



THE COMMERCIAL DETERMINANTS OF U.S. PUBLIC HEALTH LAW

Eugene McCarthy†

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† Eugene McCarthy is an Assistant Professor of Business Law at James Madison University. J.D., UCLA; Ph.D., Berkeley.

INTRODUCTION

Prior to widespread vaccination in the United States, 1,879 people died from polio, 432 died from measles, and 90 died from chicken pox each year.¹ To avert these tragic outcomes, the U.S. government took strong legal measures.² Today, the government mandates childhood vaccinations against polio, measles, chicken pox and thirteen other diseases.³ To promote production and ensure the nation has an adequate vaccine supply to meet these mandates, the government exempts manufacturers from liability for vaccine injuries.⁴ Instead of pharmaceutical industry liability, the government applies an excise tax to each mandated vaccine and uses this taxpayer-funded program to pay vaccine-injury damages.⁵ To promote compliance with the government's vaccine schedule, state governments ban unvaccinated children from attending school.⁶ In addition, public health advocates promote shaming campaigns against vaccine-hesitant parents.⁷ These campaigns label

1. MORBIDITY AND MORTALITY WKLY. REP., CTRS. FOR DISEASE CONTROL & PREVENTION, ACHIEVEMENTS IN PUBLIC HEALTH, 1900-1999 IMPACT OF VACCINES UNIVERSALLY RECOMMENDED FOR CHILDREN – UNITED STATES, 1990-1998 (2001) (stating that the “Polio vaccine was licensed in the United States in 1955. During 1951-1954, an average of 16,316 paralytic polio cases and 1879 deaths from polio were reported each year,” and that the “[m]easles vaccine was licensed in the United States in 1963. During 1958-1962, an average of 503,282 measles cases and 432 measles-associated deaths were reported each year”); Pamela A. Meyer et al., *Varicella Mortality: Trends Before Vaccine Licensure in the United States, 1970–1994*, 182 J. INFECTIOUS DISEASES 383, 385 (2000) (“From 1970 to 1994, 2262 death records listed varicella as the underlying cause of death, an average of 90 deaths per year . . .”).

2. Eugene McCarthy, *The Regulatory Production of Vaccine Hesitancy*, 86 BROOK. L. REV. 83, 84–85 (2020) [hereinafter *Vaccine Hesitancy*].

3. *Id.* at 85; see also OFF. FOR STATE, TRIBAL, LOC., & TERRITORIAL SUPPORT, CTRS. FOR DISEASE CONTROL & PREVENTION, STATE SCHOOL IMMUNIZATION REQUIREMENTS AND VACCINE EXEMPTION LAWS 7–9 (2015) (documenting the school-entry vaccine mandates). *But see* Erwin Chemerinsky & Michele Goodwin, *Compulsory Vaccination Laws Are Constitutional*, 110 NW. U. L. REV. 589, 597 (2016) (noting that compulsory vaccination laws contain various exemptions to mandatory vaccination for certain individuals).

4. Rob Henson, *Inoculated Against Recovery: A Comparative Analysis of Vaccine Injury Compensation in the United States and Britain*, 15 TULSA J. COMPAR. & INT'L L. 61, 74–75 (2007).

5. *About the National Vaccine Injury Compensation Program*, HEALTH RES. & SERVS. ADMIN., <https://www.hrsa.gov/vaccine-compensation/about/index.html> (last visited Nov. 29, 2021) (“[The program is] [f]unded by a \$.75 excise tax on vaccines recommended by the Centers for Disease Control and Prevention for routine administration to children, the excise tax is imposed on each dose (i.e., disease that is prevented) of a vaccine. Trivalent influenza vaccine for example, is taxed \$.75 because it prevents one disease; measles-mumps-rubella vaccine, which prevents three diseases, is taxed \$2.25.”).

6. See OFF. FOR STATE, TRIBAL, LOC. & TERRITORIAL SUPPORT, *supra* note 3, at 7–9.

7. Ross D. Silverman & Lindsay F. Wiley, *Shaming Vaccine Refusal*, 45 J. L. MED. & ETHICS 569, 571 (2017).

vaccine-hesitant parents as “stupid” to stigmatize their behavior.⁸ These efforts reap significant benefits—in addition to saving lives, childhood vaccinations save the nation \$14 billion in annual medical costs.⁹

Meanwhile, unhealthy diets and obesity contribute to 529,299 American deaths each year.¹⁰ The 42 percent of U.S. adults who are obese incur \$210 billion in annual healthcare costs.¹¹ Obesity is socially contagious and without meaningful intervention, almost all Americans will be overweight or obese by 2048.¹² Due to obesity, American children are expected to live shorter lives than their parents for the first time in U.S. history.¹³ The Joint Chiefs of Staff deem obesity a national security crisis and warn that America may soon be too overweight to field an army.¹⁴

8. *Id.* at 572.

9. Nili Karako-Eyal, *Increasing Vaccination Rates Through Tort Law: Theoretical and Empirical Insights*, 86 UMKC L. REV. 1, 6 (2017).

10. Ali H. Mokdad et al., *The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States*, 319 JAMA 1444, 1449 (2018) (“For example, dietary risks accounted for 529 299 deaths in 2016, with 83.9% of these deaths due to cardiovascular diseases, and the remainder due to a combination of neoplasms and diabetes, and to urogenital, blood, and endocrine diseases.”); *see also* Gisela Crespo, *Poor Diets Threaten US National Security — And It’s Serious*, CNN (July 20, 2020, 2:43 PM), <https://www.cnn.com/2020/07/20/health/us-poor-nutrition-illness-death-wellness/index.html> (“Poor nutrition is the leading cause of illnesses in the US, with unhealthy diets killing more than half a million people each year.”); *see also* Melissa M. Card, *America, You Are Digging Your Grave with Your Spoon—Should the FDA Tell You That on Food Labels?*, 68 FOOD DRUG L.J. 309, 309 (2013) (observing that “[o]besity contributes to an estimated 400,000 deaths in the United States each year. In addition, obesity increases one’s risks of developing diabetes, heart disease, hypertension, metabolic syndrome, and polycystic ovary syndrome”).

11. *Adult Obesity Facts*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/obesity/data/adult.html> (last visited Nov. 29, 2021); *see also* Tyler Rauh, *Regulating Sugar-Sweetened Beverages*, 27 U. MIA. BUS. L. REV. 269, 272 (2019) (noting that obesity causes \$210 billion in U.S. health care costs each year).

