

### Presenter Disclosures

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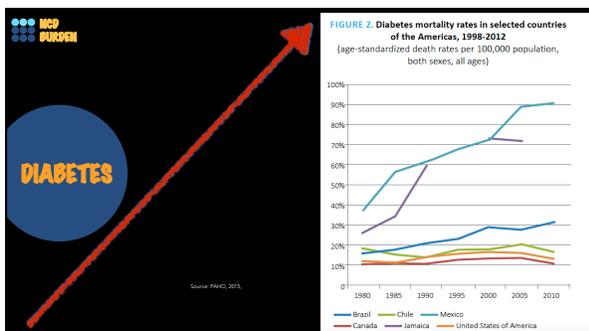
The following personal financial relationships with commercial interests relevant to this presentation existed during the past 12 months:

**No relationships to disclose**

### TOO BIG TO FAIL TO ADDRESS

- 75% OF DEATHS IN THE AMERICAS
- 2,900,000 DEATHS ANNUALLY, HALF BEFORE AGE 70
- 200,000,000 PEOPLE IN THE AMERICAS LIVING WITH ONE OR MORE NCDs
- MOST HEALTH SYSTEM EXPENDITURES
- THREAT TO SUSTAINABILITY OF UNIVERSAL HEALTH SYSTEMS

Source: PAHO, 2013



### GLOBAL COSTS OF 5 LEADING NCDs 2011-2030

The projected losses of US\$21.3 trillion in the world's LMICs are nearly equal to their combined economic output in 2013 of US\$24.5 trillion (Council on Foreign Relations, 2014).

**\$46.7 TRILLION**

Source: Bloom, 2011

**NCD BURDEN**

**4 NCD Risk Factors**

- DIETARY RISKS**  
1,375,000 DEAD 2010
- TOBACCO**  
813,000 DEAD
- HARMFUL USE OF ALCOHOL**  
304,000 DEAD
- PHYSICAL INACTIVITY**  
470,000 DEAD

underlie more than 2/3rds of new cases of NCDs  
also cause complications in people with NCDs  
caused by mankind  
can be changed by mankind

Source: 2010 Global Burden of Disease, IHME data not additive: Americas Region

**NCD BURDEN**

**ALCOHOL**

HARM RISING 50% INCREASE IN DALY'S 1990-2010 IN THE AMERICAS

2ND HIGHEST REGION IN DRINKING RATES

MOST COMMON UNDERLYING BEHAVIORAL RISK FOR DEATHS IN YOUNG

Per capita consumption (2010)

- 17.0-21.9
- 22.0-26.9
- 27.0-31.9
- 32.0-36.9
- 37.0-41.9
- 42.0-46.9
- 47.0-51.9
- 52.0-56.9
- 57.0-61.9
- 62.0-66.9
- 67.0-71.9
- 72.0-76.9
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Source: WHO, Global Health Observatory, January 2012

**NCD BURDEN**

11.4 MILLION DEATHS GLOBALLY IN 2010, 12% IN AMERICAS

**DIETARY RISKS**

INTENSIVELY MARKETED PROCESSED FOODS AND BEVERAGES

Figure 4. Convergence of ultra-processed food and drink products, selected Latin American countries

Source: FAO, 2011

BODY MASS INDEX IN ADULTS AND PER CAPITA ANNUAL SALES OF ULTRA-PROCESSED FOOD AND DRINK PRODUCTS IN 12 LATIN AMERICAN COUNTRIES, 1999-2009

**NCD BURDEN**

**DIETARY RISKS**

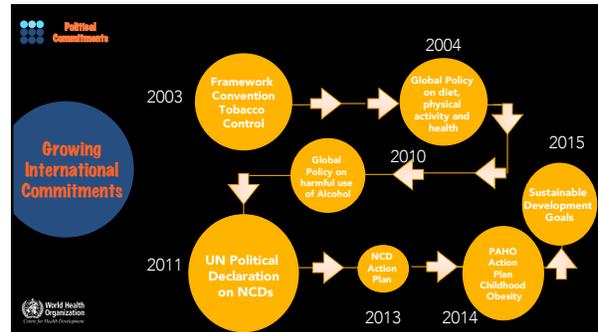
- salt
- low fruit and vegetable intake
- trans and saturated fat
- added sugar/ sugar sweetened beverages
- ultraprocessed foods combining the above

