no nutritional value.
- Daily calorie intake among Americans increased by about 300 calories between the late 1970s and the early 2000s, and nearly half of that increase in extra calories came from sugary drinks.<sup>126</sup>
- The 2015–2020 Dietary Guidelines for Americans<sup>1</sup> and the World Health Organization<sup>127</sup> both call for limiting consumption of added sugars to less than 10% of calories per day or approximately 12 teaspoons of added sugars, but children consume 70% more added sugars than the maximum recommended<sup>1</sup> and adults 40% more.

- Sugar content in common sugary drinks frequently exceeds the maximum number of daily calories from all added sugars recommended in the Dietary Guidelines for Americans.<sup>1</sup>
  - ▶ A 20-ounce bottle of soda contains 16 teaspoons of sugar, which is approximately 133% of the maximum daily recommended amount.
  - ▶ A 16-ounce Snapple Peach Ice Tea has 9.75 teaspoons of sugar, which is approximately 81% of the maximum daily recommended amount.
  - ▶ A 20-ounce Gatorade has 8.5 teaspoons of sugar, which is approximately 71% of the maximum daily recommended amount.
  - ▶ A 20-ounce Vitamin Water has 8.25 teaspoons of sugar, which is approximately 69% of the maximum daily recommended amount.
  - ▶ A 9.5-ounce Starbucks Frappuccino has 7.75 teaspoons of sugar, which is approximately 65% of the maximum daily recommended amount.
  - ▶ A 6-ounce Capri Sun pouch has 3.25 teaspoons of sugar, which is approximately 27% of the maximum daily recommended amount.
- The American Heart Association recommends that women and children over 2 years of age consume no more than 6 teaspoons of added sugar per day, men consume no more than 9 teaspoons, and children under 2 should avoid added sugar completely.<sup>128</sup>
- Per capita availability of sugary drinks in 2014 was 3 times higher than it was 60 years prior.<sup>129</sup>
- In 2015, there were enough sugary drinks for sale in the United States for every American to drink 44 gallons a year.<sup>129</sup>
- In 2013–2014 approximately half of U.S. adults and two-thirds of youth consumed at least 1 sugary drink per day.<sup>111,130,131</sup> In *[insert year]* in *[insert name of jurisdiction]*, approximately *[insert percentage]* of adults and *[insert percentage]* of youth consumed at least 1 sugary drink per day.
- The 2005–2012 National Health and Nutrition Examination Survey (NHANES) found that among toddlers (age 13–24 months), 31% consumed at least 1 sugary drink a day.<sup>132</sup>

- In 2013–2014, adolescents and young adults were the most frequent consumers of sugary drinks.<sup>133</sup>
- Consumption of sugary beverages by school-aged children increased each year between 1989 and 2008.<sup>134</sup>
- There are large age, sex, race, education, and socioeconomic disparities in consumption of sugary drinks, with daily consumers more likely to be young adults, males, black, and adults with lower education attainment.<sup>135</sup>

## Economic Cost of Obesity and Diabetes

- Missed work due to obesity-related health concerns was estimated at over \$11 billion in lost productivity nationwide in 2015.<sup>136</sup>
- Obesity-related health conditions cost the nation billions of dollars in health care and lost productivity. Adult obesity in the United States adds \$209.7 billion to medical care expenses each year, which constitutes 21% of all medical spending.<sup>137</sup> Childhood obesity is estimated to cost \$14 billion annually in direct health expenses.
- The American Diabetes Association found that the medical costs associated with diabetes have increased by more than 40% since 2007, jumping to \$327 billion in 2017 (including \$237 billion in direct medical costs and \$90 billion in reduced productivity).<sup>138</sup>
- One in four health care dollars in the United States is spent on care for people with diagnosed diabetes.<sup>138</sup>

## Targeted Marketing of Sugary Drinks to Underserved Populations

- Hundreds of millions of dollars have been spent on youth-targeted marketing for sugary drinks, with ads disproportionately targeted at black and Hispanic youth.<sup>139</sup>
- In 2017, the beverage industry spent over \$1.2 billion on marketing, with 45% dedicated to marketing full-sugar carbonated drinks.<sup>140</sup>

- In 2013, black youth saw more than twice as many television ads for sugary drinks and energy drinks as white youth.<sup>139</sup>

## Sugary Drink Taxes Reduce Consumption

- Imposing an excise tax on sugary drinks has been shown to reduce consumption of sugary drinks.<sup>7</sup>
- Sales of sugary drinks in Mexico decreased after a tax was implemented, with a 6% reduction in 2014 (the first year of tax implementation) and a 10% overall reduction in sales in 2015, with greater reductions in consumption among lower-income households, residents living in urban areas, and households with children.<sup>141</sup>
- A survey of residents from low-income neighborhoods in Berkeley, California, found a 21% drop in consumption of sugary drinks in the months following implementation of a sugary drink tax.<sup>83</sup>
- Sales of taxed beverages in Berkeley fell by 9.6%, while sales of untaxed beverages (eg, bottled water) rose by 3.5%.<sup>84</sup>

## Sugary Drink Taxes Generate Revenue for Public Health Work

- Taxing sugary drinks can generate millions of dollars annually.<sup>4</sup> This additional revenue can be allocated to invest in public health and health equity.

## Local Authority to Adopt Legislation

- Local jurisdictions in the State of *[insert state]* have the authority to adopt excise taxes on sugary drinks pursuant to *[insert [their home rule authority] or [relevant statutory citation]]*.
- Laws passed at the local level can significantly decrease the amount of sugary drinks people consume.<sup>8</sup>
- Laws enacted at the local level allow underserved communities that experience disproportionate levels of sugary drink–related harm<sup>142</sup> and that have been targeted by the beverage industry<sup>139</sup> to combat the harms associated with sugary drink consumption.

- Local governments in California, Colorado, Pennsylvania, Washington, and the Navajo Nation have enacted excise taxes on sugary drinks.<sup>4</sup>
- The beverage industry has led extensive efforts to interfere with local democracy and preempt local sugary drink taxes, stifling local government efforts to protect the health and well-being of the communities they represent, and likely contributing to higher sugary drink–related morbidity and mortality.
- Local governments have a compelling interest in protecting communities from sugary drink–related harm.
- This Act does not affect existing state laws concerning the taxing of sugary drinks.

## Reference to related efforts by jurisdiction

A local jurisdiction may also wish to include findings referencing the alignment of the tax with other concurrent city initiatives. For example, Seattle, Washington, included the following language describing how its sugary drink tax aligned with its Equity and Environment initiative:<sup>143</sup>

- WHEREAS, The City of Seattle's Equity and Environment Agenda identifies addressing the lack of access to healthy, affordable food as a major priority for communities in Seattle<sup>144</sup>

# Appendix II: Sample and Model Ordinance Language

This appendix provides both sample and model ordinance language. The model language was developed through substantial research, while the sample language comes from sugary drink taxes that have successfully been adopted in other jurisdictions. Because variations in state and municipal law make it difficult to develop a complete model, the language contained in this appendix is presented as a series of freestanding clauses and does not constitute a comprehensive model ordinance. Existing sugary drink tax ordinances can serve as useful models for comprehensive language, and can be referenced to see how the language included below can fit into broader ordinance language.

Full text for existing ordinances can be found at the links below:

- [Berkeley, California](#)
- [Philadelphia, Pennsylvania](#)
- [Boulder, Colorado](#)
- [San Francisco, California](#)
- [Seattle, Washington](#)
- [Oakland, California](#)
- [Albany, California](#)

Healthy Food America has a [tool](#) that allows comparison of ordinance language in all U.S. sites with sugary drink taxes, and can provide language for clauses not included in this brief summary, as well as additional examples of clauses that are include here.