12. Nicholas A. Christakis & James H. Fowler, *The Spread of Obesity in a Large Social Network over 32 Years*, 370 NEW ENG. J. MED. 370, 377 (2007) (“Our study suggests that obesity may spread in social networks in a quantifiable and discernable pattern that depends on the nature of social ties.”); *see also* Ashlesha Datar & Nancy Nicosia, *Assessing Social Contagion in Body Mass Index, Overweight, and Obesity Using a Natural Experiment*, 172 JAMA PEDIATRICS 239, 246 (2018) (“Exposure to counties with higher rates of obesity was associated with higher BMI and higher odds of overweight and/or obesity in parents and children. There was no evidence to support self-selection or shared built environments as possible explanations, which suggests the presence of social contagion in obesity.”); *see also* Ryan T. Williams, *Size Really Does Matter: How Obesity Is Undermining America’s National Security*, 48 U. TOL. L. REV. 21, 37 (2016) (“100% of Americans will be overweight or obese by 2048.”).

13. Barbara Bennett Woodhouse & Charles F. Woodhouse, *Children’s Rights and the Politics of Food: Big Food Versus Little People*, 56 FAM. CT. REV. 287, 290 (2018).

14. Robert Lustig et al., *The Toxic Truth About Sugar*, 482 NATURE 27, 28 (2012).

To combat the obesity crisis, the government has taken weak legal measures.¹⁵ Instead of mandating healthy school diets, the government designates french fries and pizza as “vegetable[s]” for public school lunches.¹⁶ State governments have banned obesity-related lawsuits against junk food producers while granting these companies special standing to sue people who disparage their products as unhealthy.¹⁷ Congress declines to pass soda taxes even though sugar is a leading cause of obesity.¹⁸ Meanwhile, the government heavily subsidizes corn and soy, which are primary ingredients in fattening foods.¹⁹ In contrast to the stigmatizing campaigns that label vaccine-hesitant parents as “stupid,” advocates call for a “[constitutional] right to be fat” and assert that it is unethical (and should be illegal) to critique obesity as unhealthy.²⁰ These divergent public health policies raise a curious question: why has the government taken such a strong legal stance toward vaccination, while adopting a weak stance toward obesity, which poses an extreme public health threat comparable to communicable childhood disease?

This Article argues that commercial determinants and profit-seeking corporations produce the U.S. government’s divergent and disproportionate approach to vaccine and obesity legislation—and that this divergence imperils public health. Obesity and vaccines are extremely profitable to the food and pharmaceutical industries, both of which wield tremendous government influence.²¹ To increase profits, these industries shape the government’s legal response to public health crises in an effort to promote product consumption, while limiting

15. See generally Eugene McCarthy, *Corporate Law, Misdirection, and the Obesity Epidemic*, 60 WASHBURN L.J. 197 (2021) [hereinafter *Obesity Epidemic*].

16. Lindsay F. Wiley, *Shame, Blame, and the Emerging Law of Obesity Control*, 47 U.C. DAVIS L. REV. 121, 159 (2013).

17. See *Obesity Epidemic*, *supra* note 15, at 213.

18. *Id.* at 197–98.

19. *Id.* at 212.

20. Yofi Tirosh, *The Right to Be Fat*, 12 YALE J. HEALTH POL’Y L. & ETHICS 264, 313 (2012); see also Wiley, *supra* note 16, at 131 (“And it would aim to revive interest in privacy, anti-discrimination, and anti-bullying laws as tools for addressing the problems associated with obesity.”).

21. See, e.g., Rebecca Robbins & Peter S. Goodman, *Pfizer Reaps Hundreds of Millions in Profits from Covid Vaccine*, N.Y. TIMES (May 4, 2021) <https://www.nytimes.com/2021/05/04/business/pfizer-covid-vaccine-profits.html>; *Moderna Records \$4.4bn Total Revenue in Q2 2021*, PHARM. TECH. (Aug. 6, 2021), <https://www.pharmaceutical-technology.com/news/moderna-revenue-q2-fy2021/>; Agnieszka de Sousa, *Covid Puts a Spotlight on the Food Industry’s Role in Obesity*, BLOOMBERG (Oct. 21, 2020), <https://www.bloomberg.com/news/articles/2020-10-21/covid-puts-a-spotlight-on-the-food-industry-s-role-in-obesity>; Karl Evers-Hillstrom, *Big Pharma Continues to Top Lobbying Spending*, OPENSECRETS (Oct. 25, 2019, 3:42 PM) <https://www.opensecrets.org/news/2019/10/big-pharma-continues-to-top-lobbying-spending/>.

corporate liability.²² In the case of vaccines, the government's strong legal response is beneficial; in the case of obesity, the government's weak legal response is dangerous.²³ To maximize corporate profit, commercial actors corrupt science and (through lobbying and the revolving door) capture government agencies, such as the Food and Drug Administration ("FDA"), Centers for Disease Control and Prevention ("CDC"), and the U.S. Department of Agriculture ("USDA").²⁴ A close examination of U.S. vaccine and obesity legislation demonstrates that the government consistently prioritizes private financial interests above U.S. public health.²⁵ To fuel commodity consumption, the government uses compulsion for vaccines, while emphasizing individual choice and personal responsibility for diet-related obesity.²⁶ These divergent policies share one thing in common: they keep Americans consuming corporate products.

This argument has four parts. Part I introduces the emerging "commercial determinants of health" theory ("CDoH"). CDoH is in its infancy, but its conceptual framework asserts that corporate interests play an inappropriate role in global public health policy. CDoH currently lacks precision, but this Article addresses specific aspects of U.S. vaccine

22. See generally John Abraham, *The Pharmaceutical Industry as a Political Player*, 360 LANCET 1498 (2002) ("When the interests of industry and public health diverge or conflict, the role of the government's regulatory agency is crucial."); see also *Top Industries*, OPENSECRETS, <https://www.opensecrets.org/revolving/top.php?display=I> (last visited Nov. 29, 2021); Markham Heid, *Experts Say Lobbying Skewed the U.S. Dietary Guidelines*, TIME (Jan. 8, 2016, 5:00 AM), <https://time.com/4130043/lobbying-politics-dietary-guidelines/>; Oliver J. Wouters, *Lobbying Expenditures and Campaign Contributions by the Pharmaceutical and Health Product Industry in the United States, 1999-2018*, 180 JAMA INTERNAL MED. 688 (2020).

