

Sugary Drink Taxes

To provide you with the best science and reduce review time, use the following science-approved facts in your campaigns and materials. After each fact, you will find fast facts based on the science, which can be cut and pasted word-for-word without additional science review. Note that any change in wording will require your documents go through the science review process before release.

What is a sugary drink?

The American Heart Association defines sugary drinks as any nonalcoholic beverage, whether carbonated or noncarbonated, sold for human consumption that contains any added sugars.

This includes sports drinks, lemonade, energy drinks, sweetened coffee and teas, fruit drinks with added sugar and full-calorie soda. Animal milk, 100% juice, unsweetened waters, teas and coffees, diet drinks, plant-based milk with fewer than 5 grams of added sugars per 8 ounces, infant formula and medically necessary beverages are not considered sugary drinks.

Sugary drink taxes

The American Heart Association supports taxing sugary drinks, ideally structuring the taxes in a tiered approach that considers grams of total sugars per fluid ounce and levies the tax by volume to optimally decrease consumer consumption of less-healthy beverages and spur industry reformulation. In the U.S., all current local sugary drink taxes are volume-based but tiered and sugar-based taxes have been implemented in other parts of the world. The American Heart Association supports all three tax structure options as a way that states, tribal areas and communities can encourage changes in consumer behavior and encourage the industry to reformulate its products to have less added sugars.

Evidence of sugary drink tax impact

FACT 1

As of July 2021, seven U.S. cities and more than 40 nations have adopted sugary drink taxes. These taxes reduce the sales of sugary drinks and raise valuable revenue for communities.

Fast Facts:

- ▶ As of July 2021, seven U.S. cities and more than 40 nations have adopted sugary drink taxes.
- ▶ As of July 2021, seven U.S. cities and more than 40 nations have adopted sugary drink taxes to reduce the sales of sugary drinks and raise revenue for communities.
- ▶ Several U.S. cities and dozens of nations have adopted sugary drink taxes.
- ▶ Several U.S. cities and dozens of nations have adopted sugary drink taxes to reduce the sales of sugary drinks and raise revenue for communities.

Source:

Krieger J, Bleich SN, Scarmo S, Ng SW. Sugar-sweetened beverage reduction policies: progress and promise. *Ann Rev Public Health*. 2021; 42:439-461. doi: 10.1146/annurev-publhealth-090419-103005.

FACT 2

Sugary drink taxes increase the price and reduce purchases of taxed beverages. In the United States, 43% to 123% of the taxes have been passed from the distributors to the consumers in the form of higher prices. Sales of taxed beverages have decreased by 21% to 39%, after accounting for tax avoidance from shopping in neighboring areas.

Fast Facts:

- ▶ By taxing sugary drinks, the price of these products increases and can, therefore, reduce purchases.
- ▶ Distributors are taxed when a sugary drink tax is implemented. They usually pass that price on to consumers.
- ▶ In the U.S., 43% to 123% of sugary drink taxes have been passed from the distributors to the consumers in the form of higher prices.
- ▶ Sales of taxed beverages have decreased by 21% to 39%, after accounting for tax avoidance from shopping in neighboring areas.

Source:

Krieger J, Bleich SN, Scarmo S, Ng SW. Sugar-sweetened beverage reduction policies: progress and promise. *Ann Rev Public Health*. 2021; 42:439-461. doi: 10.1146/annurev-publhealth-090419-103005.

FACT 3

An 8-ounce serving of a fruit drink can contain anywhere from 1 gram to 57 grams of added sugars. A tiered tax on sugary drinks establishes different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases. In the United Kingdom, consumption of added sugars from soft drinks fell by 10% one year after a tiered tax was implemented.