In some instances in the model language below, *[italicized language]* will prompt users to customize the information to fit their community's needs. Some degree of customization is always necessary to make sure that the ordinance is consistent with a community's existing laws and meets the community's goals. Consulting with a city attorney or county counsel is strongly advised.

## Purpose and Intent

The purpose section of an ordinance establishes and explains the goals of the ordinance. Should any issue arise as to the meaning of a particular provision of the ordinance, the purpose section can guide its interpretation. Below is sample purpose language setting forth the goals of various taxes.

- **Seattle, Washington:** "The City finds and declares that the expansion of access to healthy and affordable food, closing the food security gap, promoting healthy nutrition choices, reducing disparities in social, developmental, and educational readiness and learning for children, assisting high school graduates to enter college, and expanding services for the birth-to-five population and their families are of the utmost importance to creating a thriving and livable city for all of the people of Seattle. Therefore, through this ordinance, the City intends to exercise its taxing authority, as granted by the Washington State Constitution and as authorized by the Washington State Legislature, to raise general revenue for the City and to use that revenue to provide broad-based public benefits for residents by funding programs that achieve these purposes."<sup>144</sup>
- **Boulder, Colorado:** "An excise tax on the distribution of sugar-sweetened beverages is intended to protect the health, safety and well-being of all in the City of Boulder."<sup>145</sup>
- **Berkeley, California:** "Based on the findings set forth above, the purpose of this Ordinance is to diminish the human and economic costs of diseases associated with the consumption of sugary drinks by discouraging their distribution and consumption in Berkeley through a tax. Specifically, the purpose of this ordinance is to tax the distribution of sugary drinks and the products used to make them."<sup>146</sup>

# Definitions and Exemptions

Legislation commonly includes a section dedicated to providing definitions that will be used to interpret the law. Having a definitions section with precise descriptions of important terms will facilitate enforcement and interpretation of any tax ordinance. A sugary drink tax ordinance includes a wide range of defined terms. Some of the more challenging definitions are included below.

## Sugary Drink Definition

The most common baseline definition of a sugary drink is **“all nonalcoholic beverages with any added caloric sweetener, including those intended to be mixed into an alcoholic drink.”** This definition generally includes sugary sodas, sports drinks, fruit drinks, sweetened tea and coffees, enhanced waters, and energy drinks.

Most ordinances further define caloric sweetener as **“any substance or combination of substances that contains calories, that is suitable for human consumption, and that humans perceive as sweet. Caloric sweeteners include, but are not limited to, sugar, sucrose, dextrose, fructose, glucose, and other monosaccharides and disaccharides; corn syrup or high fructose corn syrup; and honey.”**

## Distribution and Distributor Definition

- “Distribute” and “distribution” mean the transfer of ownership of, title to, or possession of products, where the recipient of the transfer offers the products for retail sale and the transfer is (1) from 1 person to another for consideration or (2) within a business entity, such as from a wholesale or warehousing unit of a business to a retail outlet of the same business or between 2 or more employees or contractors of the same business. “Distribute” and “distribution” shall not mean the retail sale to a consumer. A distribution takes place where delivery to the recipient occurs.
- “Distributor” means any person who distributes sugary drinks in the city, regardless of whether the person also offers sugary drinks for retail sale.

## Exemptions

While the definition for “sugary drink” is relatively straightforward, defining beverages that are exempt from a sugary drink tax can be more complicated. Below is model language for beverage categories commonly exempted from sugary drink taxes. Note that this is not a comprehensive list of exemptions. There may be other exemptions, and the definitions for these exempted categories may be included in a different part of the ordinance from the list of exemptions. For example, “concentrates” may be defined in the definitions section, but only concentrates specifically intended for home use by the consumer may be included in the exemptions section.

- “Beverage for Medical Use” means a beverage suitable for human consumption and manufactured for use as:
  - ▶ Oral nutritional therapy for persons who cannot absorb or metabolize caloric or dietary nutrients from usual food or beverages;
  - ▶ Oral rehydration electrolyte solution formulated to prevent or treat dehydration due to illness; or
  - ▶ Any beverage that meets statutory definition of “medical food” under Orphan Drug Act 21 U.S.C. 360ee(b)(3), as amended.
- “Beverage for Medical Use” shall not include drinks commonly referred to as “sports drinks” or any other common names that are derivations thereof.
- “Infant or baby formula” means a food which purports to be or is represented for special dietary use solely as a food for infants not more than 12 months old, by reason of its simulation of human milk or its suitability as a complete or partial substitute for human milk.<sup>54</sup>
- “100% fruit and vegetable juices” means any beverage consisting of 100% natural fruit or vegetable juice with no added caloric sweetener. Natural fruit juice and natural vegetable juice is the original liquid, with or without water added, resulting from the pressing of fruits or vegetables.
- “Milk Product” means: (1) any beverage whose principal ingredient by volume is natural milk secreted by an animal; or (2) any plant-based

substance or combination of substances in which (a) water and (b) grains, nuts, legumes, or seeds constitute the two greatest ingredients by volume. For purposes of this definition, “natural milk” includes natural milk concentrate and dehydrated natural milk, whether or not it is reconstituted. For purposes of this definition, “Milk Product” includes, but is not limited to, soy milk, almond milk, rice milk, coconut milk, hemp milk, oat milk, hazelnut milk, and flax milk.

- “Concentrate” means a syrup, powder, frozen or gel mixture, or other product containing one or more sweeteners as an ingredient, intended to be used in making, mixing, or compounding a sugary drink for home consumption by combining the concentrate with one or more other ingredients.

## Excise Tax

For both political and legal purposes, it is often important to explain that the tax being imposed on sugary drinks is an excise tax on the distribution of sugary drink products, rather than a sales or use tax. This model clause provides standard language to make that distinction clear. Additional clauses to clarify the meaning of “distribution” are advisable.

- The tax imposed by this measure is a general excise tax on the privilege of conducting business, specifically, distributing sugary drink products, within [*insert name of jurisdiction*]. It is not a sales tax or use tax or other excise tax on the sale, consumption, or use of sugary drinks. The tax imposed herein shall be in addition to any license fee or tax imposed or levied under any other law, statute, or ordinance where imposed or levied by the city, state, or other governmental entity or political subdivision.

## Tax Administration

If a local jurisdiction has the authority to promulgate non-legislative rules and regulations, adding a provision to the tax ordinance that authorizes the appropriate local authority to issue supplementary rules can provide important flexibility. The clauses below show how several jurisdictions have done so.

- **Boulder, Colorado:** “The city manager is authorized to administer the provisions of this chapter and has all other duties and powers prescribed by Section 3-2-17, ‘Duties and Power of City Manager,’ B.R.C. 1981.”<sup>147</sup>
- **Seattle, Washington:** “The Director shall adopt, publish, and enforce rules and regulations not inconsistent with this Chapter 5.53 for the purpose of carrying out the provisions of this chapter, including, but not limited to rules to clarify the inclusion or exclusion of particular products, the calculation of tax for concentrates based on manufacturer’s instructions or industry practice, rules to implement the exemption for the products of certain manufacturers under subsection 5.53.050.A, and the designation of caloric sweeteners.”<sup>148</sup>
- **Philadelphia, Pennsylvania:** “The Department is authorized to promulgate regulations to clarify the inclusion or exclusion of particular products; and to exclude particular products with respect to which, because of their ingredients or other administrative or health-related reasons, exclusion would be consistent with sound public policy and the purposes of this Ordinance.”<sup>149</sup>

## Revenue Dedication

It can be useful to include language in an ordinance that dedicates the tax revenue to specific purposes. One approach is to dedicate the proceeds to support specific activities and programs related to advancing health equity and addressing the social determinants of health, such as early education, in states where doing so is legally permissible. Another is to broadly define the legislative intent for how the revenues are to be used. Regardless of approach, we recommend establishing a community advisory board (CAB). CABs can be empowered to make recommendations to local elected officials on how to spend the funds and monitor how revenues are actually used to ensure accountability to the community and consistency with legislative intent. Below is model language for each of these purposes. They can be used individually or in combination.