23. See Nicole L. Novak & Kelly D. Brownell, *Role of Policy and Government in the Obesity Epidemic*, 126 CIRCULATION 2345 (2012); Lawrence O. Gostin, *Vaccine Mandates Are Lawful, Effective and Based on Rock-Solid Science*, SCI. AM. (Aug. 5, 2021), <https://www.scientificamerican.com/article/vaccine-mandates-are-lawful-effective-and-based-on-rock-solid-science/>; David Leonhardt, *The Fast Path to a Vaccine*, N.Y. TIMES: BRIEFING (Jan. 11, 2021), <https://www.nytimes.com/2020/12/15/briefing/attorney-general-barr-sandra-lindsay-russia-hackers.html>.

24. See generally U.S. HOUSE OF REPRESENTATIVES COMM. ON OVERSIGHT & GOV'T REFORM, MAJORITY STAFF REPORT ON CONFLICTS OF INTEREST IN VACCINE POLICY MAKING (2000) [hereinafter *Conflicts of Interest*]; Abraham, *supra* note 22; Paddy Rawlinson, *Immunity and Impunity: Corruption in the State-Pharma Nexus*, 6 INT'L J. CRIME, JUST. & SOC. DEMOCRACY 86 (2017); *Obesity Epidemic*, *supra* note 15; Emily J. Schaffer, *Is the Fox Guarding the Henhouse? Who Makes the Rules in American Nutrition Policy?*, 57 FOOD & DRUG L.J. 371 (2002).

25. See generally Abraham, *supra* note 22, at 1498.

26. See generally *Adult Obesity Causes & Consequences*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/obesity/adult/causes.html> (last visited Nov. 29, 2021); Lawrence O. Gostin et al., *Mandating Covid-19 Vaccines*, JAMA (Dec. 29, 2020), <https://jamanetwork.com/journals/jama/fullarticle/2774712>.

and obesity legislation to provide it with analytic focus. In doing so, Part II examines the government's strong legislative approach to immunization, and demonstrates the role that the pharmaceutical industry plays in shaping this approach. Part III turns to the government's weak obesity-related legislation, and exposes how industry influence over dietary science and consumer choice produces alarming U.S. public health outcomes. Part IV looks at the recent public health convergence of immunization and obesity policies during the COVID-19 pandemic. Countries with overweight populations, like the United States, experienced a fatality rate ten-times higher than normal-weight nations, yet the U.S. government's public health response ignores obesity's pivotal role in the crisis.²⁷ The Article concludes by proposing necessary consistency in U.S. public health legislation. The government must address obesity with the same urgency it uses in promoting vaccination. A consistent legislative approach will help restore faith in a public health system that has lost much of the nation's trust.

I. THE COMMERCIAL DETERMINANTS OF HEALTH

A. *The State of U.S. Public Health*

Generally speaking, "public health" describes the state of a population's health, but specifically refers to the "government's responsibility to protect community well-being at every level[.]" ranging from population-level to individual interventions.²⁸ The American public health system—by any definition—is not working well.²⁹ Americans spend \$3.6 trillion on healthcare annually, which accounts for nearly *one-fifth* of the nation's gross domestic product.³⁰ U.S. per capita healthcare is twice as costly as any other nation; yet, among developed nations, the United States has "the worst life expectancy, the worst infant mortality rate, the worst maternal mortality rate, and the highest number of people with two or more chronic conditions."³¹ America is the only developed nation with a life expectancy below 80 years, and it has a

27. Lauren Mascarenhas & Zamira Rahim, *Covid-19 Death Rates 10 Times Higher in Countries Where Most Adults Are Overweight, Report Finds*, CNN (Mar. 5, 2021, 3:32 AM), <https://www.cnn.com/2021/03/04/health/obesity-covid-death-rate-intl/index.html>.

28. Barbara L. Atwell, *From Public Health to Public Wealth: The Case for Economic Justice*, 108 KY. L.J. 387, 389–90 (2019-2020).

29. P. Greg Gulick, Jr., *A Systems Thinking Approach to Health Care Reform in the United States*, 21 DEPAUL J. HEALTH CARE L. 1, 63 (2019).

30. *Id.* at 8.

31. Ali S. Khan, *Witch Doctors, Zombies, and Oracles: Rethinking Health in America*, 28 HEALTH MATRIX 79, 80–83 (2018).

higher infant mortality rate than Bosnia & Herzegovina.³² The United States surpasses all developed nations in prevalence of diabetes and actually “has around two thirds the number of cases of all the other 37 nations in the developed nation league combined”³³ In this unfavorable public health environment, doctors will diagnose 40 percent of Americans with some form of cancer.³⁴

The reasons for these outcomes are complex, but the U.S. public health system’s focus on profit appears to be a driving force behind the problem.³⁵ The U.S. healthcare system has a primary focus on private wealth maximization.³⁶ Unlike many peer nations that utilize socialized medicine, socialized insurance, or single-payer healthcare systems, the United States employs a “regulated free-market” system based largely on healthcare institutions making money.³⁷ For instance, a recent study revealed that, despite tuberculosis being the most lethal global disease, pharmaceutical companies had no tuberculosis drugs in research and development, but “there were eight R&D projects aimed at developing products for the treatment of erectile dysfunction and seven projects for baldness.”³⁸ Erectile dysfunction and baldness treatments will generate profits, while tuberculosis treatments will not.³⁹ Americans find themselves paying \$937 for toe ointment and a Band-Aid or \$5,751 for an ice-pack in a hospital setting.⁴⁰ More Americans fear the cost of treating a serious illness than actually suffering from the illness itself.⁴¹ Doctors and industry observers have posited that “[y]ou could not design a more expensive health care system than the one we have if you tried.”⁴² Others have described our system as a “slow-moving heist.”⁴³

32. See *Vaccine Hesitancy*, *supra* note 2, at 94.

33. *U.S. Leads Developed Nations in Diabetes Prevalence*, ENDOCRINE NEWS (Dec. 2015), <https://endocrinenews.endocrine.org/u-s-leads-developed-nations-in-diabetes-prevalence/>.

34. *Cancer Statistics*, NAT’L CANCER INST. (Sept. 25, 2020), <https://www.cancer.gov/about-cancer/understanding/statistics>.

35. See Gulick, *supra* note 29, at 22.

36. *Id.* at 10.

37. *Id.* at 10, 55–56.