Fast Facts:

- ▶ Sugary drinks vary in grams of added sugar. A tiered tax on sugary drinks takes this into account by establishing different tax rates based on how much sugar is in the drink.
- ▶ Sugary drinks vary in grams of added sugar. A tiered tax on sugary drinks takes this into account by establishing different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases.
- ▶ A tiered tax on sugary drinks establishes different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases.
- ▶ Sugary drinks vary in grams of added sugar. A tiered tax on sugary drinks takes this into account by establishing different tax rates based on how much sugar is in the drink. As the amount of sugar increases, the amount of tax per ounce increases. In the United Kingdom, consumption of added sugars from soft drinks fell by 10% one year after the nation implemented a tiered tax.
- ▶ In the United Kingdom, consumption of added sugars from soft drinks fell by 10% one year after the nation implemented a tiered tax.

Source:

Harris JL, Schwartz MB, LoDolce M, Munsell C, Fleming-Milici F, Elsey J, et al. Sugary Drink FACTS 2014: Some progress but much room for improvement in marketing to youth. November 2014. Available at: https://www.sugarydrinkfacts.org/resources/SugaryDrinkFACTS_Report.pdf.

Pell D, Mytton O, Penney TL, Briggs A, Cummins S, Penn-Jones C, et al. Changes in soft drinks purchased by British households associated with UK soft drinks industry levy: controlled interrupted time series analysis. *BMJ*. 2021; 10:372:n254. doi: 10.1136/bmj.n254.

FACT 4

Two years after implementation of Philadelphia's 1.5-cents-per-ounce sweetened beverage tax, there was an average 2-cents-per-ounce increase in taxed beverage price and a 42% decline in the volume of taxed beverages bought at small independent stores by people in Philadelphia compared to Baltimore. On average, people in Philadelphia consumed about 70 fewer calories from both beverages and high-sugar foods, suggesting they did not substitute high-sugar foods for taxed beverages.

Fast Facts:

- ▶ In the years following Philadelphia's implementation of a sweetened beverage tax, taxed beverage prices rose by about 2 cents per ounce.
- ▶ In the years following Philadelphia's implementation of a sweetened beverage tax, the volume of taxed beverages bought at small independent stores dropped by more than 40%.
- ▶ In the years following Philadelphia's implementation of a sweetened beverage tax, the volume of taxed beverages bought at small independent stores dropped by 42%.
- ▶ On average, people in Philadelphia consume about 70 fewer calories from both beverages and high-sugar foods, suggesting they aren't substituting high-sugar foods for taxed beverages.
- ▶ People in Philadelphia aren't substituting high-sugar foods for taxed beverages. In fact, on average, they now consume about 70 fewer calories from both beverages and high-sugar foods.

Source:

Bleich SN, Dunn CG, Soto MJ, Yan J, Gibson LA, Lawman HG, et al. Association of a sweetened beverage tax with purchases of beverages and high-sugar foods at independent stores in Philadelphia. *JAMA Netw Open*. 2021; 4(6):e2113527. doi: 10.1001/jamanetworkopen.2021.13527.

FACT 5

A recent economic study estimated that Philadelphia's beverage tax created between 800 and 1,350 new jobs in the city since its implementation, in part by increasing funding for child care services that allowed more parents to enter the labor force.

Fast Facts:

- ▶ Philadelphia's sweetened beverage tax has created between 800 and 1,350 new jobs since it was implemented in January 2017.
- ▶ Philadelphia's sweetened beverage tax has created more than 800 new jobs since it was implemented in January 2017.
- ▶ Philadelphia's sweetened beverage tax has created between 800 and 1,350 new jobs since it was implemented in January 2017, in part by increasing funding for early care and education programs which allowed more parents to return to the workforce.

Source:

Lahr M, Yao Y, and Nores M. The Total Economic Impact of Philadelphia's Beverage Tax. New Brunswick, NJ: National Institute for Early Education Research. September 2021. Available at: https://nieer.org/wp-content/uploads/2021/09/Policy_Brief_PHILPreK_v6.8.21_5pm_Final.pdf.

FACT 6

One year after implementation of Seattle's 1.75-cent-per-ounce sugary beverage tax, prices of taxed beverages rose by about 1 cent per ounce and purchases of taxed beverages declined by 22% compared to Portland, with no evidence of cross-border shopping. Purchases of untaxed beverages, such as bottled water, increased by about 4% compared to Portland.