## Dedication of Revenues

Below is sample revenue dedication language from several existing tax ordinances:

- **Boulder, Colorado:** “The revenues from this excise tax shall be designated for the administrative cost of the tax, and once that obligation has been fulfilled, used for health promotion, general wellness programs and chronic disease prevention in the City of Boulder that improve health equity, such as access to safe and clean drinking water, healthy foods, nutrition and food education, physical activity, and other health programs especially for residents with low income and those most affected by chronic disease linked to sugary drink consumption.”<sup>150</sup>
- **Seattle, Washington:** “Services funded by the proceeds of the beverage tax are intended to expand access to healthy and affordable food, close the food security gap, promote healthy nutrition choices, reduce disparities in social, developmental, and education readiness and learning for children, assist high school graduates enter college, and expand services for the birth-to-five population and their families.”<sup>144</sup> [The full text of the dedication section of Seattle’s ordinance outlines specific priorities for revenue use and can be found at the link above.]

## Community Advisory Board

The specific details of the CAB should be tailored to the needs and desires of the community. For example, while language below details CAB member qualifications, the specific qualifications should be tailored to the specific tax design. If revenues are intended to be used for a certain purpose, such as to fund early childhood education, the CAB should include members who have expertise in or connections to that purpose. In general, the CAB should be composed such that it is representative of various stakeholders and includes members with various relevant areas of expertise.

- **Creation.** There is hereby established a Community Advisory Board (“Board”) that shall advise and make recommendations to the *[insert name of appropriate jurisdictional government]* on how and to what extent *[insert name of*

*jurisdiction]* should establish and fund programs and activities, consistent with the intent of this ordinance, that *[insert language describing the types of programs and target populations of such programs and activities]*.

- **Composition.**

- ▶ The Board shall consist of no less than *[7-15 members]* who are residents of *[insert name of jurisdiction]* or work within the boundaries of the *[insert name of jurisdiction]*. The *[mayor/ chief executive office of jurisdiction]* shall nominate *[4-8]* members of the Board to be confirmed by the *[city council/ legislative body of jurisdiction]* and *[3-7]* members of the Board shall be appointed by the *[city council / legislative body of jurisdiction]*.
- ▶ Members of the Board shall be appointed to *[2-4-]* year terms. No member of the Board shall be appointed to more than 2 terms.
- ▶ Any vacancy in an unexpired term shall be filled in the same manner as the original appointment. A member whose term is ending may continue on an interim basis as a member with voting rights until such time as a successor for that position has been confirmed by the *[city council / legislative body of jurisdiction]*.

- **Board qualifications.** *This section should be tailored to the needs of the jurisdiction, based on the number of board members and the purposes for which the revenues will be used. Sample language from Seattle is included for reference below.*

“The 11 members shall meet the following criteria:

1. Three members shall have experience implementing community-based programs dedicated to expanding healthy food access and food security;
2. Two members shall be individuals representative of the populations who are disproportionately impacted by diseases related to the consumption of sugary drinks, with preference given to a parent of a student in the Seattle School District or a child in a Seattle-based early learning program, or a youth representative aged 16–24;

3. Four members shall be individuals with expertise in public health and nutrition with experience managing, researching, or evaluating programs related to the health effects from consuming sugary beverages, particularly among children and their families;
  4. Two members shall be individuals with expertise in education and early learning, with an emphasis on learning from birth to age five...."<sup>144</sup>
- **No government membership.** Employees of *[insert name of jurisdiction]* shall be ineligible to be members of the Board.
  - **Responsibilities.** The Board shall:
    - ▶ Annually appoint 1 of its members as chair and 1 of its members as vice chair;
    - ▶ Approve bylaws to facilitate the proper functioning of the Board;
    - ▶ Establish a regular time and place of meeting, with a minimum of 4 meetings per year. All meetings shall be noticed as required by law and shall be scheduled in a way to allow for maximum input from the public. Minutes for each meeting shall be recorded, kept, and maintained;
    - ▶ Make recommendations on how and to what extent the *[insert name of appropriate jurisdictional government]* should establish and/or fund programs and activities consistent with the intent of this ordinance that benefit *[insert name of jurisdiction]*'s populations who experience the greatest inequities.
    - ▶ Make recommendations to *[insert name of appropriate jurisdictional government]* on how to evaluate the effectiveness of the tax, including impacts on sugary drink sales and consumption, public attitudes toward sugary drink consumption, and job and economic indicators and of the process of implementing the tax.
  - **Reporting.** The Board shall publish an annual report to the *[insert name of appropriate jurisdictional government body]* with the assistance of appropriate departments, which includes the following:
    - ▶ Recommendations on how best to allocate the revenues raised by the sugary drink tax;
    - ▶ A summary of the programs funded to date and their progress to date;
    - ▶ A summary of tax implementation efforts and any completed studies evaluating the implementation of the tax;
    - ▶ A summary of the impact of the tax on beverage prices, consumer purchasing behavior, sugary drink sales, related health outcomes, and economic impacts, including impacts on employment and retail revenues;
    - ▶ A summary of the impact of the tax on health equity and the social determinants of health within *[insert name of jurisdiction]*; and
    - ▶ Any additional information that the Board deems appropriate for inclusion.
  - **Staffing.** *[Insert name of appropriate jurisdictional government]* shall provide administrative support for the Board.