38. Yaniv Heled et al., *Why Healthcare Companies Should Be(come) Benefit Corporations*, 60 B.C. L. REV. 73, 88 (2019).

39. *Id.*

40. See Gulick, *supra* note 29, at 10–11.

41. MARTY MAKARY, *THE PRICE WE PAY* 39 (2019).

42. CHARLES SILVER & DAVID A. HYMAN, *OVERCHARGED: WHY AMERICANS PAY TOO MUCH FOR HEALTH CARE* 8 (2018).

43. Brianna Lee Welsh, *Sick-Care for Profit: How Big Business is Keeping Us Sick*, MEDIUM (Feb. 25, 2020), https://medium.com/@brianna_91610/sick-care-for-profit-how-big-business-is-keeping-us-sick-5270e3be3f64.

Attempts to fix the problem only seem to exacerbate it. In 2010, Congress passed the Patient Protection and Affordable Care Act to improve access to affordable health care and ameliorate the high levels of U.S. medical debt and healthcare-related bankruptcies.⁴⁴ This “solution” to the U.S. healthcare problem resulted in higher healthcare premiums and medical costs for Americans.⁴⁵ In some cases, insurance premiums rose 25 percent or more after the government “fixed” the problem.⁴⁶

B. Defining the Commercial Determinants of Health

According to some critics in the emerging CDoH public health field, the foundational problem with the U.S. health care system—and, with global public health more generally—is pervasive corporate influence over public health policymaking.⁴⁷ The recognition of the dangers of corporate influence over public health dates back to at least 1980, when Dr. Arnold Relman, editor of the prestigious *New England Journal of Medicine*, warned Americans about the “medical-industrial complex.”⁴⁸ Relman described this complex as “a large and growing network of private corporations engaged in the business of supplying health-care services to patients for a profit—services heretofore provided by nonprofit institutions or individual practitioners.”⁴⁹ This new state of affairs, he warned, had “broad and potentially troubling implications for the future of our medical-care system,” but had somehow, “attracted remarkably little attention”⁵⁰ This phenomenon continued to attract remarkably little attention until 2008, when the World Health Organization (“WHO”) formed the Commission on Social Determinants of Health, which found that public health outcomes were directly linked to our social environments.⁵¹ The Commission posited that “[t]ogether, the structural determinants and conditions of daily life constitute the social determinants of health and are responsible for a major part of health

44. See Gulick, *supra* note 29, at 32.

45. *Id.* at 34–37.

46. *Id.* at 36.

47. Jonathan H. Marks, *Beyond Disclosure: Developing Law and Policy to Tackle Corporate Influence*, 46 AM. J.L. & MED. 275, 275 (2020).

48. Arnold S. Relman, Special Article, *The New Medical-Industrial Complex*, 303 NEW ENG. J. MED. 963, 963 (1980).

49. *Id.*

50. *Id.*

51. See generally MICHAEL MARMOT ET AL., WORLD HEALTH ORG., CLOSING THE GAP IN A GENERATION: HEALTH EQUITY THROUGH ACTION ON THE SOCIAL DETERMINANTS OF HEALTH (2008).

inequity between and within countries.”⁵² The Commission’s proposal was simple (if quixotic): in order to improve public health conditions, public health policymakers need to first ameliorate social conditions.⁵³

However, this new focus on the social determinants of health did not result in any meaningful change in global public health policies or outcomes.⁵⁴ The culprit, according to a small group of critical public health scholars, was the “reality of the global political economy, whereby powerful actors actively work against reducing health inequities when it threatens their political and economic interests.”⁵⁵ In other words, *commercial* determinants—not the broader notion of “social” determinants—produce poor global public health policies and outcomes.⁵⁶ This realization birthed the study of the Commercial Determinants of Health (CDoH).⁵⁷ For CDoH scholars, the primary threats to global health are “industrial epidemics,” where transnational corporations, as opposed to viruses or bacteria, are the “vectors of [disease] spread[.]”⁵⁸ While infectious disease is an urgent global public health concern, the vast majority (71 percent) of all global deaths result from non-communicable diseases, such as cardiovascular disease, cancer, respiratory disease, and diabetes.⁵⁹ These non-communicable diseases arise, by and large, through the misuse (and overuse) of profitable corporate products such as tobacco, alcohol, asbestos, cars, and processed food and beverages, among others.⁶⁰

The realization that commercial factors drive poor public health outcomes spawned attempts to define CDoH, yet no consistent definition has arisen.⁶¹ West and Marteau offer a basic CDoH definition: “factors that influence health which stem from the profit motive.”⁶² Ilona Kickbusch defines CDoH as “strategies and approaches used by the private sector to promote products and choices that are detrimental to

52. *Id.* at 1.

53. *Id.*

54. Kumanan Rasanathan, *10 Years After the Commission on Social Determinants of Health: Social Injustice Is Still Killing on a Grand Scale*, 392 LANCET 1176, 1176 (2018).

55. *Id.* at 1177.

56. *See id.*

57. Ilona Kickbusch et al., *The Commercial Determinants of Health*, 4 LANCET e895, e895 (2016).

58. Rob Moodie et al., *Profits and Pandemics: Prevention of Harmful Effects of Tobacco, Alcohol, and Ultra-processed Food and Drink Industries*, 381 LANCET 670, 671 (2013).

59. *Noncommunicable Diseases*, WORLD HEALTH ORG. (Apr. 13, 2021), <https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>.

60. *See* Moodie et al., *supra* note 58, at 670–71.

61. Cassandra de Lacy-Vawdon & Charles Livingstone, *Defining the Commercial Determinants of Health: A Systematic Review*, 20 BMC PUB. HEALTH 1, 9 (2020).

62. Robert West & Theresa Marteau, *Commentary on Casswell (2013): The Commercial Determinants of Health*, 108 ADDICTION 686, 686 (2013).

health.”⁶³ Nason Maani provides a more specific definition of CDoH, describing it as circumstances in which “commercial actors, often with resources far in excess of national or non-governmental counterparts, are seen to be able to influence population health and wellbeing at the supranational, national, community and individual levels.”⁶⁴ Refining and building on these concepts, this Article uses CDoH to mean the for-profit corporate capture of public health.⁶⁵

C. *The Danger of Commercial Determinants of Health*

CDoH deals in both “hard power” and “soft power.”⁶⁶ Hard power relates to private entities building financial and institutional networks with governments for preferential treatment at the national and transnational level.⁶⁷ Soft power describes the influence that corporations exercise over science, culture, and ideas.⁶⁸ According to another framework, CDoH focuses on three dimensions of power, addressing corporate power over knowledge, political policy, and media narratives.⁶⁹ Put more simply, corporations control public health outcomes to maximize private profit by capturing (and corrupting) science, government, and discourse.