**NCD BURDEN**

**WE CANNOT TREAT OUR WAY OUT OF THE NCD EPIDEMIC**

**NCD BURDEN**

**NO CHOICE BUT TO ADDRESS ROOT CAUSES**



**Regulation**

**TEN OF WHO'S "15 BEST BUYS" FOR NCDs ARE REGULATORY**

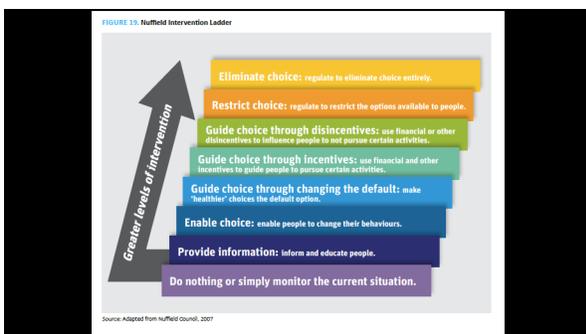
**High-impact interventions for attaining targets**

Target	Intervention
Target 1.1	<b>Tobacco</b> <ul style="list-style-type: none"> <li>Reduce affordability of tobacco products by increasing tobacco excise taxes</li> <li>Create laws completely smoke-free environments in all indoor workplaces, public places and public transport</li> <li>Eliminate or reduce the availability of tobacco products through effective health warnings and mass media campaigns</li> <li>Ban all forms of tobacco advertising, promotion and sponsorship</li> </ul>
Target 1.2	<b>Harmful use of alcohol</b> <ul style="list-style-type: none"> <li>Regulate commercial and public availability of alcohol</li> <li>Reduce or ban alcohol advertising and promotion</li> <li>Use pricing policies such as excise tax increases on alcoholic beverages</li> </ul>
Target 1.3, 4, 5, 6, 7	<b>Diet and physical activity</b> <ul style="list-style-type: none"> <li>Reduce salt intake</li> <li>Reduce saturated fat with physical and diet fat</li> <li>Implement public awareness programmes on diet and physical activity</li> <li>Improve and protect breastfeeding</li> </ul>
Target 1.4	<b>Cardiovascular disease and diabetes</b> <ul style="list-style-type: none"> <li>Drug therapy including glycemic control for diabetes mellitus and control of hypertension using a total risk approach and according to individuals who have had a heart attack or stroke and to persons with high risk</li> <li>20% of total and nonfatal cardiovascular events in the next 10 years</li> <li>Available and ongoing for acute myocardial infarction</li> </ul>
Target 1.5	<b>Cancer</b> <ul style="list-style-type: none"> <li>Prevention of liver cancer through hepatitis B immunization</li> <li>Prevention of cervical cancer through screening (visual inspection with acetic acid (VIA) linked with timely treatment of pre-cancerous lesions)</li> </ul>



Regulation has been clearly recognized as an essential public health function but its capacity lags behind other fields of public health action

Noncommunicable Disease Risk Factors in the Americas: Considerations on the Strengthening of Regulatory Capacity  
REGULA Technical Reference Document



A TOOLBOX OF REGULATORY STRATEGIES FOR NCDs

Source: PAHO, 2013

FIGURE 11. Toolbox of regulatory strategies in use or attempted for tobacco use, unhealthy diet, and harmful use of alcohol