# Notes

1. *Added sugars* are defined by the Centers for Disease Control and Prevention as “sugars and syrups that are added to foods or beverages when they are processed or prepared. Naturally occurring sugars such as those in fruit or milk are not added sugars.” Examples of added sugars include brown sugar, corn sweetener, corn syrup, dextrose, fructose, glucose, high-fructose corn syrup, honey, lactose, malt syrup, maltose, molasses, raw sugar, and sucrose. Centers for Disease Control and Prevention. Know Your Limits for Added Sugars: Facts about Added Sugars Consumption. [www.cdc.gov/nutrition/data-statistics/know-your-limit-for-added-sugars.html](http://www.cdc.gov/nutrition/data-statistics/know-your-limit-for-added-sugars.html). 2016. Accessed September 19, 2018.
2. T.H. Chan School of Public Health. The Nutrition Source: Sugary Drinks. Harvard University website: [www.hsph.harvard.edu/nutritionsource/healthy-drinks/sugary-drinks](http://www.hsph.harvard.edu/nutritionsource/healthy-drinks/sugary-drinks). September 20, 2018.
3. Sugar Advocacy Toolkit: Sugary Drinks. Healthy Food America website: [www.healthyfoodamerica.org/sugartoolkit\\_kahuna](http://www.healthyfoodamerica.org/sugartoolkit_kahuna). 2015. Accessed September 20, 2018.
4. Map and Chart the Movement: Local Sugary Drink Taxes Passed in the US as of 03/06/18. Healthy Food America website: [https://d3n8a8pro7vnm.cloudfront.net/healthyfoodamerica/pages/45/attachments/original/1508941702/USstaxespasted\\_chart101917.pdf?1508941702](https://d3n8a8pro7vnm.cloudfront.net/healthyfoodamerica/pages/45/attachments/original/1508941702/USstaxespasted_chart101917.pdf?1508941702). 2018. Accessed September 20, 2018.
5. Zhong Y, Auchincloss AH, Lee BK, Kanter GP. The Short-Term Impacts of the Philadelphia Beverage Tax on Beverage Consumption. *American Journal of Preventive Medicine*. 2018.
6. Arantxa Cochero M, Rivera-Dommarco J, Popkin BM, Ng SW. In Mexico, evidence of sustained consumer response two years after implementing a sugar-sweetened beverage tax. *Health Affairs*. 2017;36:564-571.10.1377/hlthaff.2016.1231
7. Falbe J, Thompson HR, Becker CM, Rojas N, McCulloch CE, Madsen KA. Impact of the Berkeley excise tax on sugar-sweetened beverage consumption. *Am J Public Health*. 2016;106(10):1865-1871.10.2105/AJPH.2016.303362
8. Silver LD, Ng SW, Ryan-Ibarra S, et al. Changes in prices, sales, consumer spending, and beverage consumption one year after a tax on sugar-sweetened beverages in Berkeley, California, US: A before-and-after study. *PLoS Med*. 2017;14(4):e1002283.10.1371/journal.pmed.1002283
9. *Policy Profile: Philadelphia, PA Sweetened Drink Tax*. Seattle, WA: Healthy Food America; 2018.
10. *Policy Profile: Berkeley, CA Sugary Drink Tax*. Seattle, WA: Healthy Food America; 2018.
11. *Policy Profile: Boulder, CO Sugary Drink Tax*. Seattle, WA: Healthy Food America; 2018.
12. O'Mara-Eves A, Brunton G, Oliver S, Kavanagh J, Jamal F, Thomas J. The effectiveness of community engagement in public health interventions for disadvantaged groups: a meta-analysis. *BMC Public Health*. 2015;15:129.10.1186/s12889-015-1352-y
13. SugarScience: The Unsweetened Truth. University of California San Francisco website: [sugarscience.ucsf.edu](http://sugarscience.ucsf.edu). 2018. Accessed September 20, 2018.
14. Agricultural Research Service. *Scientific Report of the 2015 Dietary Guidelines Advisory Committee: Advisory Report to the Secretary of Health and Human Services and the Secretary of Agriculture*. Washington, D.C.: US Department of Agriculture; 2015.
15. Pan A, Hu FB. Effects of carbohydrates on satiety: differences between liquid and solid food. *Curr Opin Clin Nutr Metab Care*. 2011;14(4):385-390.10.1097/MCO.0b013e328346df36
16. Malik VS, Hu FB. Sweeteners and risk of obesity and type 2 diabetes: the role of sugar-sweetened beverages. *Curr Diab Rep*. 2012.10.1007/s11892-012-0259-6
17. Xi B, Huang Y, Reilly KH, et al. Systematic Review with Meta-Analysis Sugar-sweetened beverages and risk of hypertension and CVD: a dose – response meta-analysis *British Journal of Nutrition*. 2015;709-717.10.1017/S0007114514004383
18. Wang M, Yu M, Fang L, Hu RY. Association between sugar sweetened beverages and type 2 diabetes: a meta analysis. *Journal of Diabetes Investigation*. 2015;6(3):360-366
19. Hardy LL, Bell J, Bauman A, Mhrshahi S. Association between adolescents' consumption of total and different types of sugar sweetened beverages with oral health impacts and weight status. *Australian and New Zealand journal of public health*. 2018;42(1):22-26.
20. Centers for Disease Control and Prevention. *Fact Sheet: CDC Health Disparities and Inequalities Report – U.S., 2011*. 2011.
21. American Diabetes Association. *Advocate to Stop Diabetes in Latino Communities*. 2014.
22. American Diabetes Association. *Advocate to Stop Diabetes in African American Communities*. 2014.
23. *Sugary Drinks in America: Who's Drinking What and How Much?* Seattle, WA: Healthy Food America; 2018.
24. Powell LM, Chiqui JF, Khan T, Wada R, Chaloupka FJ. Assessing the potential effectiveness of food and beverage taxes and subsidies for improving public health: a systematic review of prices, demand and body weight outcomes. *Obes Rev*. 2013;14(2):110-128.10.1111/obr.12002
25. Andreyeva T, Long MW, Brownell KD. The impact of food prices on consumption: a systematic review of research on the price elasticity of demand for food. *Am J Public Health*. 2010;100(2):216-222.10.2105/AJPH.2008.151415
26. Wang YC, Coxson P, Shen Y-M, Goldman L, Bibbins-Domingo K. A penny-per-ounce tax on sugar-sweetened beverages would cut health and cost burdens of diabetes. *Health affairs*. 2012;31:199-207.10.1377/hlthaff.2011.0410
27. Healthy Food America. Policy Profiles. [www.healthyfoodamerica.org/policy\\_profiles](http://www.healthyfoodamerica.org/policy_profiles).
28. Kottasova I. Soda wars: The UK's tax on sugary drinks is working. *CNN Money*. March 9, 2017. [money.cnn.com/2017/03/09/news/economy/soda-tax-uk-sugar-revenue](http://money.cnn.com/2017/03/09/news/economy/soda-tax-uk-sugar-revenue). Accessed September 21, 2018.
29. Winkler J, Fry T, J T Winkler and Tam Fry: Making the healthy choice the cheaper choice. The BMJ Opinion website: [blogs.bmj.com/bmj/2018/05/14/j-t-winkler-and-tam-fry-making-the-healthy-choice-the-cheaper-choice](http://blogs.bmj.com/bmj/2018/05/14/j-t-winkler-and-tam-fry-making-the-healthy-choice-the-cheaper-choice). May 14, 2018. Accessed September 21, 2018.