Fast Facts:

- ▶ In the year following Seattle's implementation of a sugary drink tax, taxed beverage prices rose by about 1 cent per ounce.
- ▶ In the year following Seattle's implementation of a sugary drink tax, purchases of taxed beverages declined by 22% compared to Portland, with no evidence of cross-border shopping.
- ▶ In the year following Seattle's implementation of a sugary drink tax, there was no evidence of cross-border shopping.
- ▶ In the year following Seattle's implementation of a sugary drink tax, purchases of untaxed beverages, such as bottled water, increased by about 4% in Seattle compared to Portland.
- ▶ In the year following Seattle's implementation of a sugary drink tax, purchases of taxed beverages declined by 22% compared to Portland, and purchases of untaxed beverages, such as bottled water, increased by about 4%.

Source:

Powell LM, Leider J. The impact of Seattle's sweetened beverage tax on beverage prices and volume sold. *Econ Hum Biol.* 2020; 37:100856. doi: 10.1016/j.ehb.2020.100856.

FACT 7

Research looking at the first year of the Berkeley, Calif., sugary drink tax showed the tax was working as intended: Sales of sugary drinks declined almost 10% and sales of water increased by 15%. Three years later, consumption of sugary drinks dropped by 52% and water increased by 25% among Berkeley residents in diverse neighborhoods with a large proportion of Black and Latino residents.

Fast Facts:

- ▶ Berkeley, Calif.'s sugary drink tax is working as intended as sugary drink sales have declined and water sales have increased.
- ▶ In the year following the implementation of Berkeley, Calif.'s sugary drink tax, sugary drink sales declined by about 10% and water sales increased by about 15%.
- ▶ Berkeley, Calif.'s sugary drink tax is working as intended as sugary drink consumption dropped and water consumption increased.
- ▶ Four years after the implementation of Berkeley, Calif.'s sugary drink tax, sugary drink consumption dropped by 52% and water consumption increased by 25%.
- ▶ Four years after the implementation of Berkeley, Calif.'s sugary drink tax, people living in predominantly Black and Latino communities began drinking fewer sugary drinks and more water.
- ▶ Four years after the implementation of Berkeley, Calif.'s sugary drink tax, sugary drink consumption among Black and Latino residents dropped by 52%, while water consumption increased by 25%.

Source:

Silver LD, Ng SW, Ryan-Ibarra S, Taillie LS, Induni M, Miles DR, et al. (2017) 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: e1002283. doi: 10.1371/journal.pmed.1002283.

Lee MM, Falbe J, Schillinger D, Basu S, McCulloch CE, Madsen KA. Sugar-sweetened beverage consumption 3 years after the Berkeley, California, sugar-sweetened beverage tax. *Am J Public Health.* 2019; 109:637-639. doi: 10.2105/AJPH.2019.304971.

FACT 8

During the four months that the 1-cent-per-ounce Cook County, Ill., sugary drink tax was in effect, purchases of taxed beverages decline by 21% compared to St. Louis, Mo, after accounting for cross-border shopping.

Fast Facts:

- ▶ During the four months that the 1-cent-per-oz. Cook County, Ill., sugary drink tax was in effect, purchases of taxed beverages declined by 21% compared to St. Louis, Mo., after accounting for cross-border shopping.
- ▶ Purchases of sugary drinks fell by more than 20% during the time Cook County, Ill., had a sugary drink tax.

Source:

Powell LM, Leider J, Léger PT. The impact of a sweetened beverage tax on beverage volume sold in Cook County, Illinois, and its border area. *Ann Intern Med.* 2020; 172:390-397. doi: 10.7326/M19-2961.

FACT 9

Across store types, there is no evidence of increases in volume or dollar sales of candy, snacks or spirits in Philadelphia compared to nearby counties, suggesting that Philadelphia's decline in taxed beverage purchases is not offset by increases in purchases of other unhealthy foods and beverages.