Strategy	Strategy
<b>Supply control</b>	<ul style="list-style-type: none"> <li>Assurance of availability of healthy products</li> <li>Labeling requirements for unhealthy products</li> <li>Restrictions on sales of unhealthy products near schools</li> <li>Restrictions on sales near schools</li> <li>Prohibition of self-service sales</li> <li>Restrictions on product display settings</li> </ul>
<b>Retail practices</b>	<ul style="list-style-type: none"> <li>Product ban on use restrictions</li> <li>Product prohibition</li> <li>Content limits</li> <li>Warning labels</li> <li>Mandated information for consumers</li> </ul>
<b>Restrictions on products</b>	<ul style="list-style-type: none"> <li>Excise taxes</li> <li>Salt taxes</li> <li>Minimum price</li> <li>Restrictions on discounting</li> <li>Prohibition on marketing to children</li> <li>Restrictions on time, place and manner</li> <li>Broad prohibitions for all age groups</li> <li>Plain packaging</li> </ul>
<b>Information</b>	<ul style="list-style-type: none"> <li>Regulations on second-hand smoke</li> <li>Regulations on day care practices</li> <li>Regulations on school practices</li> <li>Regulations on workplace practices</li> <li>Regulations on public spaces</li> </ul>
<b>Price</b>	<ul style="list-style-type: none"> <li>Agricultural subsidies (add or eliminate)</li> <li>Procurement policies (procure or restrict)</li> <li>Land use/agricultural use or urban zoning policies</li> <li>Incentives/subsidies for citizens</li> </ul>
<b>Marketing</b>	
<b>Social environment</b>	
<b>Other economic approaches</b>	

The Big 4

PAHO Country Capacity Survey

2013 SURVEY: 36 COUNTRIES RESPONDED

Strengths in tobacco, weakness in other areas

Deficiencies in regulatory policies, lack of enforcement of existing policies

97% HAVE NCD PLAN, BUT ONLY 31% FOR ALCOHOL, 22% FOR DIETARY RISKS, 42% FOR PHYSICAL ACTIVITY, 31% FOR OVERWEIGHT

Tobacco and alcohol taxed extensively but too low

Source: PAHO, 2013

Regulating the Big



**Tobacco** THE FRAMEWORK CONVENTION ON TOBACCO CONTROL

**30 of 35 countries have ratified FCTC**  
**Still Missing: Argentina, Cuba, Dominican Republic, Haiti, USA**

**FCTC**

**Demand reduction:**

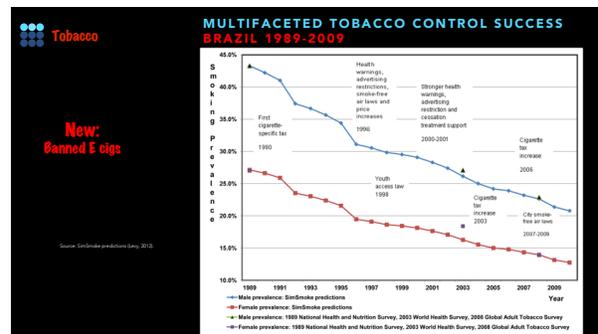
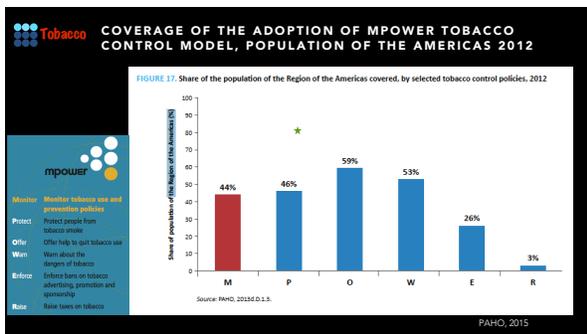
- Price and tax measures ☆
- Protection from exposure to tobacco smoke. ☆
- Regulation of the contents ☆
- Regulation of disclosures ☆
- Packaging and labeling ☆
- Education, communication, training and public awareness.
- Advertising, promotion and sponsorship ☆
- Reduction measures concerning tobacco dependence and cessation.

**Supply reduction:**

- Illicit trade in tobacco products. ☆
- Sales to and by minors. ☆

**Reporting, Monitoring & Conference of the Parties**

☆ = Regulatory measures



**Diet** FRONT OF PACK FOOD LABELLING IN ECUADOR AND CHILE

**FIGURE 11.** Example of "traffic light" in food label in Ecuador

**Diet**

## SODA (SSB) TAXES PASSED:

MEXICO (10%) 2013  
 BERKELEY, CA (10%) 2014  
 CHILE (8%) 2015  
 BARBADOS (10%) 2015

are they working?



