Senate Budget Subcommittee #3:
Health & Human Services

Senator Bill Monning, Chair

Senator Bill Emmerson, Vice-Chair
Senator Mark DeSaulnier

Informational Hearing:
Public Health Protections in a Free Market

AGENDA

Tuesday, September 24, 2013
10:00 am
California State Capitol, Room 3191
(Michelle Baass)

1. **Overview: Public Health Protections in a Free Market**

    a. Public Health Economics
        - Richard Scheffler, PhD, Professor of Public Health and Public Policy, University of California at Berkeley

    b. Public Policy as a Tool for Improving the Public's Health
        - Linda Rudolph, MD, MPH, Public Health Institute

2. **The Trend and Burden of Chronic Diseases and Injury in California**

    a. Ron Chapman, MD, MPH, Director, California Department of Public Health (CDPH)

3. **Effective and Successful Public Health Laws and Programs**

    a. California Tobacco Control Program
        - Ron Chapman, MD, MPH, Director, CDPH
    b. Injury Prevention Policies
        - Barbara Alberson, MPH, Senior Deputy Director, Policy and Planning, San Joaquin County Public Health Services
    c. Government As Protector of Public Health
        - Andrew Cheyne, CPhil, Research Director, Berkeley Media Studies Group

4. Opportunities for Additional Public Health Policy Interventions

a. Sugar-Sweetened Beverage Tax
   - Harold Goldstein, DrPH, Executive Director, California Center for Public Health Advocacy

b. Built Environments
   - Marice Ashe, JD, MPH, Founder and CEO, ChangeLab Solutions

c. Alcohol Harms and Minimum Pricing Policies
   - Thomas K. Greenfield, PhD, Center Director and Scientific Director, Alcohol Research Group

5. Public Comment

Speaker Biographies

Barbara Alberson. Ms. Alberson is a public health professional with more than 35 years of experience in the government sector. She recently joined San Joaquin County Public Health Services as a Senior Deputy Director for Policy and Planning. In this role, she will be guiding the department through the formal process to achieve national accreditation status. Ms. Alberson also oversees the department's Health Promotion and Chronic Disease Prevention program and public health activities that address the built environment. Previously, Ms. Alberson served as the Chief of the State and Local Injury Control Section in the California Department of Public Health. During that 23 year tenure, Ms. Alberson and her staff designed and implemented a comprehensive statewide injury and violence prevention program - now one of the largest and most productive of its kind in the nation. On the national level, Ms. Alberson has served as a consultant to many federal agencies and national associations, and as a member of America Walks, Safe States Alliance, and Directors of Health Promotion and Education; she was also a member of the Federal Highway Administration's National Safe Routes to School Task Force. Ms. Alberson serves as faculty for numerous national, regional, and state conferences each year. She earned her Bachelors of Arts from University of California at Los Angeles, and her Masters in Public Health from California State University at Northridge.

Marice Ashe. The founder and chief executive officer of ChangeLab Solutions, Marice Ashe has launched a number of groundbreaking efforts to improve public health through the use of law and policy. Under her leadership, ChangeLab Solutions builds the capacity of leaders across the nation to address a range of chronic diseases through practical policy solutions. ChangeLab Solutions' team of lawyers, city planners, architects, and policy specialists develop model laws and policies, consult on tough policy questions, and provide training and technical assistance to ensure strong policy initiatives and sustainable solutions. Ms. Ashe is a frequent speaker at public health conferences throughout the nation, and she consults with federal and state agencies on how best to incorporate legal and policy tools into public health strategies. Ms. Ashe graduated from University of Notre Dame, and received her Masters in Public Health and Juris Doctor from UC Berkeley.