30. Morales L. The Navajo Nation's Tax On Junk Food Splits Reservation. *NPR*. 2015. [www.npr.org/sections/codeswitch/2015/04/08/398310036/the-navajo-nations-tax-on-junk-food-splits-reservation](http://www.npr.org/sections/codeswitch/2015/04/08/398310036/the-navajo-nations-tax-on-junk-food-splits-reservation).
31. Cities 101: Delegation of Power. National League of Cities website: [www.nlc.org/resource/cities-101-delegation-of-power](http://www.nlc.org/resource/cities-101-delegation-of-power). December 13, 2016. Accessed September 21, 2018.
32. ChangeLab Solutions. *Fundamentals of Preemption*. Oakland, CA: ChangeLab Solutions; 2013.
33. Camden J. Voters to be asked to stop local soda and grocery taxes. *The Spokesman-Review*. July 6, 2018. [www.spokesman.com/stories/2018/jul/06/voters-to-be-asked-to-stop-local-soda-and-grocery-](http://www.spokesman.com/stories/2018/jul/06/voters-to-be-asked-to-stop-local-soda-and-grocery-). Accessed September 21, 2018.
34. Health equity is “the state in which everyone has the opportunity to attain full health potential and no one is disadvantaged from achieving this potential because of social position or any other socially defined circumstance.” *Communities in Action: Pathways to Health Equity*. 2017; Washington, DC: National Academies of Sciences, Engineering, and Medicine.
35. Beverages and Health Equity. Kick the Can website: [www.kickthecan.info/beverages-and-health-equity](http://www.kickthecan.info/beverages-and-health-equity). September 19, 2018.
36. An *ad valorem* tax is a tax based on the value of the item being purchased and is usually expressed as a percentage (eg, 5%). A *sales tax* generally means a tax on sales of goods and services that is levied at the point of sale (eg, at retail). An *ad valorem* sales tax, then, is a tax on sales of goods and services that is levied at the point of sale based on the gross price of the goods or services. California's Tax System: A Primer. California Legislative Analyst's Office website: [www.lao.ca.gov/2007/tax\\_primer/tax\\_primer\\_040907.aspx](http://www.lao.ca.gov/2007/tax_primer/tax_primer_040907.aspx). 2007. Accessed December 5, 2018.
37. California Budget Project. *Principles and Policy: A Guide to California's Tax System*. Sacramento, CA, 2013.
38. O'Donoghue T, Rabin M. Optimal sin taxes. *Journal of Public Economics*. 2006;90(10-11):1825-1849.10.1016/j.jpubeco.2006.03.001
39. Elder RW, Lawrence B, Ferguson A, et al. The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms. *Am J Prev Med*. 2010;38:217-229.10.1016/j.amepre.2009.11.005
40. Seattle Municipal Code §5.53.050.
41. Seattle Municipal Code § 5.53.030.
42. Erb KP. Double Tax Argument Falls Flat As Pennsylvania Supreme Court Rules Soda Tax Legal. *Forbes* website: [www.forbes.com/sites/kellyphillips/2018/07/18/double-tax-argument-falls-flat-as-pennsylvania-supreme-court-rules-soda-tax-legal/#1108c6561f61](http://www.forbes.com/sites/kellyphillips/2018/07/18/double-tax-argument-falls-flat-as-pennsylvania-supreme-court-rules-soda-tax-legal/#1108c6561f61). 2018. Accessed September 21, 2018.
43. Bologna MJ. Cook County Soda Tax Circling Drain in Illinois. *Bloomberg Tax News* website: [www.bna.com/cook-county-soda-n73014463434](http://www.bna.com/cook-county-soda-n73014463434). 2017. Accessed September 21, 2018.
44. National Public Radio, Kaiser Family Foundation, Government KSo. *National Survey of Americans' Views on Taxes*. 2003.
45. Hansen A. Washington State Poll Respondents Prefer Sin Taxes and “Temporary” Tax Increases. *Tax Foundation* website: [taxfoundation.org/washington-state-poll-respondents-prefer-sin-taxes-and-temporary-tax-increases](http://taxfoundation.org/washington-state-poll-respondents-prefer-sin-taxes-and-temporary-tax-increases). 2009. Accessed December 5, 2018.
46. The state of Colorado and some local jurisdictions have adopted Taxpayer Bills of Rights (TABOR), which prohibit state and local governments from raising tax rates (including excise and sales taxes) without voter approval and prohibit spending revenues collected under existing tax rates without voter approval if revenues grow faster than the rate of inflation and population growth. Revenue generated in excess of the TABOR limit must be refunded to taxpayers, unless voters approve a revenue change as an offset in a referendum. *Policy Basics: Taxpayer Bill of Rights (TABOR)*. Center on Budget and Policy Priorities website. 2017. Accessed September 21, 2018.
47. FYI-C120: County Gross Receipts Tax Local Options.
48. Conn D. *Local Tax Reference Guide: Information on Local Taxes in Washington State*. Taxpayer Account Administration, Department of Revenue, Washington State; 2017.
49. Powell L, Andreyeva T, Isgor Z. *Distribution of Sugar Content in Sugary Drink Purchases in the U.S.: Implications for Tiered Taxation* American Heart Association;2017.
50. Bowman S. Added sugars: Definition and estimation in the USDA Food Patterns Equivalents Databases. *Journal of Food Composition and Analysis*. 2017;64(1):3.10.1016/j.jfca.2017.07.013
51. For example, in Philadelphia, if a business selling drinks made with syrups and powders buys them from a distributor registered with the city, the business must notify the distributor at the time of purchase how much of the product is going to be used to make finished beverages (and is thus taxable) and how much of the product is going to be made available to the customer to add (and is thus non-taxable). *City of Philadelphia Sugar-Sweetened Beverage Tax (“SBT”) Regulations*. Philly Bev Tax website: [www.phillybevtax.com/Content/Documents/Philadelphia-Beverage-Tax-Regulations.pdf](http://www.phillybevtax.com/Content/Documents/Philadelphia-Beverage-Tax-Regulations.pdf). August 4, 2017. Accessed September 24, 2018.
52. Povich ES. Soda Taxes Create Complicated Rules. *Pew Charitable Trusts* website: [www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/08/31/soda-taxes-create-complicated-rules](http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/08/31/soda-taxes-create-complicated-rules). August 31, 2017. Accessed September 24, 2018.
53. City of Seattle. *Sweetened Beverage Tax: Illustrative Examples*. Seattle, WA, 2018.
54. The Federal Food, Drug, and Cosmetic Act (FFDCA) defines *infant formula* as “a food which purports to be or is represented for special dietary use solely as a food for infants by reason of its simulation of human milk or its suitability as a complete or partial substitute for human milk.” *Guidance for Industry: Frequently Asked Questions about FDA's Regulation of Infant Formula*. US Food and Drug Administration website: [www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/infantformula/ucm056524.htm#q1](http://www.fda.gov/food/guidanceregulation/guidancedocumentsregulatoryinformation/infantformula/ucm056524.htm#q1). 2006. Accessed December 5, 2018.
55. Auerbach BJ, Dibey S, Vallila-Buchman P, Kratz M, Krieger J. Review of 100% fruit juice and chronic health conditions: implications for sugar-sweetened beverage policy. *Adv Nutr*. 2018;9(2):78-85.10.1093/advances/nmx006
56. Auerbach BJ, Wolf FM, Hikida A, et al. Fruit juice and change in BMI: A meta-analysis. *Pediatrics*. 2017;139(4).10.1542/peds.2016-2454
57. Patel AI, Moghadam SD, Freedman M, Hazari A, Fang ML, Allen IE. The association of flavored milk consumption with milk and energy intake, and obesity: A systematic review. *Prev Med*. 2018;111:151-162.10.1016/j.ypmed.2018.02.031
58. Diet Beverages: To Tax or Not? *Healthy Food America* website: [www.healthyfoodamerica.org/diet\\_beverages\\_to\\_tax\\_or\\_not](http://www.healthyfoodamerica.org/diet_beverages_to_tax_or_not). September 25, 2018.
59. Mendes E. Regular Soda Popular With Young, Nonwhite, Low-Income. *Gallup* website: [news.gallup.com/poll/163997/regular-soda-popular-young-nonwhite-low-income.aspx](http://news.gallup.com/poll/163997/regular-soda-popular-young-nonwhite-low-income.aspx). 2013. Accessed September 25, 2018.

