Why Soda Taxes Can Address Pandemics and Create Greater Racial Equity

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What we’ll cover today

- Why jurisdictions are taxing sugar-sweetened beverages (SSBs)
- Evidence on the impact of SSB taxes
- How SSB tax revenues are being invested
- How SSB tax investments can increase health equity and create resiliency in the face of disasters
Why tax SSBs?

more precisely:

Why tax distributors of SSBs?
Added sugars in our diets are a leading cause of premature death from heart disease

Yang et al. 
*JAMA.* 2014.
Sugar-sweetened beverages are the #1 source of added sugars in the U.S. diet

National Cancer Institute: Sources of Calories from Added Sugars among the U.S. Population, 2005-06.
Recent industry data on soda consumption

Source: NPD Group, 2015 estimate
The complete story on soda consumption

Gallons per person per year

Source: NPD Group, 2015 estimate

Diabetes data from CDC National Health Interview Survey

USDA ERS data
Just 1 serving per day of SSBs increases the risk of developing type 2 diabetes by 26%
$10 Billion
Health care cost of diabetes

$327 Billion, Every Year

Solutions

• Compel industry to set prices that reflect the health hazards of its products
• Ensure industry bears some of the costs associated with consumption of their products
SSB Taxes Worldwide, 2018

- 1¢/oz
- 1¢/oz ST
- 1.5¢/oz
- 1¢/oz
- 2¢/oz
- 1.75¢/oz
- 2% ST
How SSB excise taxes work

- **Distributors**: Pay tax
- **Retailers**: Raise prices for retailers
- **Shelf Price**: Raise prices for consumers
- **Consumer Behaviors**: Buy fewer SSBs, Consume fewer SSBs
- **City**: Invests revenues in community,
  Greater health equity
Evidence on the impact of SSB taxes
Distributors pay cities the tax

<table>
<thead>
<tr>
<th>City</th>
<th>Annual Revenue</th>
<th>Tax (cents/oz)</th>
<th>Population (000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philadelphia</td>
<td>$77.7 million</td>
<td>1.5 ¢/oz</td>
<td>1,584</td>
</tr>
<tr>
<td>Seattle</td>
<td>$23.1 million</td>
<td>1.75 ¢/oz</td>
<td>754</td>
</tr>
<tr>
<td>San Francisco</td>
<td>$16.1 million</td>
<td>1 ¢/oz</td>
<td>882</td>
</tr>
<tr>
<td>Oakland</td>
<td>$10.2 million</td>
<td>1 ¢/oz</td>
<td>443</td>
</tr>
<tr>
<td>Boulder</td>
<td>$5.0 million</td>
<td>2 ¢/oz</td>
<td>106</td>
</tr>
<tr>
<td>Berkeley</td>
<td>$1.6 million</td>
<td>1 ¢/oz</td>
<td>121</td>
</tr>
<tr>
<td>Albany</td>
<td>$0.3 million</td>
<td>1 ¢/oz</td>
<td>20</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$133.9 million</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

http://www.healthyfoodamerica.org/map
SSBs prices increase after taxes

Significant variability by product and store.

Berkeley
Oakland
San Francisco
Boulder
Seattle
Philadelphia

Price increase (cents/oz)

Relative to untaxed cities

0.0¢
0.5¢
1.0¢
1.5¢
2.0¢

Sugary drink sales decline 1 year post tax

Preliminary results

% Reduction in volume sales

-60% -50% -40% -30% -20% -10% 0%

Berkeley Oakland San Francisco Seattle Philadelphia Chicago


*Only 3 stores

*
Cross-border purchasing

% Reduction in volume sales

*Only 3 stores

Preliminary results

Berkeley  Oakland  San Francisco  Seattle  Philadelphia  Chicago

SSB Consumption declines in low-income neighborhoods

Changes in consumption over first 3 years of Berkeley’s tax

<table>
<thead>
<tr>
<th>Total SSBs</th>
<th>Regular soda</th>
<th>Sports drinks</th>
<th>Sweetened coffee/tea</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>-52%</td>
<td>-54%</td>
<td>-60%</td>
<td>-70%</td>
<td>29%</td>
</tr>
</tbody>
</table>