Ron Chapman. On June 13, 2011, Ron Chapman, MD, MPH, was sworn in as director of the California Department of Public Health (CDPH). Dr. Chapman is a board-certified family physician who has dedicated his career to public health and medicine, caring for the uninsured and underinsured in California. Prior to becoming the director of CDPH, he was the chief medical officer of Partnership HealthPlan of California (PHC), a managed care Medi-Cal plan serving Yolo, Solano, Napa, and Sonoma counties. For six years prior to that, Dr. Chapman was the public health officer and deputy director of public health in Solano County, California. From 1998 to 2004, he worked at the California Department of Health Services as the founding chief of the Medicine and Public Health section. Dr. Chapman has a medical degree from the University of

Southern California, a Masters in Public Health from the University of Michigan and a Bachelor of Science from University of California, Irvine. He has completed fellowships in academic medicine at the University of California, San Francisco and graduated in the inaugural class of the California Health Care Foundation's Health Care Leadership Program. Before entering public health practice, Dr. Chapman was on the faculty at the University of California, Davis School of Medicine. He is the American Medical Association 2008 Dr. Nathan Davis Award winner for local government service. Dr. Chapman's primary interests are in the areas of care for the uninsured, the interface between public health and medicine, and chronic disease management.

Andrew Cheyne. Andrew Cheyne leads the research team at Berkeley Media Studies Group (BMSG). Combining his interest in political activism with his background in media analysis and social science scholarship, Andrew has guided the organization's research into a variety of contemporary issues at the forefront of public health. This work spans content analyses of how the news frames public health issues to assessments of industry marketing practices. He has been project director for a series of investigations into food and beverage marketing to children, focusing on the industry's use of cutting-edge digital techniques to target young people. Mr. Cheyne has also acted as the primary liaison between BMSG and a leading legal institute for a joint news-policy analysis of the tobacco industry's use of "personal responsibility" rhetoric as a strategic framing device to neutralize potential tobacco control policies. He is currently overseeing an inquiry into the food and beverage industry's use of corporate social responsibility tactics as a means to forestall meaningful public health intervention, and comparing these to similar practices employed by other industries such as Big Tobacco. Andrew holds a Bachelors of Art in American Studies from Northwestern University and a Master's and C.Phil. in political sociology from the University of California, San Diego.

Harold Goldstein. Harold Goldstein, DrPH is the Executive Director of the California Center for Public Health Advocacy, which he founded in 1999. CCPHA is a nationally recognized leader in advocating for public policies to address the social, economic, and community conditions that perpetuate the obesity epidemic. CCPHA has lead statewide campaigns resulting in enactment of state laws getting soda and junk food out of schools, getting first-ever funding for school physical education, establishing the nation's first state menu labeling law, and defining access to water as a basic human right. Harold has a Bachelors degree in physiology from UC Berkeley and both Masters and Doctorate degrees in public health from UCLA.

Thomas Greenfield. Educated at Caltech, MIT and the University of Michigan (PhD, Clinical Psychology), since 1999 Dr. Greenfield has directed the US National Institute on Alcohol Abuse and Alcoholism (NIAAA)-supported National Alcohol Research Center on the Epidemiology of Alcohol Problems at the Public Health Institute's Alcohol Research Group (ARG) in Emeryville, California (in its 33nd year). He also directs its 5-yearly National Alcohol Survey (NAS) series. Center studies have generated numerous contributions and spawned a large number of related independent NIH grants. Greenfield has collaborated with other scientists on age-period-cohort (APC) trend analyses of alcohol and drug use patterns. The Center and Greenfield's independent

grants have conducted numerous innovative analyses to improve alcohol consumption pattern and problem measures for use in the US and other countries. Greenfield's other funded research mostly supported by NIAAA has included epidemiology of alcohol consumption and problems of men and women in various cultures, populations and ethnic minority groups; ethnicity and long-term alcohol-related mortality (two R01s); long-term policy-analyses of prevention interventions; alcohol and mental health services research (funded by SAMSA, CMHS), and alcohol's relationship to sexual risk taking. Recently, working with economists Greenfield has been examining alcohol prices and expenditures, beverage quality substitution, and more recently alcohol externalities (harms experienced from other drinkers). Other studies have focused on federal alcohol policy development, public opinion and the role of research in policy making. Greenfield has authored and coauthored over 200 peer reviewed articles, chapters and other publications. He has served on the board of directors of the Public Health Institute and the International Council on Alcohol & the Addictions (ICAA) and on a number of editorial boards. In 2008 he received the American Public Health Association's ATOD Section Leadership Award and until recently served on NIAAA's Extramural Advisory Board.