60. News AHA. Limit low-calorie sodas and drinks, and stick to water instead, researchers advise. American Heart Association website: [www.heart.org/en/news/2018/07/29/limit-low-calorie-sodas-and-drinks-and-stick-to-water-instead-researchers-advise](http://www.heart.org/en/news/2018/07/29/limit-low-calorie-sodas-and-drinks-and-stick-to-water-instead-researchers-advise). 2018. Accessed December 5, 2018.
61. Such a clause might look akin to “The [Tax Administrator] is authorized to promulgate, amend, or repeal rules and regulations relating to the administration and enforcement of this ordinance, including but not limited to rules to clarify the inclusion or exclusion of particular products, the calculation of tax for concentrates based on manufacturer’s instructions or industry practice, rules to implement the exemption for the products of certain manufacturers, rules to implement the tax rates established by this ordinance, provisions for the re-examination and correction of returns and payments, and the designation of caloric sweeteners.” To see how other jurisdictions have done this, see Berkeley Municipal Code §7.2.020.
62. Burness A. Boulder spares mixers and CU from soda tax; more amendments may come. Daily Camera: Boulder News website: [www.dailycamera.com/news/boulder/ci\\_30994068/boulder-spare-mixers-and-cu-boulder-from-soda](http://www.dailycamera.com/news/boulder/ci_30994068/boulder-spare-mixers-and-cu-boulder-from-soda). 2017. Accessed December 5, 2018.
63. Engelbart D. Boulder’s sugary drink tax will hurt small business aimed to improve health. Fox 31 Denver website: [kdvr.com/2016/11/09/boulders-sugary-drink-tax-hurting-small-business-aimed-to-improve-health](http://kdvr.com/2016/11/09/boulders-sugary-drink-tax-hurting-small-business-aimed-to-improve-health). 2016. Accessed December 5, 2018.
64. Some countries have adopted much higher taxes designed to reduce consumption, such as India’s 40% tax on carbonated beverages (combining two taxes) or Saudi Arabia’s tax of 50% on sugary drinks and 100% on energy drinks. Wan L, Watson E, Arthur R. Sugar Taxes: The Global Picture in 2017. Beverage Daily. December 20, 2017. [www.beveragedaily.com/Article/2017/12/20/Sugar-taxes-The-global-picture-in-2017](http://www.beveragedaily.com/Article/2017/12/20/Sugar-taxes-The-global-picture-in-2017). Accessed October 24, 2018.
65. Cawley J, Frisvold D, Hill A, Jones D. *The Impact of the Philadelphia Beverage Tax on Purchases and Consumption by Adults and Children*. National Bureau of Economic Research; 2018.
66. Powell LM, Chriqui JF, Khan T, Wada R, Chaloupka FJ. Assessing the potential effectiveness of food and beverage taxes and subsidies for improving public health: A systematic review of prices, demand, and body weight outcomes. *Obesity Reviews*. 2014;14:110-128.10.1111/obr.12002. Assessing
67. Long MW, Gortmaker SL, Ward ZJ, et al. Cost Effectiveness of a Sugar-Sweetened Beverage Excise Tax in the U.S. *Am J Prev Med*. 2015;49(1):112-123.10.1016/j.amepre.2015.03.004
68. Micha R, Penalva JL, Cudhea F, Imamura F, Rehm CD, Mozaffarian D. Association Between Dietary Factors and Mortality From Heart Disease, Stroke, and Type 2 Diabetes in the United States. *JAMA*. 2017;317(9):912-924.10.1001/jama.2017.0947 (Numbers cited are based on data from this article and personal communications with the authors of this study. The actual numbers given in the text of this guide are not in the article).
69. Because sugary drink taxes are generally levied on distributors, reduced consumption will only occur if the cost of the tax is passed through to the consumer. Evaluation of recent sugary drink taxes indicates that most of the tax is passed by distributors to consumers in the final price of the beverage. Cawley J, Frisvold DE. The Pass-Through of Taxes on Sugar-Sweetened Beverages to Retail Prices: The Case of Berkeley, California. *Journal of Policy Analysis and Management*. 2017;36(2):303-326.10.1002/pam.21960
70. Revenue Calculator for Sugary Drink Taxes. UConn Rudd Center for Food Policy & Obesity website: [www.uconnruddcenter.org/revenue-calculator-for-sugary-drink-taxes](http://www.uconnruddcenter.org/revenue-calculator-for-sugary-drink-taxes). September 25, 2018.
71. Sinclair B, Sing F. *Building Momentum: Lessons on Implementing a Robust Sugar Sweetened Beverage Tax*. World Cancer Research Fund International; 2018.
72. Thuronyi V. Adjusting Taxes for Inflation. In: *Tax Law Design and Drafting*. Vol 1. 2012 ed. Washington, D.C.: International Monetary Fund; 1996.
73. Inflation-Adjusted Tax Items by Tax Year. Internal Revenue Service website: [www.irs.gov/newsroom/inflation-adjusted-tax-items-by-tax-year](http://www.irs.gov/newsroom/inflation-adjusted-tax-items-by-tax-year). December 5, 2018.
74. Burdick C, Fisher L. Social Security Cost-of-Living Adjustments and the Consumer Price Index. Social Security: Office of Retirement and Disability Policy website: [www.ssa.gov/policy/docs/ssb/v67n3/v67n3p73.html](http://www.ssa.gov/policy/docs/ssb/v67n3/v67n3p73.html). 2007. Accessed December 5, 2018.
75. Stone L. Inflation Indexing in the Individual Income Tax. Tax Foundation website: [taxfoundation.org/inflation-indexing-individual-income-tax](http://taxfoundation.org/inflation-indexing-individual-income-tax). 2014. Accessed December 5, 2018.
76. Alcohol Taxes Are Too Low, Have Not Kept Up With Inflation. ScienceDaily. December 13, 2017. [www.sciencedaily.com/releases/2017/12/171213095552.htm](http://www.sciencedaily.com/releases/2017/12/171213095552.htm). Accessed October 24, 2018.
77. While it may be politically advantageous not to index the tax for inflation, evidence shows that the effective tax rate for state alcohol, cigarette, and gas taxes has declined significantly over the years, even when states have voted on subsequent excise tax increases. *Strategizer 37: Increasing Alcohol Taxes to Fund Programs to Prevent and Treat Youth-Related Alcohol Problems*. Alexandria, VA: Community Anti-Drug Coalitions of America & Center for Science in the Public Interest; 2008.
78. 2017 Health Equity Fund Allocations. City of Boulder website: [www-static.bouldercolorado.gov/docs/2017\\_and\\_2018\\_HEF\\_Final\\_Allocations-1-201809041344.pdf?\\_ga=2.137534128.1219184729.1536272684-983767979.1536272684](http://www-static.bouldercolorado.gov/docs/2017_and_2018_HEF_Final_Allocations-1-201809041344.pdf?_ga=2.137534128.1219184729.1536272684-983767979.1536272684). 2017. Accessed December 5, 2018.
79. Sugar-Sweetened Beverage Product Panel of Experts. *Grant Allocation: Approve Funding Recommendation for Programs to Reduce Consumption of Sugar-Sweetened Beverages (SSBs)*. May 30, 2017.
80. Hitt L. Philly Beverage Tax: Where the money goes. City of Philadelphia website: [www.phila.gov/posts/mayor/2017-04-03-philly-beverage-tax-where-the-money-goes](http://www.phila.gov/posts/mayor/2017-04-03-philly-beverage-tax-where-the-money-goes). 2017. Accessed December 5, 2018.
81. City of Seattle Sweetened Beverage Tax 2018 Investments. City of Seattle website: [www.seattle.gov/Documents/Departments/OSE/FoodAccess/SBTBoard/SBTFactSheet\\_RevenueDetail\\_March2018.pdf](http://www.seattle.gov/Documents/Departments/OSE/FoodAccess/SBTBoard/SBTFactSheet_RevenueDetail_March2018.pdf). 2018. Accessed December 5, 2018.
82. Concurrent Meeting of the Oakland Redevelopment Successor Agency and the City Council. City of Oakland website: [oakland.legistar.com/MeetingDetail.aspx?ID=602747&GUID=968FA6D4-E81D-44DE-87DF-9EF5F184ACDD&Search=sugar](http://oakland.legistar.com/MeetingDetail.aspx?ID=602747&GUID=968FA6D4-E81D-44DE-87DF-9EF5F184ACDD&Search=sugar). 2018. Accessed December 5, 2018.
83. San Francisco Sugary Drink Distributors Tax Advisory Committee: March 2018 Report. City of San Francisco Department of Public Health website: [www.sfdph.org/dph/files/SDDTAC/SDDTAC-2018-Annual-Report.pdf](http://www.sfdph.org/dph/files/SDDTAC/SDDTAC-2018-Annual-Report.pdf). 2018. Accessed December 5, 2018.
84. Gardiner D. Poll: Arizonans Would Support Soda Tax for Education. *AZCentral*. November 27, 2017. [www.azcentral.com/story/news/politics/politicalinsider/2017/11/25/poll-arizonans-would-support-soda-tax-education/893549001](http://www.azcentral.com/story/news/politics/politicalinsider/2017/11/25/poll-arizonans-would-support-soda-tax-education/893549001). Accessed October 26, 2018.
85. O’Connor A, Sanger-Katz M. California, of All Places, Has Banned Soda Taxes. How a New Industry Strategy Is Succeeding. *The New York Times*. June 27, 2018. [www.nytimes.com/2018/06/27/upshot/california-banning-soda-taxes-a-new-industry-strategy-is-stunning-some-lawmakers.html](http://www.nytimes.com/2018/06/27/upshot/california-banning-soda-taxes-a-new-industry-strategy-is-stunning-some-lawmakers.html). Accessed September 24, 2018.
86. For more information on combating opposition during a sugary drink tax campaign, see Friedman R. *A Roadmap for Successful Sugary Drink Tax Campaigns: A Pathway to Better Health*. Seattle, WA: Action for Healthy Food; 2015.