First, commercial actors subvert public health by capturing “science.” David Michaels, the former U.S. Assistant Secretary of Labor for Occupational Safety and Health, describes the “science-for-sale specialists” who “use bad science to produce whatever results their sponsors want.”⁷⁰ As he puts it, scientists start with the answer they want to find, and then figure out the most persuasive way to support that

63. Kickbusch et al., *supra* note 57, at e895.

64. Nason Maani et al., *Bringing the Commercial Determinants of Health Out of the Shadows: A Review of How the Commercial Determinants Are Represented in Conceptual Frameworks*, 30 EUR. J. PUB. HEALTH 660, 661 (2020).

65. *Id.*

66. *See* Moodie et al., *supra* note 58, at 672.

67. *Id.*

68. *Id.*

69. *See* Joana Madureira Lima & Sandro Galea, *Corporate Practices and Health: A Framework and Mechanisms*, 14 GLOBALIZATION & HEALTH 1, 1–7 (2018) (discussing the industry’s ability to exert tremendous influence over political, scientific, and media institutions).

70. David Michaels, *Science for Sale*, BOSTON REV. (Jan. 28, 2020), <http://bostonreview.net/science-nature/david-michaels-science-sale>; *see also* Faculty Bio, DAVID MICHAELS, GEO. WASH. UNIV., <https://publichealth.gwu.edu/departments/environmental-and-occupational-health/david-michaels-phd> (last visited Nov. 29, 2021) (noting that Michaels “has held sub-Cabinet Senate-confirmed public health positions in the administrations of President Barack Obama (in which he was Assistant Secretary of Labor for Occupational Safety and Health) and President Bill Clinton (Assistant Secretary of Energy for Environment, Safety and Health).”).

desired outcome.⁷¹ These experts “produce impressive-looking reports and publish the results of their studies in peer-reviewed scientific journals (reviewed, of course, by peers of the hired guns writing the articles).”⁷² This pervasive problem prompted Richard Horton, the former editor of the *Lancet*, to decry that scientific journals “have devolved into information-laundering operations” for private industry.⁷³ For example, the tobacco industry infamously partnered with scientists, who in turn disseminated information to the public to obscure the harmful effects of smoking.⁷⁴ The sugar industry likewise paid scientists at Harvard to misrepresent the health risks of sugar.⁷⁵ Pharmaceutical companies also engage in clinical trial fraud and information laundering related to new drugs to make them appear safer and more effective than they actually are.⁷⁶ Critics have exposed such behavior in the food and beverage, oil and gas, and professional sports industries as well.⁷⁷

Corporations purchase science by the “[f]unding of symposia, hospital lectures, and medical specialty meetings,” which “ensures that the educational content is shaped to favour certain products and procedures over others”⁷⁸ Commercial actors likewise enlist key “opinion leaders” to “prepare the target audience to welcome new drugs, technologies and diagnosis.”⁷⁹ If scientific data suggests a corporation’s product is unhealthy, companies purchase competing “science” to “cast doubt on science demonstrating the harmful effects of industry products or practices.”⁸⁰ The end result is that “[c]orporations and their hired guns market their studies and reports as ‘sound science,’ but in reality they merely *sound like* science. Such bought-and-paid-for corporate research is sanctified, while any academic research that might threaten corporate interests is vilified.”⁸¹

Scientists who challenge the paid-for corporate public health narrative “are reduced to irrational ravings” and “labelled dangerous

71. See Michaels, *supra* note 70.

72. *Id.*

73. Richard Horton, *The Dawn of McScience*, N.Y. REV. OF BOOKS (Mar. 11, 2004), <https://www.nybooks.com/articles/2004/03/11/the-dawn-of-mcscience/>.

74. See Moodie et al., *supra* note 58, at 673.

75. Anahad O’Connor, *How the Sugar Industry Shifted Blame to Fat*, N.Y. TIMES (Sept. 12, 2016), <https://www.nytimes.com/2016/09/13/well/eat/how-the-sugar-industry-shifted-blame-to-fat.html>.

76. Eugene McCarthy, *A Call to Prosecute Drug Company Fraud as Organized Crime*, 69 SYRACUSE L. REV. 439, 452–58 (2019) [hereinafter *Organized Crime*].

77. See Marks, *supra* note 47, at 279.

78. See Lima & Galea, *supra* note 69, at 7–8.

79. *Id.* at 5.

80. See Marks, *supra* note 47, at 279.

81. See Michaels, *supra* note 70 .

‘conspiracy theorists’[.]”⁸² The government database that tracks private industry payments to physicians, medical researchers, and medical schools has recorded payments of \$11 billion dollars, with \$5.2 in research payments, in 2019 alone.⁸³ Since 2013, private industry has paid health practitioners and researchers \$53 billion for their services.⁸⁴ According to a former high-ranking U.S. public health official, much of today’s scientific evidence “is a charade,” but such industry-science collusion is “standard practice.”⁸⁵

Second, according to CDoH, private industry subverts public health for profit through government lobbying and the revolving door. Through lobbying, or corporate payments to government officials in exchange for political influence, private industry seeks control “over decision-making, agenda-setting, and non-decision” in order to “keep statutory regulation at bay and to shape the narrative and public perceptions around the role that governments should play” with regard to public health.⁸⁶ Private industry commits tremendous resources to U.S. public health lobbying. Since 1998, the following health industries have been among the top government lobbyists: the pharmaceutical industry (\$4.8 billion, ranking first of all industries), insurance industry (\$3.1 billion, ranking second of all industries), hospitals and nursing homes (\$1.9 billion), health professionals (\$1.7 billion), and health services and HMOs (\$1.4 billion).⁸⁷ Additionally, the revolving door, or the movement of employees from the private sector into government (and vice versa), serves three industry purposes:

First, it may result in policy decisions about products and practices that favor industry interests. Second, it guarantees industry a voice in the policymaking process, even though other stakeholders have no assurance that their concerns will be addressed by regulatory agencies. Thirdly, it gives industry a competitive advantage when former regulators bring confidential information into their corporate roles.⁸⁸

82. See Rawlinson, *supra* note 24, at 92.

83. *The Facts About Open Payments Data*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://openpaymentsdata.cms.gov/summary> (last visited Nov. 29, 2021).

84. *Id.*

85. See Michaels, *supra* note 70.

86. See Lima & Galea, *supra* note 69, at 3.

87. *Industries*, OPENSECRETS, <https://www.opensecrets.org/federal-lobbying/industries?cycle=a> (last visited Nov. 29, 2021).