Lee et al. *AJPH*, 2019.
Expected health outcomes of SSB taxes
CA statewide SSB tax of 1¢/oz: 10-year reductions in new cases of diabetes

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>African-Americans</th>
<th>Latinx</th>
<th>Low-income</th>
</tr>
</thead>
<tbody>
<tr>
<td>% reduction in new cases</td>
<td></td>
<td>-3%</td>
<td>-6%</td>
<td>-7%</td>
</tr>
</tbody>
</table>

(Assuming 20% reduction in SSB consumption)

CA statewide SSB tax of 1¢/oz: 10-year projected health-care savings

Diabetes Costs

- $622M

Including heart disease

- $1,066M

(Mekonnen J et al. *PLOS ONE*, 2013. (Assuming 20% reduction in SSB consumption))
Summary of the evidence on SSB taxes

• Net reduction in SSB sales of 20% or more in the largest cities
• Projected reduction of 23,000 new diabetes cases in CA over 10 yrs
• Projected healthcare savings of over $1 billion in CA over 10 yrs
How SSB tax revenues are being invested
Review of public documents

190 allocations, totaling $137M

Annual tax revenues

(in millions)

- Albany: $0.3M
- Berkeley: $1.6M
- Oakland: $10M
- San Francisco: $16M
- Boulder: $5M
- Seattle: $23M
- Philadelphia: $78M

(Tax Revenues)
How much of the revenues cities actually allocated

(in millions)

- Albany: $0.3M
- Berkeley: $1.6M
- Oakland: $10
- San Francisco: $16
- Boulder: $5.0
- Seattle: $23
- Philadelphia: $78M

Tax Revenues

Allocations in fiscal year studied
We organized allocations into 3 major categories

- **Human & Community Capital**, $90M
  - Health promotion, $37M
  - Tax Administration & Evaluation, $10M

_percentages: 66%, 7%, 27%_
We organized allocations into 3 major categories:

- Human & Community Capital, $90M (66%)
- Health promotion, $37M (27%)
- Tax Administration & Evaluation, $10M (7%)
$90M invested in Human & Community Capital

- **Early Childhood Support**, $58M
- **Economic & Human Development**, $7M
- **Youth Development**, $4M
- **Improve Infrastructure**, $21M
- **8%**
- **24%**
- **4%**
- **64%**

- African-American youth 6-10X more likely to drown
- Job training for formerly incarcerated & homeless

- High school completion
- 4-year college
- Employment
3 Major categories of allocations

- Human & Community Capital, $90M (66%)
- Health promotion, $37M (27%)
- Tax Administration & Evaluation, $10M (7%)
$37M invested in Health

- Prevent Chronic Disease, $3M
- Health & Nutrition Knowledge, $3M
- General Health & Wellbeing, $6M
- Physical Activity, $6M
- Access to Healthy Foods & Beverages, $17M
- Reduce SSBs, $2M

San Francisco Economic Impact

"After I pay rent and all my other bills, I have exactly $5 to live on for the rest of the month…the EatSF program changed everything for me."

EatSF Program Participant

Vouchers 4 Veggies - EatSF is funded through the Department of Public Health, City and County of San Francisco, and other supporters.
What types of organizations receive funding from SSB tax revenues?

- Community organizations, $84M (61%)
- City departments, $36M (27%)
- Schools, $15M (11%)
- Clinics, $2M

For example:
- YMCA
- Meals on Wheels
- Food pantries
- Non-profits
- Women & minority-owned businesses

Building capacity of community organizations

- Parks & Rec
- Public Health
- Human Services
- Tax Administration
Summary of SSB tax revenue investments

• Cities are investing revenues as promised
• Revenues are promoting health, and developing human & community capital
• Investments are building the capacity of community organizations
SSB taxes, equity, and community resilience
Investing in Equity

- Low-income communities (78%)
- Communities of color (61%)
- Children (58%)
2 cities rapidly redirected revenues to address financial hardships during COVID-19

• $5 million in Seattle
• $1.7 million in San Francisco

The emergency voucher program has saved a lot of families. If it weren't for the sugary beverage tax in Seattle, we would not have been able to do this.
Because of previous tax-revenue investments in community infrastructure...