Fast Facts:

- ▶ Data demonstrate that people in Philadelphia are not substituting taxed sweetened beverages with candy, snacks or alcohol.
- ▶ There is no evidence of increases in sales of candy, snacks or spirits in Philadelphia compared to nearby counties, suggesting that Philadelphia's decline in taxed beverage purchases is not offset by increases in purchases of other unhealthy foods and beverages.

Source:

Gibson LA, Lawman HG, Bleich SN, Yan J, Mitra N, LeVasseur MT, et al. No evidence of food or alcohol substitution in response to a sweetened beverage tax. *Am J Prev Med.* 2021; 60:e49-e57. doi: 10.1016/j.amepre.2020.08.021.

Tax revenue raised and community impact

FACT 10

Sugary drink taxes in the United States have raised substantial revenues. Across the seven cities with taxes, the average revenue raised from taxes is \$133.9 million each year, with nearly all (\$133.2 million) of the revenue allocated.

Fast Facts:

- ▶ Sugary drink taxes in the United States have raised substantial revenues. Across the seven cities with taxes, the average revenue raised from taxes is nearly \$134 million each year, with nearly all of the revenue allocated.
- ▶ Currently, seven U.S. cities have sugary drink taxes and the average revenue raised is nearly \$134 million each year.
- ▶ Currently, seven U.S. cities have sugary drink taxes. On average, each city raises nearly \$134 million in revenue annually as a result of the tax.
- ▶ Sugary drink taxes can bring in tens of millions of dollars for the cities that implement them. Currently, seven U.S. cities have sugary drink taxes. On average, each city raises nearly \$134 million in revenue annually from the tax.

Source:

Krieger J, Magee K, Hennings T, Schoof J, Madsen KA. How sugar-sweetened beverage tax revenues are being used in the United States. *Prev Med Rep.* 2021; 23: 01388. doi: 10.1016/j.pmedr.2021.101388.

FACT 11

Across the seven cities with sugary drink taxes, the largest revenue investments support early childhood development (annual average of \$57.6 million), improvements to community infrastructure (\$21.2 million) and increased access to healthy foods (\$17.2 million). Investments have been varied and specific to each community's needs:

Fast Facts:

- ▶ Albany (N.Y.), Berkeley (Calif.), Boulder (Colo.) and San Francisco (Calif.) have focused their revenue allocations on health-related goals.
- ▶ Philadelphia (Pa.) has focused almost solely on human and community capital, allocating more than 90% of its revenues to expand access to pre-K and improve community infrastructure.
- ▶ Oakland (Calif.) and Seattle (Wash.) have divided their revenue investments between health and human and community capital.
- ▶ Currently, seven cities have implemented sugary drink taxes. Revenue investments in these locations include support to early childhood development, improvements to community infrastructure and increased access to healthy foods.
- ▶ Currently, seven cities have implemented sugary drink taxes. Revenue investments in these locations include support to early childhood development at about \$58 million, improvements to community infrastructure at about \$21 million and increased access to healthy foods at about \$17 million.
- ▶ The seven cities that have implemented sugary drink taxes have invested nearly \$100 million in early childhood development, community infrastructure and access to healthy foods.
- ▶ Albany, N.Y.; Boulder, Colo.; and Berkeley and San Francisco, Calif., have invested sugary drink tax revenue in health-related goals.
- ▶ Philadelphia has invested its sweetened beverage tax revenue almost solely in its residents and the communities in which they live. In fact, the city has allocated more than 90% of its revenue to expand access to pre-K and improve community infrastructure.
- ▶ Oakland, Calif., and Seattle, Wash., have divided their revenue investments between health, residents and the communities in which they live.

Source:

Krieger J, Magee K, Hennings T, Schoof J, Madsen KA. How sugar-sweetened beverage tax revenues are being used in the United States. *Prev Med Rep.* 2021; 23: 01388. doi: 10.1016/j.pmedr.2021.101388.