88. Lima & Galea, *supra* note 69, at 3.

Currently, 67 percent of insurance industry lobbyists were former government employees, while 65 percent of health services lobbyists, 63 percent of pharmaceutical industry lobbyists, and 58 percent of hospital lobbyists were former government employees, respectively.⁸⁹

Finally, CDoH theorists believe commercial actors control public discourse to shape public health for profit. That is, corporations influence the media, public health organizations, and patient-advocacy groups to “legitimize[] or delegitimize[] certain discourses, especially those that threaten the interests of the powerful.”⁹⁰ Corporations and their allies prescribe (and limit) the window of acceptable public health discourse on certain topics, such that “[p]olicies falling inside this window are considered acceptable, or even desirable, whereas those falling outside it are deemed unacceptable, unworthy of even being discussed.”⁹¹ For instance (as Parts II and III below demonstrate), open dialogue about U.S. immunization or obesity policies is strictly off limits in the media and public health discourse. Corporations capture discourse through media ownership and by leveraging advertising expenditures to control editorial decisions.⁹² This is possible because a handful of conglomerate corporations control almost all American media outlets (i.e., Disney, NewsCorp, Viacom, WarnerMedia, and CBS).⁹³ That is, “Five companies give us most of the information we use to form opinions about people and events unfolding around us,” and “it’s almost impossible to get news from a source that isn’t owned by a conglomerate that sells us a panoply of ‘stuff’”⁹⁴ Adding to this, Amazon Chairman Jeff Bezos owns the *Washington Post*, while billionaire Rupert Murdoch owns the *Wall Street Journal* and financier Warren Buffet owns 70 daily newspapers in the United States.⁹⁵ A very small group of people undoubtedly shape the population’s ideological viewpoints.

Meanwhile, private industry funds 93 percent of patient-advocacy groups that represent patients’ rights before the FDA.⁹⁶ Coca-Cola and

89. *Top Industries*, OPENSECRETS, <https://www.opensecrets.org/revolving/top.php?display=I> (last visited Nov. 29, 2021).

90. Martin McKee & David Stuckler, *Revisiting the Corporate and Commercial Determinants of Health*, 108 AM. J. PUB. HEALTH 1167, 1168 (2018).

91. *Id.*

92. See Lima & Galea, *supra* note 69, at 6–7.

93. Ashley Lutz, *These 6 Corporations Control 90% of the Media in America*, BUS. INSIDER (June 14, 2012, 9:49 AM), <https://www.businessinsider.com/these-6-corporations-control-90-of-the-media-in-america-2012-6>.

94. Monica Harris, *Why Are We Still Listening to Mainstream News?*, MEDIUM (May 18, 2020), <https://medium.com/indian-thoughts/why-are-we-still-listening-to-mainstream-news-ad8f9b901ad2>.

95. *Id.*

96. See Marks, *supra* note 47, at 279–80.

Pepsi fund nearly 100 health-related civil society groups in the United States.⁹⁷ The pharmaceutical industry spends over \$26 billion annually to market their products (including the purchase of 4.6 million media advertisements and 663,000 television commercials), while the food, beverage, and restaurant industry spends approximately \$14 billion to market its products in the U.S. each year.⁹⁸ These vast advertising expenditures presumably afford the industry significant editorial influence.

Private industry actors employ this influence to deny any links between their products and unhealthy outcomes and, if that is not possible, to claim any proposed government regulation is overly paternalistic. Learning from early tobacco industry tactics, corporations “deny that there is a problem and resist at every stage any attempts at regulatory intervention by governments,” arguing that government intervention is “an infringement of personal choice and freedom of speech.”⁹⁹ For unsafe and unhealthy products, the goal is to fabricate a false consensus of safety, so that “if a harmful product is *portrayed* as safe, healthful, and even necessary, as long as the consumer perceives it as such, there will be no need to confront the manufactures about its toxicity.”¹⁰⁰ As a former U.S. public health official frames it, “[t]he instinct for corporations is to take the low road: deny the allegations, defend the product at all costs, and attack the science underpinning the concerns.”¹⁰¹ Using the media, corporations discredit scientists who produce evidence about a product’s negative health effects—they seek to “manufactur[e] doubt” about any potential dangers.¹⁰² This is a proven

97. *Id.* at 279.

98. Sam Baker, *Medical Marketing Tops \$30 Billion Per Year*, AXIOS (Jan. 9, 2019), <https://www.axios.com/medical-marketing-tops-30-billion-advertising-1547033121-c3b1c891-546d-449f-9388-6e5212a8e26f.html> (“Drug companies spent \$20 billion on marketing to health care professionals in 2016, mostly to provide free samples of their products. Pharma[ceutical] companies spent another \$6 billion on marketing to consumers.”); *see also* UCONN RUDD CTR. FOR FOOD POL’Y & HEALTH, *Food Marketing*, UNIV. OF CONN. (November 12, 2021), <https://uconnruddcenter.org/research/food-marketing/> (finding that “[f]ood, beverage and restaurant companies spend almost \$14 billion per year on advertising in the United States. More than 80% of this advertising promotes fast food, sugary drinks, candy, and unhealthy snacks[.]”).

99. John S. Millar, *The Corporate Determinants of Health: How Big Business Affects Our Health, and the Need for Government Action!*, 104 CAN. J. PUB. HEALTH e327, e328 (2013).

100. Lima & Galea, *supra* note 69, at 5 (emphasis added).

101. Michaels, *supra* note 70.

102. *See* Lima & Galea, *supra* note 69, at 5.

blueprint that the tobacco and the food and beverage industries have utilized for decades at the expense of U.S. public health.¹⁰³

According to CDoH theorists, corporations capture science, politics, and discourse to maximize profit, and most people are unaware of this fact or the immense danger this influence presents.¹⁰⁴ The public does not recognize the dangers of public health capture because corporate control is “subtle” and sometimes “invisible.”¹⁰⁵ Corporations prime the public for the industry narrative by covertly creating and reinforcing social consciousness.¹⁰⁶ This invisible power is enormous, as Walmart and ExxonMobil would rank as the world’s 25th and 30th largest national economies by revenue,¹⁰⁷ while “71 of the world’s largest 100 economies are corporations.”¹⁰⁸ Since this power is both enormous and invisible, corporations have no real political accountability.¹⁰⁹ Indeed, many corporations exercise more influence over the democratic process than most voters do, yet many people do not recognize this reality.¹¹⁰

The CDoH framework paints a bleak picture of the state of public health. However, as the following Parts demonstrate, this bleak picture is unfortunately an accurate portrait of U.S. public health. To demonstrate that the CDoH theory is, in fact, reality, the remainder of this Article juxtaposes the divergent U.S. legislative approaches to communicable disease and obesity. This juxtaposition reveals how commercial determinants dictate U.S. public health legislation at the expense of the nation’s wellbeing.