- Community organizations funded by tax revenues were able to:
  - Expand emergency food programs
  - Provide produce at affordable prices in key neighborhoods
  - Distribute personal protective equipment
  - Support clients to apply for benefits (EDD, housing, legal)

**Infrastructure = Resilience**
Summary of equity and resilience

• Cities are investing in programs and policies that promote equity
• A majority of revenues are being invested in communities of color and low-income communities
• Children, high consumers of SSBs, are a major focus of investments
• Local organizations are able to rapidly respond to shifting needs
Challenges
Big Soda Lobbying and Ballot Spending, 2009-2016

Center for Science in the Public Interest.
CA enacted “preemption,” banning new local soda taxes in CA through 2030

Cities with resolutions to repeal preemption:
- Berkeley
- Carlsbad
- Chula Vista
- Compton
- Davis
- El Segundo
- Healdsburg
- Hermosa Beach
- Long Beach
- Los Angeles
- Manhattan Beach

Counties with resolutions to repeal preemption:
- Alameda
- Contra Costa
- Humboldt
- Los Angeles

- San Diego
- San Luis Obispo
- Monterey
- San Francisco
Common questions about SSB taxes

• Are SSB taxes regressive?
The beverage industry targets ads to communities of color and low-income communities.
SSB consumption is higher among non-White adults (NHANES: National Health & Examination Survey)

Data from: Bleich et al. *Obesity*, 2018.
Diabetes is regressive

Prevalence of diabetes by race/ethnicity

American Diabetes Association, 2018 numbers.
Common questions about SSB taxes

- Are SSB taxes regressive?
- What is the economic impact of SSB taxes?
No negative economic impacts from taxes

• Extensive evidence from tobacco taxes: no loss of jobs overall
• No effect on jobs or economy in Mexico after 2 years of sugar tax
• No effect on employment in Philadelphia after 1 year of beverage tax
• Models predict a statewide tax in California would lead to small net job increase (+0.03%)

Money stays in the economy

We surveyed 103 retailers in Berkeley, Oakland and SF

50 Corner & Liquor stores

28 Chain stores (Convenience, Drug & Box)

25 Supermarkets (7 non-chain)

Retailers perceptions of SSB taxes

- Do you have any concerns about the soda tax?
  - Only 24% responded yes
- How has the soda tax affected your business?
  - 70% said it had no effect or only a minimal effect
- Do you think there should be a statewide tax?
  - 54% responded yes

Results were consistent across store type and neighborhood income level

Common questions about SSB taxes

• Are SSB taxes regressive?
• What is the economic impact of SSB taxes?
• Why does the beverage industry call it a “grocery tax”??
Retailers response to SSB taxes

• 19% raised the price of untaxed beverages (mostly diet soda)
• Only 2 retailers raised the price of other products – junk food and alcohol
When we really mean it...
Tobacco taxes & Local taxes & Smoke-free restaurants and workplaces & Warning labels & Advertising bans

Cigarette packs per person per year

Federal & State Taxes per pack

Lung cancer deaths

139 packs

68 cases/100,000 ppl

52 cases/100,000 ppl

41 packs

$0.18

$2.82

Path forward
Tobacco Tax example of local flexibility
MEASURE D FUNDS GO INTO BERKELEY’S GENERAL FUND AND A COMMISSION COMPRISED OF RESIDENTS ADVISES THE CITY COUNCIL ON HOW TO INVEST FUNDS TOWARDS COMMUNITY-LED EFFORTS FOR HEALTH — A GREAT EXAMPLE OF PARTICIPATORY BUDGETING.
The facts are: SSB taxes are a win-win-win-win

- Financial accountability
- Public health
- Community Resilience
Take action for equity - vote!!

https://registertovote.ca.gov/
Thank you

- Lizette Avina
- Ana Ibarra-Castro
- Ben King
- Christina Becker
- Emily Altman
- Hannah Thompson
- Jen Falbe
- Jenny Linchey
- Julián Ponce
- Karen Sokal-Gutierrez
- Kiran Magee
- Matt Lee
- Nadia Rojas
- Natalya Goode
- Richard Pulvera
- Robert Girardi
- Somanette Rivas
- Tara Benesch
- All of our wonderful students and volunteers!
- San Francisco Department of Public Health
- City of Berkeley
- Johns Hopkins Global Obesity Prevention Center
- The California Endowment
- NIH/NHLBI