

Building Momentum evidence table: effects of implemented SSB taxes

Summary of what is known to date

Jurisdiction	Effects of implemented SSB tax
Barbados	Price: Prior to SSB tax implementation, SSBs and non-SSBs experienced very similar year-over-year price growth of around 1%. Post-SSB tax implementation, SSB prices increased and non-SSB prices decreased. In the two quarters after the tax was implemented, average SSB prices increased by 5.9% compared to the previous year. ¹
Chile	Price: One year and three months after SSB tax rate changes went into effect ¹ prices of both carbonated and noncarbonated high sugar sweetened beverages (H-SSBs) increased by 2% and 3.9% respectively. Prices of low- or no-sugar sweetened beverages (L-SSBs) concentrates decreased by 6.7% and prices of ready-to-drink L-SSBs increased by 1.5%. ² Purchases: One year and three months after the SSB tax changes went into effect, households decreased per-capita purchases of H-SSBs by 3.4% by volume and 4% by calories. This change was greatest among households with high socioeconomic status. The volume of household purchases of L-SSBs increased by 10.7% and untaxed beverage purchases decreased by 3.1%. ³
France	Price: Following implementation, the SSB tax was gradually passed through to varying degrees by product category. Six months post-implementation, the tax had fully passed through to soda prices and almost fully passed through to prices of fruit drinks, but was incomplete for flavoured waters. ⁴

¹ On 1 October 2014, Chile increased the tax rate from 13% to 18% for beverages with high levels of sugar (H-SSBs) [$>6.25\text{g sugar}/100\text{mL}$] and decreased the tax rate from 13% to 10% on beverages with low or no sugar (L-SSBs) [$<6.25\text{g sugar}/100\text{mL}$].

Hungary	<p>Consumption:</p> <ul style="list-style-type: none"> • One-year post implementation, 26 to 35% of consumers had decreased their intake of products subject to the Public Health Product Tax.⁵ • Two-years post-implementation, reduction in consumption of taxed products was sustained. Between 2012 and 2014, people changed their consumption of energy drinks by 28% and their consumption of sugar sweetened soft drinks by 20%. Price and knowledge that sugar sweetened drinks are unhealthy were the two main factors that influenced a reduction in sugar sweetened soft drink consumption.⁶
Mexico	<p>Price: The SSB tax passed through to the consumer for all SSBs but passed through at a higher rate to carbonated SSBs. The tax passed through at a higher rate in Mexico City, Central North, North Border and the Northwest, and at a lower rate in other regions. Price changes were higher among beverages with smaller package sizes.⁷</p> <p>Purchases:</p> <ul style="list-style-type: none"> • One-year post-SSB tax implementation, purchases of taxed beverages decreased by 6% on average, and decreased at an increasing rate up to 12% in December 2014. Reduced purchases of taxed beverages were seen across all socioeconomic groups, but reductions were higher among households of low socioeconomic status, with an average decline of 9% during 2014 and up to a 17% decrease in December 2014.⁸ Reductions in purchases were higher among people living in urban areas and households with children.⁹ • Two-years post-SSB tax implementation – purchases of SSBs continued to be lower (average of 9.7% reduction). Similar to the first year, the decline in SSB purchases was greatest for lowest income households.¹⁰
US (Berkeley)	<p>Price: One-year post-SSB tax implementation, pass through rate varied for SSBs. The tax was fully passed through in large chain supermarkets and small chain supermarkets and chain gas stations, partially passed through in pharmacies and negatively passed through in independent corner stores and independent gas stations.¹¹</p> <p>Purchases: One-year post-SSB tax implementation, SSB sales declined in Berkeley stores by 9.6%, but rose by 6.9% for non-Berkeley stores. In Berkeley stores, untaxed beverage sales increased by 3.5% compared to 0.5% in non-Berkeley stores. Sales of water increased by 15.6% in Berkeley.¹²</p> <p>Consumption: Four months post SSB tax implementation, consumption of SSBs decreased by 21% in Berkeley, compared to 4% in comparison cities. Water consumption increased by 63% in Berkeley compared to 19% in comparison cities.¹³</p>

US (Philadelphia)	Consumption: Two-months post-SSB tax implementation, the likelihood of daily consumption of sugared soda and energy drinks declined by 40% and 64% respectively and the likelihood of daily bottled water consumption increased by 58%. ¹⁴
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Table last updated on 13 July 2018

For more information about the different SSB taxes, see “[U – Use economic tools to address food affordability and purchase incentives](#)” in our NOURISHING policy database (www.wcrf.org/NOURISHING).

Definitions

Sugar sweetened beverages (SSBs): Beverages containing added caloric sweeteners, such as sucrose, high-fructose corn syrup or fruit juice concentrates. These include, but are not limited to, carbonates, fruit beverages, sports beverages, energy and vitamin water beverages, sweetened iced tea and lemonade. While most SSB taxes only include sugar sweetened beverages, some countries and local jurisdictions also include beverages to which non-caloric sweeteners have been added.

Pass through rate: The rate of an excise tax that is transferred from producer to consumer.

How to cite this table

World Cancer Research Fund International (2018). Building momentum: lessons on implementing a robust sugar sweetened beverage tax. Building Momentum evidence table: effects of implemented SSB taxes. Available at www.wcrf.org/buildingmomentum

¹ Alvarado M et al. (2017) Trends in beverage prices following the introduction of a tax on sugar-sweetened beverages in Barbados. *Preventive Medicine*.

² Caro JC et al. (2018) Chile’s 2014 sugar-sweetened beverage tax and changes in prices and purchases of sugar-sweetened beverages: An observational study in an urban environment. *PLOS Medicine* 15(7): e1002597

³ Caro JC et al. (2018) Chile’s 2014 sugar-sweetened beverage tax and changes in prices and purchases of sugar-sweetened beverages: An observational study in an urban environment. *PLOS Medicine* 15(7): e1002597

⁴ Berardi N et al. (2012) The impact of a ‘soda tax’ on prices: Evidence from French micro data. Working Paper No. 415, Banque de France

⁵ World Health Organization. Fiscal policies for diet and prevention of noncommunicable diseases: technical meeting report, 5-6May 2015, Geneva, Switzerland.

⁶ National Institute for Food and Nutrition Science Directorate General. Assessment of the impact of a public health product tax, Final report. World Health Organization, Regional Office for Europe, November 2015

⁷ Colchero MA et al. (2015) Changes in prices after an excise tax to sweetened sugar beverages was implemented in Mexico: evidence from urban areas *PLoS One* 10(12): e0144408.

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- ⁸ Colchero M et al.(2016). Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study. *British Medical Journal*, 352, h6704.
- ⁹ Colchero MA, Molina M & Guerrero-Lopez CM (2017) After Mexico implemented a tax, purchases of sugar-sweetened beverages decreased and water increased: difference by place of residence, household composition, and income level. *J Nutr* 147, 1552–1557.
- ¹⁰ Colchero MA et al. (2017) In Mexico, Evidence Of Sustained Consumer Response Two Years After Implementing A Sugar-Sweetened Beverage Tax. *Health Affairs* 36(3):564-571
- ¹¹ Silver, LD 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 Medicine* 14(4): e1002283
- ¹² Silver, LD 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 Medicine* 14(4): e1002283
- ¹³ Falbe J et al. (2016) Impact of the Berkeley Excise Tax on Sugar-Sweetened Beverage Consumption. *AJPH* 106(10), 1865-1871
- ¹⁴ Zhong Y et al. (2018) The short-term impacts of the Philadelphia beverage tax on beverage consumption. *American Journal of Preventive Medicine* 55(1): 26-34