II. THE COMMERCIAL DETERMINANTS OF U.S. VACCINE LEGISLATION

This Section examines how commercial determinants shape U.S. vaccine legislation. Regarding immunization policy, the government’s acquiescence to corporate interests has many positive outcomes. Vaccines

103. See generally Kelly D. Brownell & Kenneth E. Warner, *The Perils of Ignoring History: Big Tobacco Played Dirty and Millions Died. How Similar is Big Food?*, 87 MILBANK Q. 259 (2009).

104. See generally McKee & Stuckler, *supra* note 90.

105. See *id.* at 1168.

106. *Id.*

107. *Id.* at 1167.

108. Connor Rochford et al., Commentary, *Reframing the Impact of Business on Health: The Interface of Corporate, Commercial, Political and Social Determinants of Health*, BMJ GLOB. HEALTH, Aug. 18, 2019, at 1, 2.

109. JONATHAN H. MARKS, THE PERILS OF PARTNERSHIP: INDUSTRY INFLUENCE, INSTITUTIONAL INTEGRITY, AND PUBLIC HEALTH 82 (2019).

110. Michael Thorn, *Addressing Power and Politics Through Action on the Commercial Determinants of Health*, 29 HEALTH PROMOTION J. AUSTRAL. 225, 225 (2018) (footnote omitted).

are an indispensable public health tool.¹¹¹ According to some estimates, U.S. vaccines prevent 42,000 deaths, 20 million cases of disease, and \$14 billion in medical costs each year.¹¹² Yet, a majority of American parents have concerns about U.S. vaccines, among them the nation's most educated, financially secure, and experienced caregivers.¹¹³ The pharmaceutical industry's role in producing U.S. vaccine policy contributes to these concerns.¹¹⁴ The pharmaceutical industry has been the top government lobbyist every year since 1998, contributing a total of \$4.8 billion to regulators and officials.¹¹⁵ The industry generates tremendous profit from vaccines, a fact which contributes to vaccine hesitancy.¹¹⁶ Vaccine producers expect to earn \$105 billion annually in vaccine revenues, and vaccine profits are growing fast—in large part, due to the U.S. vaccine policies discussed herein.¹¹⁷ As this Section demonstrates, the pharmaceutical industry plays an inappropriate role in producing U.S. vaccine legislation by securing favorable laws related to science, government intervention, limited liability, taxation, and the window of permissible public health discourse about vaccination.

A. Science

The government has instituted a regime of evidence-based medicine, whereby drug companies must conduct a successful clinical trial to prove a new drug is safe and effective.¹¹⁸ Drug companies must administer three phases of human trials and submit the trial data to the government for approval before marketing the drug to the public.¹¹⁹ Unfortunately, according to the deputy editor of the *Journal of the American Medical Association*, some aspects of the FDA approval process are “profoundly

111. *Vaccine Hesitancy*, *supra* note 2, at 82.

112. *See* Karako-Eyal, *supra* note 9, at 6.

113. *See Vaccine Hesitancy*, *supra* note 2, at 82–83.

114. *See id.* at 103–04 (“For vaccine-hesitant critics, the presence of drug company executives on a government panel that approves childhood vaccines raises ethical concerns.”).

115. *Industries*, OPENSECRETS.ORG, <https://www.opensecrets.org/federal-lobbying/industries?cycle=a> (last visited Nov. 29, 2021).

116. *See Vaccine Hesitancy*, *supra* note 2, at 117.

117. *Id.*

118. Russel Katz, *FDA: Evidentiary Standards for Drug Development and Approval*, 1 NEURORX 307, 307 (2004); *see also* Federal Food, Drug, and Cosmetic Act, Pub. L. No. 75-717, § 505, 52 Stat. 1040, 1052 (1938); Drug Amendments of 1962, Pub. L. No. 87-781, § 102(a), 76 Stat. 780, 781 (1962).

119. *See* Drug Amendments of 1962, Pub. L. No. 87-781, § 102(a), 76 Stat. 780, 781 (1962).

corrupting.”¹²⁰ Drug companies can conduct unlimited failed trials that demonstrate the drug is actually dangerous or ineffective, but they do not have to submit this data to the government.¹²¹ In fact, drug companies do not report data from about half of the clinical trials they conduct.¹²² As a result, “[a]n ample record reveals that drug firms can design clinical trials in ways that bias the conclusions. They can also misinterpret or misreport the trial data, or engage in fraud.”¹²³ To perpetuate this fraud, companies pay ghostwriters to draft articles using biased clinical trial data, pay doctors to sign on as purported authors, and then pay to place the articles in top scientific journals.¹²⁴ In some cases, corporations manage the process from start to finish, and as one ghostwriter put it, the entire clinical trial regime has become “marketing masquerading as science.”¹²⁵

The extent of fraud and criminality in the pharmaceutical industry is reminiscent of organized crime—only with more human casualties.¹²⁶ The top three vaccine producers by annual profit are GlaxoSmithKline (“GSK”) (\$9.1 billion), Merck (\$7.97 billion), and Pfizer (\$6.5 billion).¹²⁷ These companies have tarnished records with regard to engaging in clinical trial fraud.¹²⁸ GSK admitted to engaging in fraud during clinical trials for its antidepressant drug Paxil, which resulted in thousands of adolescent suicides.¹²⁹ Merck admitted to engaging in clinical trial fraud for its pain reliever Vioxx, which killed 60,000 Americans from heart

120. Drummond Rennie, *When Evidence Isn't: Trials, Drug Companies and the FDA*, 15 J.L. & POL'Y 991, 1003–10 (2007) (describing how the Prescription Drug User Fee Act of 1992 creates a conflict of interest for regulators).

121. JOSEPH DUMIT, *DRUGS FOR LIFE: HOW PHARMACEUTICAL COMPANIES DEFINE OUR HEALTH* 100 (Michael M.J. Fischer & Joseph Dumit eds., 2012).

122. See Heled et al., *supra* note 38, at 94.

123. Marc A. Rodwin, *Independent Clinical Trials to Test Drugs: The Neglected Reform*, 6 SAINT LOUIS U. J. HEALTH L. & POL'Y 113, 114 (2012) (footnotes omitted).