Linda Rudolph. Linda Rudolph, MD, MPH, is the co-director of the Climate Change and Public Health Project in Public Health Institute's (PHI) Center for Climate Change and Public Health. She was recently recognized as a White House Champion for Change for her work in Climate Change and Health. She is also the principal investigator on a PHI project to advance the integration of Health in All Policies in local jurisdictions throughout California. Previously, Dr. Rudolph served as the Deputy Director of the California Department of Public Health (CDPH)'s Center for Chronic Disease Prevention and Public Health and the health officer and public health director for the City of Berkeley, CA. While at CDPH, Rudolph chaired the Strategic Growth Council Health in All Policies Task Force and the California Climate Action Team Public Health Work Group. Dr. Rudolph has also been the chief medical officer for Medi-Cal Managed Care, medical director for the California Division of Workers' Compensation, executive medical director for the Industrial Medical Council, staff physician in the CDPH Occupational Health program, and a physician for the Oil, Chemical, and Atomic Workers' International Union. Dr. Rudolph received her doctorate in medicine and clinical training in pediatrics and emergency medicine from the University of California at San Francisco. She holds a Master's in Public Health from the University of California at Berkeley. Rudolph is board certified in occupational medicine.

Richard Scheffler. Richard Scheffler is a Distinguished Professor of Health Economics and Public Policy at the University of California, Berkeley and holds the Chair in Healthcare Markets & Consumer Welfare endowed by the Office of the Attorney General for the State of California. He is Director of The Nicholas C. Petris Center On Health Care Markets and Consumer Welfare. At Berkeley, he serves as Co-Director of the Scholars in Health Policy Research Program funded by the Robert Wood Johnson Foundation; he is founding Co-Director of the National Institutes of Mental Health (NIMH) pre- and post-doctoral training programs. Professor Scheffler co-directs the NIH-Fogarty Mental Health & Policy Research Training for Czech Post Doctoral

Scholars program; the Agency for Healthcare Research and Quality (AHRQ) pre and postdoctoral training program; and the Edmund S. Muskie Fellowship Program. He served as President and Program Chair of the International Health Economics Association (iHEA) 4th World Congress San Francisco, June 2003. His research is on healthcare markets, health insurance, the health work force, mental health economics, and international health system reforms in Western and Eastern Europe. Professor Scheffler is the current recipient of the American Public Health Association's Carl Taube Award, which honors distinguished contributions to the field of mental health services research. He is a recipient of a senior scientist award from NIMH for work on mental health parity, the economics of the public mental health system in California, managed care in mental health, and the mental health work force. Professor Scheffler has been a Fulbright Scholar, a Rockefeller Scholar and a Scholar in Residence at the Institute of Medicine–National Academy of Sciences. Professor Scheffler has published over a hundred papers and edited and written six books. His forthcoming book is on the future of the health work force–University of California Press.

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Informational Hearing Background Paper
September 24, 2013
10:00 am, Room 3191

Summary

As a protector of the public's health, California utilizes laws, regulations, and other public policies designed to protect the public's health and safety by targeting individual or private sector behaviors that present health or safety hazards to the population.[1] These behaviors, often referred to as externalities, include actions such as emitting air pollution, addressed by setting and enforcing air quality standards.

Legal and public policy tools to address these externalities and protect the public's health include incentives, taxation, regulation, and zoning laws. For example, California's Tobacco Control Program (funded by a cigarette tax) has had a powerful impact on reducing adult and youth smoking rates, incidence of lung cancer, and medical care costs in the state.

The top three leading attributable causes of death are tobacco, poor diet and physical inactivity, and alcohol consumption. These preventable behaviors and exposures also lead to millions of Californians living with diseases and injuries and are largely a result of imperfect market conditions that do not account for the true costs of consumption to society. Public policy proposals to address these imperfect market conditions, such as the sugar-sweetened beverage tax, have the potential to significantly improve public health.

Moreover, given that government, and ultimately the taxpayer, is responsible for financing a significant portion of health care costs associated with diseases and injury, through public programs such as Medicare and Medicaid, the need to address these public health concerns is even more important.