87. Raguso E. Lawsuit filed over Berkeley 'soda tax' ballot. *NOSH*. August 15, 2014. [www.berkeleyside.com/2014/08/15/lawsuit-filed-over-berkeley-soda-tax-ballot-language](http://www.berkeleyside.com/2014/08/15/lawsuit-filed-over-berkeley-soda-tax-ballot-language). Accessed September 24, 2018.
88. Isabella M. COFFEY, Petitioner, v. Latonda SIMMONS, Oakland City Clerk; Tim Dupuis, Alameda County Register of Voters; Does I-X, Respondents, Sherry HIROTA, Jared Fine, Tanya Holland, Louise Rothman-Riemer, and Harold Mayberry; Does XI-XX, Real Parties in Interest, 2016 WL 6245348 (Cal.Super.).
89. Illinois Retail Merchants Ass'n v The Cook County Dept. of Revenue, No. 17 L 50596, 2017 WL 3318078, (Ill.Cir.Ct. July 28, 2017).
90. Williams v. City of Philadelphia, 188 A. 3d 421 (Pa. 2018).
91. Erb KP. Lawsuit Filed Against Philadelphia In Effort To Stop Soda Tax. *Forbes*. September 14, 2016. [www.forbes.com/sites/kellyphillips/2016/09/14/lawsuit-filed-against-philadelphia-in-effort-to-stop-soda-tax/#f381048b1924](http://www.forbes.com/sites/kellyphillips/2016/09/14/lawsuit-filed-against-philadelphia-in-effort-to-stop-soda-tax/#f381048b1924). Accessed September 25, 2018.
92. State Uniformity Doctrines and Sugary Drink Taxes: Issue Brief. Public Health Law Center website: [www.publichealthlawcenter.org/sites/default/files/resources/State-Uniformity-Sugary-Drink-Taxes-2017.pdf](http://www.publichealthlawcenter.org/sites/default/files/resources/State-Uniformity-Sugary-Drink-Taxes-2017.pdf). 2017. Accessed December 5, 2018.
93. What is Uniformity? The Law Dictionary website: [thelawdictionary.org/uniformity](http://thelawdictionary.org/uniformity). December 5, 2018.
94. Anthony JOHNSON & Leon Cain, Petitioners/Plaintiffs, v. Mark NUMAINVILLE, the City Clerk of the City of Berkeley; Tim Dupuis, Alameda County Registrar of Voters; Does I-V, Respondents/Defendants. CITY COUNCIL OF THE CITY OF BERKELEY, a municipal corporation; Zach Cowan, the City Attorney of the City of Berkeley; Does VI-XV, Real Parties in Interest., 2014 WL 10449620 (Cal.Super.).
95. Collaborators USBoD, Mokdad AH, Ballestros K, et al. The state of US health, 1990-2016: Burden of diseases, injuries, and risk factors among US states. *JAMA*. 2018;319(14):1444-1472.10.1001/jama.2018.0158
96. Malik V, Popkin B, Bray G, Després J-P, Hu F. Sugar sweetened beverages, obesity, type 2 diabetes and cardiovascular disease risk. *Circulation*. 2010;121:1356-1364.10.1161/CIRCULATIONAHA.109.876185.Sugar
97. Local organizations may collect more specific city-level data, but you can find county-level diabetes data at: County Data. Centers for Disease Control and Prevention website.; [www.cdc.gov/diabetes/data/county.html](http://www.cdc.gov/diabetes/data/county.html).
98. Malik VS, Popkin BM, Bray Ga. Sugar-Sweetened Beverages and Risk of Metabolic Syndrome and Type 2 Diabetes. *Reviews/Commentaries/ADA Statements*. 2010;33:2477 - 2481.10.2337/dc10-1079.
99. Gregg EW, Zhuo X, Cheng YJ, Albright AL, Narayan KMV, Thompson TJ. Trends in lifetime risk and years of life lost due to diabetes in the USA, 1985-2011: A modelling study. *The Lancet Diabetes and Endocrinology*. 2014;2:867-874.10.1016/S2213-8587(14)70161-5
100. Local organizations may collect more specific city-level data, but you can find state-level heart disease data at: Data Trends and Maps. Centers for Disease Control and Prevention: Division for Heart Disease and Stroke Prevention website.; [www.cdc.gov/dhdsp/maps/dtm/index.html](http://www.cdc.gov/dhdsp/maps/dtm/index.html).
101. Yang Q, Zhang Z, Gregg EW, Flanders WD, Merritt R, Hu FB. Added Sugar Intake and Cardiovascular Diseases Mortality Among US Adults. *JAMA Internal Medicine*. 2014;174:516.10.1001/jamainternmed.2013.13563
102. Narain A, Kwok CS, Mamas MA. Soft drinks and sweetened beverages and the risk of cardiovascular disease and mortality: a systematic review and meta-analysis. *Int J Clin Pract*. 2016;70(10):791-805.10.1111/ijcp.12841
103. Larsson SC, Akesson A, Wolk A. Sweetened beverage consumption is associated with increased risk of stroke in women and men. *J Nutr*. 2014;144(6):856-860.10.3945/jn.114.190546
104. Jayalath VH, de Souza RJ, Ha V, et al. Sugar-sweetened beverage consumption and incident hypertension: a systematic review and meta-analysis of prospective cohorts. *Am J Clin Nutr*. 2015;102(4):914-921.10.3945/ajcn.115.107243
105. Cheungpasitporn W, Thongprayoon C, Edmonds PJ, et al. Sugar and artificially sweetened soda consumption linked to hypertension: a systematic review and meta-analysis. *Clin Exp Hypertens*. 2015;37(7):587-593.10.3109/10641963.2015.1026044
106. Stanhope KL, Bremer AA, Medici V, et al. Consumption of fructose and high fructose corn syrup increase postprandial triglycerides, LDL-cholesterol, and apolipoprotein-B in young men and women. *J Clin Endocrinol Metab*. 2011;96(10):E1596-1605.10.1210/jc.2011-1251
107. Wadhera RK, Steen DL, Khan I, Giugliano RP, Foody JM. A review of low-density lipoprotein cholesterol, treatment strategies, and its impact on cardiovascular disease morbidity and mortality. *J Clin Lipidol*. 2016;10(3):472-489.10.1016/j.jacl.2015.11.010
108. Handelsman Y, Shapiro MD. Triglycerides, Atherosclerosis, and Cardiovascular Outcome Studies: Focus on Omega-3 Fatty Acids. *Endocr Pract*. 2017;23(1):100-112.10.4158/EP161445.RA
109. *Heart Disease and Stroke Statistics 2018 At-a-Glance* American Heart Association;2018.
110. Asgari-Taee F, Zerfati-Shoae N, Dehghani M, Sadeghi M, Baradaran HR, Jazayeri S. Association of sugar sweetened beverages consumption with non-alcoholic fatty liver disease: a systematic review and meta-analysis. *Eur J Nutr*. 2018.10.1007/s00394-018-1711-4
111. Ma J, Fox CS, Jacques PF, et al. Sugar-sweetened beverage, diet soda, and fatty liver disease in the Framingham Heart Study cohorts. *Journal of Hepatology*. 2015. [dx.doi.org/10.1016/j.jhep.2015.03.032](https://doi.org/10.1016/j.jhep.2015.03.032)
112. Welsh JA, Karpen S, Vos MB. Increasing prevalence of nonalcoholic fatty liver disease among United States adolescents, 1988-1994 to 2007-2010. *J Pediatr*. 2013;162(3):496-500 e491.10.1016/j.jpeds.2012.08.043
113. Mozaffarian D, Hao T, Rimm EB, Willett WC, Hu FB. Changes in diet and lifestyle and long-term weight gain in women and men. *N Engl J Med*. 2011;364(25):2392-2404.10.1056/NEJMoa1014296
114. Ludwig DS, Peterson KE, Gortmaker SL. Relation between consumption of sugar-sweetened drinks and childhood obesity: a prospective, observational analysis. *Lancet*. 2001;357:505-508.10.1016/s0140-6736(00)04041-1
115. State level data on nutrition and obesity is available at: Nutrition, Physical Activity, and Obesity Data Portal. Centers for Disease Control and Prevention website.; [chronicdata.cdc.gov/browse?category=Nutrition%2C+Physical+Activity%2C+and+Obesity](http://chronicdata.cdc.gov/browse?category=Nutrition%2C+Physical+Activity%2C+and+Obesity).
116. Hales CM, Fryar CD, Carroll MD, Freedman DS, Ogden CL. Trends in Obesity and Severe Obesity Prevalence in US Youth and Adults by Sex and Age, 2007-2008 to 2015-2016. *JAMA*. 2018;319(16):1723-1725.10.1001/jama.2018.3060
117. Fryar CD, Carroll MD, Ogden CL. Prevalence of Obesity Among Children and Adolescents : United States , Trends 1963 - 1965 Through 2009 - 2010. *National Center for Health Statistics*. 2012;September:1-6
118. Hales CM, Carroll M, Fryar CD, Ogden C. *Prevalence of Obesity Among Adults and Youth, 2015-2016*. National Center for Health Statistics;2017.