Additional Examples:

[*note: borrowed directly from the Voices sugary drink messaging guide – not science*]

- ▶ In Philadelphia, funding from the sugary drink tax has been used to support thousands of pre-K slots, more than a dozen community schools and improvements to parks and recreation centers. The city focuses funding in areas lacking child-care options and communities with greater numbers of families with low incomes.
- ▶ In Seattle, a community-driven campaign directed tax revenues where the community sees its greatest needs, including to help feed families who are food insecure during COVID-19.
- ▶ San Francisco has used the tax revenue to improve school food, health and recreation programs for families and children who have low incomes and to create Peace Parks to increase recreation options for teens and young adults who live in neighborhoods affected by crime.

- ▶ In 2014, the Navajo Nation passed the Healthy Diné Nation Act to address the health concerns of the Diné community. It is the first such policy in the world serving as an example of tribal sovereignty to support community wellness. The act places a 2% tax on calorie-dense food and drinks with little-to-no nutritional value and waives a 6% tax on healthy foods such as fruits and vegetables. The act has funded more than 1,300 community-selected wellness projects across Navajo Nation, including community fitness classes, greenhouses, youth clubs, clean water initiatives, Navajo language and culture classes and more.

Source:

Voices for Healthy Kids. Sugary Drink Messaging for Policy Change: A Resource for Advocacy Campaigns. April 2021. Available at: https://voicesforhealthykids.org/assets/resources/vhk_sugarydrinkmessageguide_final-2021.pdf.

Responding to tax regressivity concerns

FACT 12

A systematic review found only a small difference in the impact of sugary drink taxes on spending between low- and high-income households (an additional 0.1-1.0% of annual household income for low-income vs. 0.03-0.6% for high-income households).

Fast Facts:

- ▶ A systematic review found that sugary drink taxes only marginally impact spending in most households.
- ▶ A systematic review found that sugary drink taxes only marginally impact spending for low- and high-income households.
- ▶ A systematic review found that low-income households in cities with sugary drink taxes spent marginally more, about 0.1% to 1% more.
- ▶ A systematic review found that high-income households in cities with sugary drink taxes spent marginally more, about 0.03% to 0.6% more.

Source:

Backholer K, Sarink D, Beauchamp A, Keating C, Loh V, Ball K, et al. The impact of a tax on sugar-sweetened beverages according to socio-economic position: a systematic review of the evidence. *Public Health Nutr.* 2016; 19:3070-3084. doi: 10.1017/S136898001600104X.

FACT 13

Studies modeling effects of sugary drink taxes in the U.S. estimated they would result in less than a \$2 average difference in annual spending increases between high- and low-income individuals.

Fast Facts:

- ▶ Studies show that sugary drink taxes result in less than a \$2 average difference in annual spending increases between individuals with high and low incomes.
- ▶ People, regardless of income, spend only about \$2 more per year on beverages because of sugary drink taxes.

Source:

Falbe J. The ethics of excise taxes on sugar-sweetened beverages. *Physiol Behav.* 2020; 225:113105. doi: 10.1016/j.physbeh.2020.113105.

FACT 14

Compared to other groups, families with low-incomes and communities of color are exposed to more advertising for sugary drinks and experience disproportionately higher rates of sugary drink-related chronic diseases. As a result, modeling studies predict that these groups would experience the largest gain in health and greatest reduction in health care costs.

Fast Facts:

- ▶ Families with low incomes and communities of color are exposed to more sugary drinks ads than their peers from other racial or ethnic groups.
- ▶ Families with low incomes and communities of color experience disproportionately higher rates of sugary drink-related chronic diseases than their peers from other racial or ethnic groups.
- ▶ Families with low incomes and communities of color would experience the largest gain in health and greatest reduction in health care costs if sugary drink taxes were implemented in their cities.
- ▶ Families with low incomes and communities of color are exposed to more sugary drinks ads and experience disproportionately higher rates of sugary drink-related chronic diseases than their peers from other racial or ethnic groups. As a result, studies show that these groups would experience the largest gain in health and greatest reduction in health care costs if sugary drink taxes were implemented in their cities.

Source:

Falbe J. The ethics of excise taxes on sugar-sweetened beverages. *Physiol Behav.* 2020; 225:113105. doi: 10.1016/j.physbeh.2020.113105.