The purpose of this hearing is to discuss the role of government in protecting the public's health in a free market and consider when government is the appropriate agent to intervene for the public's health and safety.

Public Health Economics

Public health economics is the study of the economic role of government in public health, particularly, in addressing externalities and supplying public goods.[2] Externalities occur when consumers or producers do not bear the full costs of their consumption/production (negative externalities) or when there are benefits from consumption/production that go beyond the individual consumer/producer (positive externalities). A public good is a good or service that does not lend itself to market allocation because it costs nothing and it is generally difficult or impossible to exclude individuals from consuming it.

In a free market, individuals work, play, and consume what they want without restrictions. Sellers and buyers exchange goods and services at a price determined by supply and demand. Under ideal conditions, the entire economy functions without any central control or direction from the government.

However, perfect market conditions are useful for modeling and simulations, but do not occur in the real world.[3] Market conditions are manipulated, for example, by uninformed consumers. Information about the short- and long-term costs and benefits of consuming or producing some products is often limited and individuals make choices they later regret or the full costs of their consumption is often not borne by those making the consumption.

Mass media and other public education campaigns can provide information that can alter consumers' perceptions of the costs and benefits they received from consuming a given product, resulting in different consumption choices. For example, cigarette smoking in the U.S. rose rapidly in the first half of the twentieth century. It was not until the 1950s that strong evidence linking cigarette smoking to lung cancer first appeared in scientific literature. Consequently, individuals made choices to smoke without full information about the health risks (and associated health costs) from smoking.[4]

Similarly, negative externalities in production, such as air and water pollution from emissions and discharges that can cause various health consequences, are costs to society that are not reflected in the costs paid by producers.

These imperfect market conditions can justify government intervention to protect the public's health. Some legal interventions are more controversial than others and illustrate the challenge of balancing public goods and individual freedoms due to varying norms, expectations, and values that may inform both public opinion and decision-making by lawmakers in different jurisdictions.

Legal and Public Policy Tools to Protect the Public's Health

Federal, state, and local governments have various public policy interventions and tools that can be used to address imperfect market conditions and protect the public's health. These include: [5]

- taxation, incentives, and spending (e.g., cigarette and other "sin" taxes and allocation of the tax to combat the problem, may include pricing policies and financial incentives);
- altering the informational environment (e.g., food or drug labeling, and disclosure of health information);
- altering the built/physical environment (e.g., zoning, toxic waste);
- altering the natural environment (e.g., clean water, air);
- direct regulation (e.g., seat belts, helmets, gun safety device requirements, drinking water fluoridation, iodized salt; licensure of medical care providers and facilities);
- indirect regulation (e.g., tort litigation in tobacco); and
- deregulation (e.g., distribution of sterile injection equipment).

These tools can address market failures by changing the relative costs and benefits that influence the decisions consumers and producers make. Public policies can address the true price of a product, which includes not just the monetary cost of the product but other costs associated with obtaining and using the product.

Polices that increase the full price of unhealthy behaviors or reduce the full price of healthier behaviors have the potential to significantly improve public health.

Successful Public Policies that Have Protected and Improved the Public's Health

Examples of successful public policies that have been proven effective and of high value in addressing major causes of death, disease, and disability include the Tobacco Control Program and California's seat belt law.

Tobacco Control Program. The California Tobacco Control Program has had a powerful impact on reducing adult and youth smoking rates, incidence of lung cancer, and medical care costs in the state. In California, between 1989 and 2004, $1.8 billion was spent on the Tobacco Control Program, and $86 billion was saved in personal health care expenditures alone (and 3.6 billion fewer packs of cigarettes were bought).[6]

The Tobacco Control Program is funded with Proposition 99 funds. Proposition 99, the California Tobacco Health Protection Act of 1988, was approved by voters in November 1988. This initiative increased the state cigarette tax by 25 cents per pack and earmarked new revenues for programs to reduce smoking and to support tobacco-related research, among other programs.

Seat Belt Law. In 1986, California became one of the first states in the country to require individuals to wear seat belts in an automobile. According to the National Highway Traffic Safety Administration, the 2007 seat belt use rate (94.6 percent) in California resulted in a total cost savings of $8.9 billion and 1,791 lives saved.