119. Simmonds M, Llewellyn A, Owen CG, Woolacott N. Predicting adult obesity from childhood obesity: a systematic review and meta-analysis. *Obes Rev.* 2016;17(2):95-107.10.1111/obr.12334
120. Gordon-Larsen P, Adair LS, Nelson MC, Popkin BM. Five-year obesity incidence in the transition period between adolescence and adulthood: the National Longitudinal Study of Adolescent Health. *Am J Clin Nutr.* 2004;80(3):569-575.10.1093/ajcn/80.3.569
121. Ogden CL, Fakhouri TH, Carroll MD, et al. Prevalence of Obesity Among Adults, by Household Income and Education - United States, 2011-2014. *MMWR Morb Mortal Wkly Rep.* 2017;66(50):1369-1373.10.15585/mmwr.mm6650a1
122. Benjamin RM. Oral health: the silent epidemic. *Public Health Rep.* 2010;125(2):158-159.10.1177/003335491012500202
123. Fleming E, Afful J. *Prevalence of Total and Untreated Dental Caries Among Youth: United States, 2015-2016.* National Center for Health Statistics;2018.
124. Sohn W, Burt BA, Sowers MR. Carbonated soft drinks and dental caries in the primary dentition. *J Dent Res.* 2006;85(3):262-266.10.1177/154405910608500311
125. Bernabe E, Vehkalahti MM, Sheiham A, Aromaa A, Suominen AL. Sugar-sweetened beverages and dental caries in adults: a 4-year prospective study. *J Dent.* 2014;42(8):952-958.10.1016/j.jdent.2014.04.011
126. Woodward-Lopez G, Kao J, Ritchie L. To what extent have sweetened beverages contributed to the obesity epidemic? *Public Health Nutrition.* 2011;14:499-509.10.1017/S1368980010002375
127. *Guideline: Sugars intake for adults and children.* Geneva, Switzerland: World Health Organization;2015.
128. Johnson RK, Appel LJ, Brands M, et al. Dietary sugars intake and cardiovascular health a scientific statement from the american heart association. *Circulation.* 2009;120:1011-1020.10.1161/CIRCULATIONAHA.109.192627
129. Non-alcoholic beverage trend analysis.
130. Abdelmalek MF, Day C. Sugar sweetened beverages and fatty liver disease: Rising concern and call to action. *J Hepatol.* 2015;63(2):306-308.10.1016/j.jhep.2015.05.021
131. Cawley J, Rizzo JA, Haas K. Occupation-Specific Absenteeism Costs Associated With Obesity and Morbid Obesity. *Journal of Occupational and Environmental Medicine.* 2007;49:1317-1324.10.1097/JOM.0b013e31815b56a0
132. Grimes CA, Szymlek-Gay EA, Nicklas TA. Beverage Consumption among U.S. Children Aged 0-24 Months: National Health and Nutrition Examination Survey (NHANES). *Nutrients.* 2017;9(3):10.3390/nu9030264
133. Rosinger A, Herick K, Gahche J, Park S. *Sugar-sweetened beverage consumption among U.S. adults, 2011-2014.*: National Center for Health Statistics;2017.
134. Lasater G, Piernas C, Popkin BM. Beverage patterns and trends among school-aged children in the US, 1989-2008. *Nutr J.* 2011;10:103.10.1186/1475-2891-10-103
135. Park S, Xu F, Town M, Blanck HM. Prevalence of Sugar-Sweetened Beverage Intake Among Adults--23 States and the District of Columbia, 2013. *MMWR Morb Mortal Wkly Rep.* 2016;65(7):169-174.10.15585/mmwr.mm6507a1
136. Asay GR, Roy K, Lang JE, Payne RL, Howard DH. Absenteeism and employer costs associated with chronic diseases and health risk factors in the US workforce. *Prev Chronic Dis.* 2016;13:E141.doi/10.5888/pcd13.150503
137. Cawley J, Meyerhoefer C. The medical care costs of obesity: An instrumental variables approach. *Journal of Health Economics.* 2012;31:219-230.10.1016/j.jhealeco.2011.10.003
138. American Diabetes A. Economic Costs of Diabetes in the U.S. in 2017. *Diabetes Care.* 2018;41(5):917-928.10.2337/dci18-0007
139. Harris JL, Schwartz MB, Shehan C, et al. *Snack FACTS 2015: Evaluating Snack Food Nutrition and Marketing to Youth.* Hartford, CT: UConn Rudd Center for Food Policy & Obesity;2015.
140. *Unpublished analysis of Nielsen Data.* University of Connecticut Rudd Center for Food Policy and Obesity;2018.
141. Colchero MA, Molina M, Guerrero-López CM. After Mexico implemented a tax, purchases of sugar-sweetened beverages decreased and water increased: difference by place of residence, household composition, and income level. *The Journal of Nutrition.* 2017;147(8):1552-1557
142. *Monitoring Changing Tobacco Use Behaviors: Maryland 2000 - 2016.* Maryland Department of Health: Center for Tobacco Prevention and Control;2017.
143. Equity & Environment Initiative. City of Seattle website.; [www.seattle.gov/environment/equity-and-environment/equity-and-environment-initiative](http://www.seattle.gov/environment/equity-and-environment/equity-and-environment-initiative). 2018.
144. Seattle City Council Legislative Summary CB 118965.
145. Boulder Municipal Code §3-16-1(a).
146. Imposing a General Tax on the Distribution of Sugar-Sweetened Beverage Products. City of Berkeley website.; [www.cityofberkeley.info/uploadedFiles/Clerk/Elections/Sugar%20Sweetened%20Beverage%20Tax%20-%20Full%20Text.pdf](http://www.cityofberkeley.info/uploadedFiles/Clerk/Elections/Sugar%20Sweetened%20Beverage%20Tax%20-%20Full%20Text.pdf). 2018.
147. Boulder Municipal Code §3-16-6.
148. Seattle Municipal Code § 5.53.080.
149. Philadelphia Municipal Code § 19-4101(3)(e).
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