**Diet**

## MEXICO'S TAX - 1 YEAR ANALYSIS

6-12% ↓

**Methods:** Analysis of households in 53 cities from commercial panel

**Results:** 6% decline in SSB sales over pre-tax trends, rising to 12% by last month

4% increase in untaxed beverages, primarily bottled water

Attempt to reduce the tax just failed this past week

Colchero, Rivera, Popkin & Ng 2015

**Diet**

## B.E.S.T STUDY: BERKELEY SODA TAX - NEW RESULTS - DID THE TAX GET PASSED ON TO CONSUMERS? THE FIRST STEP FOR EFFECTIVENESS

**Methods:**

**Study 1** - Direct Observation of Prices of panel of 68 beverage products in sample of 26 stores of varying types, 1168 prices collected 12/2014 and 6/2015 in month 4 post-tax

**Study 2** - Analysis of sales weighted retail scanner data from 2 grocery chains in Berkeley and comparison cities 2014 to 2015. Covers first 6 months of tax. Covers 100 million transactions including 9.1 million covered beverage transactions

Data is interim and preliminary

Ng, Silver, Ryan, Induni, Hamma, Poti, Popkin 2015

### BERKELEY STORE STUDY - PRICE PASSED ON TO CONSUMER IN CHAIN STORES AND PARTIALLY IN PHARMACIES BUT NOT YET INDEPENDENTS AT MONTH 4

Store type (# stores)	# Items		Mean price change (\$/oz)	
	Tax	Untax	Tax	Untax
Large Supermarket (N=6)	43	43	1.32*	0.17
Chain Small Supermarket (N=2)	14	19	1.65*	0.63
Independent Small markets (N=13)	122	87	-0.21	-0.35
Chain Gas Station (N=2)	10	7	2.71*	0.25
Independent Gas Station (N=3)	15	15	-0.56	-0.05
Pharmacy (N=2)	25	25	0.43	0.61

Note: bold values denote increase in prices. \* denotes increase in price of \$14/oz

Ng, Silver, Ryan, Induni, Hamma, Poti, Popkin 2015 preliminary data

- Price of SSBs rose >1 ¢/oz among those sold at large chain supermarkets, small chain supermarkets, and chain gas stations
- In chain pharmacies, tax partially passed-through among SSBs and untaxed bev
- Pass-through did not occur in independent small markets or gas stations
- Staff from chain supermarkets (both large and small) compared to staff from other store types were more likely to report
  - receiving information about the SSB tax from city reps
  - seeing changes in price

### BERKELEY STUDY 2 - TAX FULLY PASSED ON IN BOTH CHAINS STUDIED AT 6 MONTHS POST TAX

100 MILLION TRANSACTIONS, 9.1M FOR STUDY BEVERAGES

Sales weighted prices rose for taxed beverages by 0.5 to 0.76¢/oz in Month 1 to 1.42 to 1.74¢/oz in Month 6

Rose more on small package sizes

Results consistent across studies

Prices rose, but the increase was not uniform across store types, beverage categories, or package sizes.

Ng, Silver, Ryan, Induni, Hamma, Poti, Popkin 2015 preliminary data

**Diet**

### Salt Smart Americas

13 countries taken action to reduce salt:

- "Less Salt, More Life" in Argentina combined voluntary targets with mandatory maxima 2013
- Similar measure introduced in Paraguay for bread/farinaceous products 2013
- Voluntary salt reduction initiatives in Brazil, Canada, Chile, and Mexico
- Mercosul common market adopted targets
- Efforts way ahead of US FDA