Public Health Concerns that Merit Government Intervention

According to the California Department of Public Health, almost half of all deaths that occurred in the United States in 2000 can be attributed to a limited number of largely preventable behaviors and exposures. The top three leading attributable causes of death are tobacco, poor diet and physical inactivity, and alcohol consumption.

These preventable behaviors and exposures also lead to millions of Californians living with diseases and injuries. Chronic disease (e.g., heart disease, cancer, diabetes, chronic respiratory disease, and hypertension) accounts for 80 percent of health care costs in California.

Government Bears Costs For Public Health Externalities. These preventable diseases and injuries are largely a result of imperfect market conditions that do not account for the true costs of consumption to society. Moreover, given that government, and ultimately the taxpayer, is responsible for financing a significant portion of health care costs associated with diseases and injury, through public programs such as Medicare and Medicaid, the need to address these public health concerns is even greater.

Obesity. For example, the dramatic increase in the prevalence of obesity appears to be attributable to environmental conditions that indirectly discourage physical activity and directly encourage the consumption of greater quantities of low-nutrient foods.[7] Consequently, a clear economic rationale exists for public policy to correct the market failures caused by externalities related to obesity.

Additionally, obesity has been shown to promote many chronic diseases, including type 2 diabetes, cardiovascular disease, several types of cancer (endometrial, postmenopausal breast, kidney, and colon cancer,) musculoskeletal disorders, sleep apnea, and gallbladder disease.[8]

The economic costs of obesity, overweight, and physical inactivity are estimated to exceed $28 billion annually in California.[9] The percentage of deaths attributed to poor diet and physical inactivity increased 17 percent from 1990 to 2000 and is expected to

surpass tobacco as the leading cause of death in the near future. In 1984, 40 percent of Californians were overweight or obese; in 1995, 50 percent were overweight or obese; and in 2010, almost 60 percent were overweight or obese.

Additionally, Medicaid enrolls a more obese population and incurs greater obesity-related costs.[10] In California, it is estimated that $1.7 billion in Medi-Cal expenditures were related to obesity in 2003.

Nationwide, $550 billion could be saved between 2012 and 2030 if the obesity rate stayed the same or decreased.[11]

Public Policy Proposals to Address Public Health Concerns

As discussed earlier, there are various tools that can be used to address public health concerns. Research suggests that the following types of intervention could have the biggest impact addressing public health concerns.

"Sin" Taxes. When it comes to public health laws that target the demand side of the market, economists emphasize the concept of "full price" as the mechanism through which these policies influence health-related behaviors and their consequences.[12]

Behaviors such as smoking, alcoholism, poor nutrition, and inadequate physical inactivity contribute significantly to the burden of disease and the cost of its treatment. Research indicates that these behaviors are amenable to changes (increases) in taxes on tobacco, alcohol, sugary beverages, and fatty foods. Additionally, extensive economic research clearly demonstrates that higher taxes and prices lead to significant improvements in public health by reducing the use of harmful products.

These types of taxes attempt to recover the related public cost of an activity, increased health care costs, not covered by the private cost of that activity. Research[13] indicates that:

- Alcohol Tax – Doubling the tax on alcohol would reduce alcohol-related mortality by about 35 percent, traffic deaths by 11 percent, sexually transmitted diseases by 6 percent, violence by 2 percent, and crime in general by 1.4 percent.

- Cigarette Tax – A ten percent increase in cigarette prices generally reduces consumption by four percent. A reduction in the number of people who smoke or are exposed to secondhand smoke would have budgetary effects on a range of health care programs, including Medicaid and Medicare, as well as the private health insurance market.

- Sugar-Sweetened Beverage Tax – A 10 percent increase in the price of soda could result in a 10 to 12 percent decrease in consumption.[14] A reduction in the

consumption of sugar-sweetened beverages decreases the risk of obesity, diabetes, and heart disease.[15]

In addition to the resulting reduction of consumption of these products because of the increased price of the product, the revenue generated by these taxes can be used for public education campaigns and prevention programs to discourage behaviors and lead to further reductions in consumption.