Impact on employment and store revenues

FACT 15

Up to two and a half years after the Philadelphia sweetened beverage tax was implemented, there was no evidence that the tax resulted in job losses in the overall economy, private sector, limited-service restaurants or convenience stores.

Fast Facts:

- ▶ Philadelphia's sweetened beverage tax has not caused job losses in the city.
- ▶ Despite beverage industry talking points, Philadelphia's sweetened beverage tax has not caused job losses in the city.
- ▶ Even though Philadelphia implemented a sweetened beverage tax, there has been no evidence to suggest the tax caused job losses of any kind.
- ▶ In the two and a half years after Philadelphia implemented its sweetened beverage tax, there was no evidence that the tax resulted in job losses of any kind.
- ▶ Even though Philadelphia implemented a sweetened beverage tax, there has been no evidence to suggest the tax caused job losses in the overall economy, private sector, limited-service restaurants or convenience stores.
- ▶ In the two and a half years after Philadelphia implemented its sweetened beverage tax, there was no evidence that the tax resulted in job losses in the overall economy, private sector, limited-service restaurants or convenience stores.

Source:

Marinello S, Leider J, Pugach O, Powell LM. The impact of the Philadelphia beverage tax on employment: a synthetic control analysis. *Econ Hum Biol.* 2021; 40:100939. doi: 10.1016/j.ehb.2020.100939.

FACT 16

Up to two years after the San Francisco sugary drink tax was implemented, there was no evidence that the tax resulted in job losses overall or in the private sector, nor any job losses in beverage manufacturing, supermarket and other grocery store, convenience store or limited-service restaurant industries.

Fast Facts:

- ▶ San Francisco's sugary drink tax has not caused job losses in the city.
- ▶ Despite beverage industry talking points, San Francisco's sugary drink tax has not caused job losses in the city.
- ▶ Even though San Francisco implemented a sugary drink tax, there has been no evidence to suggest the tax caused job losses of any kind.
- ▶ In the two years after San Francisco implemented a sugary drink tax, there was no evidence that the tax resulted in job losses of any kind.
- ▶ After San Francisco implemented a sugary drink tax, there has been no evidence to suggest the tax caused job losses overall or in the private sector, nor any job losses in beverage manufacturing, supermarket and other grocery store, convenience store or limited-service restaurant industries.
- ▶ In the two years after San Francisco implemented sugary drink tax, there was no evidence that the tax resulted in job losses in beverage manufacturing, supermarket and other grocery store, convenience store or limited-service restaurant industries.

Source:

Marinello S, Leider J, Powell LM. Employment impacts of the San Francisco sugar-sweetened beverage tax two years after implementation. *PLoS One*. 2021; 16:e0252094. doi: 10.1371/journal.pone.0252094.

FACT 17

In Berkeley, Calif., the sugary drink tax has strengthened the local economy. Food sector sales tax revenue rose by 15%, while food sector jobs increased by 7.2% just 18 months after the tax was passed.

Fast Facts:

- ▶ Berkeley, Calif.'s sugary drink tax has strengthened the local economy.
- ▶ Despite beverage industry talking points, Berkeley, Calif.'s sugary drink tax strengthened the local economy.
- ▶ When Berkeley, Calif., implemented its sugary drink tax, both food sector sales tax revenue and food sector jobs increased.
- ▶ When Berkeley, Calif., implemented its sugary drink tax, food sector sales tax revenue rose by 15% and food sector jobs increased by more than 7%.
- ▶ Just 18 months after Berkeley, Calif., implemented its sugary drink tax, both food sector sales tax revenues and food sector jobs increased.
- ▶ Just 18 months after Berkeley, Calif., implemented its sugary drink tax, food sector sales tax revenue rose by 15% and while food sector jobs increased by more than 7%.

Source:

Public Health Institute. Berkeley's Sugar Sweetened Beverage Tax: What Happened to Jobs and Business Revenue? Issue brief. May 2017. Available at: <https://www.phi.org/uploads/application/files/zq8houfhy138b4rggefjapj7t2s7k2hpfjofgin6pw2tp77h.pdf>.