**Trans Fat**  
Bans in Argentina 2010  
US 2015



Source: World Cancer Research Fund, 2014



**Diet**

### Do we need a Global Framework Convention for Healthy and Sustainable Food?

A growing movement says yes

**Alcohol**

### WHO RECOMMENDED STRATEGIES FOR ALCOHOL

**Harmful use of alcohol**

- Building leadership, awareness and commitment
- Strengthening the response of health services
- Reducing the availability of alcohol ☆
- Marketing restrictions ☆
- Pricing policy/Excise tax ☆
- Community action
- Drink driving countermeasures ☆
- Reducing the impact of illicit and informally produced alcohol ☆
- Reducing negative consequences of drinking
- Monitoring and surveillance

☆ = Regulatory measures



Source: WHO, 2013

**Alcohol**

### REDUCING ALCOHOL AVAILABILITY & HOURS

**Harmful use of alcohol**

The Story of **Diadema, SP** in Brazil in 2002  
4,800 bars told to close between 23h and 6 am

- Homicides 47%
- Road Accidents 30%
- Assaults against women 55%
- Alcohol related hospital admission 80%
- Business improved

Copied by 120 municipalities and one state



Source: PAHO, 2011

**Physical Activity**

### PHYSICAL NACTIVITY

### ACTIVE TRANPORTATION: HEALTH AND SUSTAINABILITY COBENEFITS



how can i stop climate change?

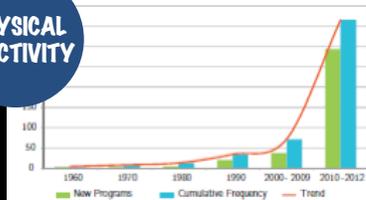


**Physical Activity**

### ACTIVE TRANSPORTATION: HEALTH AND SUSTAINABILITY COBENEFITS

### OPEN STREET EXPANSIONS IN THE AMERICAS LAST 50 YEARS

Source: Torres et al., 2013




Regulation

## ROADBLOCKS

Regulation

Health system staff not trained as regulators or planners

Funding of regulatory activities

Political will to take on economic interests

Regulation

**NEW PLAYING FIELD**

**THE SEQUEL TO: TOBACCO INDUSTRY REGULATORY SABOTAGE STRATEGIES**

Food and Alcohol industry sequels now in theaters!

- + Influence the political and legislative process
- + Exaggerate the economic importance of the industry & negative impact of regulation
- + Manipulate public opinion to improve the industry's image
- + Facilitate support through front groups
- + Discredit proven science
- + Intimidate governments with litigation

Source: WHO 2013

Regulation

**Trade negotiations**

Examples- USTR complaint about Chilean Food Labels, Trans Pacific Partnership debates

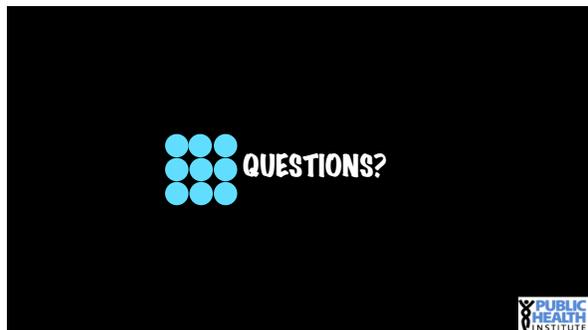
- + Need to go beyond access to medication
- + Assure right to protect public health in all agreements, global and regional
- + Work with Ministries of foreign relations and others to keep public health on the agenda
- + WTO SPS agreements: "Members shall ensure that their sanitary or phytosanitary measures are based on an assessment, as appropriate to the circumstances, of the risks to human, animal or plant life or health, taking into account risk assessment techniques developed by the relevant international organizations"

★ **LOOKING FORWARD FOR HEALTH SYSTEMS**

- ★ Help meet the 25 x 25% premature mortality goal by achieving NCD risk factor reduction targets
- ★ Strengthen the public health stewardship function
- ★ Help level to playing field between private economic interests and broader societal interests, strengthening fair governance

★ **LOOKING FORWARD**

- ★ Evaluate existing regulatory & planning capacity and laws
- ★ Strengthen organizational development for regulatory capacity in health systems
- ★ Strengthen technical capacity and exchange for control of these specific risk factors
- ★ Strengthen the capacity of civil society
- ★ Develop a research agenda



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