Built Environment. From a public health perspective, built environment refers to physical environments that are designed with health and wellness as integral parts of the communities. This type of policy and land-use planning addresses the market failure of imperfect information as it disseminates information on the health impact of various land-use planning decisions and also stimulates the increase in supply of environments and communities that promote healthier eating and increased activity.

Research has indicated that the way neighborhoods are created can affect both the physical activity and mental health of the communities' residents.[16] Studies have shown that built environments that were expressly designed to improve physical activity are linked to higher rates of physical activity, which in turn, positively affects health.[17]

Access to healthy food is also an important component of the built environment. A higher density of convenience stores has been associated with obesity in children.[18] In contrast, improved access to community supermarkets and farmer's markets is correlated with a lower incidence of overweight individuals.[19]

Conclusion

The public health consequences that result from market failures are enormous. These market failures create a clear economic rationale for governments to intervene through laws, regulations, and other policies to improve public health. Economic theory suggests which types of policies are likely to be effective in addressing market failures and in improving public health.

From a state budget perspective, the need to address these concerns is particularly important since the state, and ultimately the taxpayer, is responsible for a significant portion of health care costs associated with preventable diseases and injury, through public programs such as Medicare and Medicaid.

[1] IOM (Institute of Medicine). 2011. "For the Public's Health: Revitalizing Law and Policy to Meet New Challenges". Washington, DC: The National Academies Press.

[2] Vilma G. Carande-Kulis, PhD, MS, Thomas Getzen, PhD, Stephen Thacker, MD, MSc, "Public Goods and Externalities: A Research Agenda for Public Health Economics," Journal of Public Health Management Practice, 2007.
[3] Ibid
[4] Public Health Law Research, "Mechanisms of Legal Effect: Perspectives from Economics," Robert Wood Johnson Foundation, March 15, 2012.
[5] IOM (Institute of Medicine). 2011. "For the Public's Health: Revitalizing Law and Policy to Meet New Challenges". Washington, DC: The National Academies Press.
[6] Ibid
[7] Cheryl Hayne, Patricia Moran, and Mary Ford, "Regulating Environments to Reduce Obesity," Journal of Public Health Policy, Vol. 25, No. ¾, 2004.
[8] Eric Finkelstein, Ian Fiebelkorn, Guijing Wong, "State-Level Estimates of Annual Medical Expenditures Attributable to Obesity," Obesity Research, Vol. 12, No. 1, January 2004.
[9] California Department of Public Health, "California Burden of Disease and Injury Report, 2013." http://www.cdph.ca.gov/programs/Documents/BurdenReportOnline%2004-04-13.pdf
[10] Ibid
[11] Ibid
[12] Public Health Law Research, "Mechanisms of Legal Effect: Perspectives from Economics," Robert Wood Johnson Foundation, March 15, 2012.
[13] Michael Joyner and David Warner, "The Syntax of Sin Taxes: Putting it Together to Improve Physical, Social, and Fiscal Health," Mayo Clinic Proceedings, June 2013.
[14] Roberta R. Friedman, Kelly Brownell, "Rudd Report: Sugar-Sweetened Beverage Taxes, An Updated Policy Brief," Yale University Rudd Center for Food Policy and Obesity, October 2012.
[15] Harvard School of Public Health, "Sugary Drinks and Obesity Fact Sheet," as accessed: http://www.hsph.harvard.edu/nutritionsource/sugary-drinks-fact-sheet/
[16] Arlene Renalds, Tracey Smith, Patty Hale, "A Systematic Review of Built Environment and Health." Family and Community Health," 2010, 33: 68–78.
[17] Cynthia Carlson, Semra Aytur, Kevin Gardner, Shannon Rogers, "Complexity in Built Environment, Health, and Destination Walking: A Neighborhood-Scale Analysis," Journal of Urban Health, 2012, 89: 270–84.
[18] Irina Grafova, "Overweight Children: Assessing The Contribution Of The Built Environment," Prev Med. 2008, 47: 304.
[19] Tamanna Rahman, Rachel Cushing, Richard Jackson, "Contributions of Built Environment to Childhood Obesity," Mt. Sinai Journal of Medicine, 2011, 78: 49–57.