124. Sergio Sismondo, *Ghost Management: How Much of the Medical Literature Is Shaped Behind the Scenes by the Pharmaceutical Industry?*, 4 PLOS MED. 1429, 1429 (2007).

125. JEROME P. KASSIRER, *ON THE TAKE: HOW MEDICINE'S COMPLICITY WITH BIG BUSINESS CAN ENDANGER YOUR HEALTH* 33 (2005).

126. See *Organized Crime*, *supra* note 76, at 489.

127. Matej Mikulic, *Leading Companies Based on Global Vaccine Revenue in 2019*, STATISTA (Sept. 15, 2021), <https://www.statista.com/statistics/1104110/top-global-pharma-companies-by-vaccine-revenue/>.

128. See, e.g., David Dobbs, *The Human Cost of a Misleading Drug-Safety Study*, ATLANTIC (Sept. 18, 2015), <https://www.theatlantic.com/health/archive/2015/09/paxil-safety-bmj-depression-suicide/406105/>.

129. *Id.*

attacks and strokes.¹³⁰ Pfizer, the “poster child” for industry fraud, repeatedly faces criminal sanctions for cheating during the development and marketing of its prescription drugs.¹³¹ In the case of Pfizer’s drug Neurontin, the company engaged in widespread fraud and commercial bribery to sell the drug for unapproved uses in order to increase profits, despite knowing of its adverse effects and describing it internally as “snake oil.”¹³²

Vaccines, unfortunately, are not exempt from this brand of corrupt science. In response to public safety concerns, the Association of American Physicians and Surgeons requested government safety data on the Hepatitis B vaccine.¹³³ The Hepatitis B vaccine is approved to prevent sexually transmitted disease, and the government schedules it for newborn babies.¹³⁴ The government ignored the request, indicating that no safety data exists, which suggests that researchers engaged in clinical trial fraud to secure approval.¹³⁵ Subsequent independent third-party studies found serious safety and efficacy concerns related to the Hepatitis B vaccine.¹³⁶ Likewise, Pfizer secured approval for Prevnar, a vaccine for pneumococcal infections (bacterial infections which cause earaches and pneumonia), despite admitting that it could not attest to whether or not the vaccine causes cancer and infertility, but conceding that it probably did interfere with the efficacy of other required vaccines.¹³⁷ Prevnar only reduces a child’s incidence of pneumococcal infection from 0.15 percent to 0.02 percent; despite these marginal benefits, Prevnar (a mandated immunization) is one of the world’s top selling vaccines, netting Pfizer nearly \$11.7 billion in revenue in 2020 alone.¹³⁸

The government does not appear concerned with reviewing vaccine safety and efficacy data after granting approval either, as it designed the

130. See Brian Deer, *Victims of Drug that Took a Hidden Toll*, SUNDAY TIMES (Aug. 21, 2005), <https://www.thetimes.co.uk/article/investigation-victims-of-drug-that-took-a-hidden-toll-k89f7kkmqtl>.

131. See *Organized Crime*, *supra* note 76, at 456.

132. See *id.* at 456–57.

133. See Mary Holland, *Compulsory Vaccination, the Constitution, and the Hepatitis B Mandate for Infants and Young Children*, 12 YALE J. HEALTH POL’Y, L. & ETHICS 39, 71–72 (2012).

134. See *id.* at 67–68, 73–74; see also KIMBERLY A. WORKOWSKI, ET AL., CTRS. FOR DISEASE CONTROL & PREVENTION, SEXUALLY TRANSMITTED DISEASES TREATMENT GUIDELINES 95–96 (2015).

135. Holland, *supra* note 133, at 71–72, 72 n.237.

136. *Id.* at 72.

137. Michael E. Horwin, Comment, *Ensuring Safe, Effective and Necessary Vaccines for Children*, 37 CAL. W.L. REV. 321, 342–46 (2001).

138. *Id.* at 346; Linda A. Johnson, *Pfizer Swings to Small Profit as Vaccines Begin to Roll Out*, ASSOCIATED PRESS (Feb. 2, 2021), <https://apnews.com/article/coronavirus-pandemic-earnings-5c0bc50188b9c081df6810f4597be851>.

Vaccine Adverse Event Reporting System (“VAERS”) to be a passive system, meaning that patients must seek out the VAERS database to report injuries.¹³⁹ According to the CDC, this means that “VAERS receives reports for only a small fraction of actual adverse events” related to vaccines.¹⁴⁰ That small fraction is probably about one percent of all adverse events.¹⁴¹ The government apparently structured VAERS as a passive system to intentionally miss most vaccine injuries.¹⁴² A former CDC director stated that the U.S. vaccination program would likely collapse if VAERS captured the accurate number of adverse events, as parents would not willingly vaccinate their children if they were aware of the extent and degree of vaccine-related injuries.¹⁴³ Government clinical trial and drug-safety science does appear, in some cases, to favor pharmaceutical industry interests.

B. Lobbying & the Revolving Door

Almost 70 percent of pharmaceutical industry lobbyists were previously government employees, while the pharmaceutical industry has been the top government lobbyist every year since 1998, contributing nearly \$5 billion to government officials.¹⁴⁴ In an investigation into vaccine testing and approval procedures, the U.S. House of Representatives Government Reform Committee found that “conflict of interest rules employed by the FDA and CDC have been weak, enforcement has been lax, and committee members with substantial ties to pharmaceutical companies have been given waivers to participate in committee proceedings.”¹⁴⁵ The House Committee was referring to a troubling degree of government-industry financial collusion in the vaccine-approval process.¹⁴⁶

Before the federal government recommends and states mandate a vaccine for American children, the vaccine must secure approval from the FDA’s Vaccines and Related Biological Products Advisory Committee

139. *Guide to Interpreting VAERS Data*, VACCINE ADVERSE EVENT REPORTING SYS., <https://vaers.hhs.gov/data/dataguide.html> (last visited Nov. 29, 2021).

140. *Id.*

141. STEPHEN A. GOLDMAN, FOOD & DRUG ADMIN., THE CLINICAL IMPACT OF ADVERSE EVENT REPORTING 5 (1996).

142. See Efthimos Parasidis, *Recalibrating Vaccination Laws*, 97 B.U. L. REV. 2153, 2207 (2017).

143. *See id.*

144. *See supra* Part I.C.

145. *See Conflicts of Interest, supra* note 24.

146. *See id.*

(the “Advisory Committee”).¹⁴⁷ Dr. Paul Offit, a leading vaccine safety expert, sits on the Advisory Committee and helps determine which vaccines the government approves.¹⁴⁸ He also develops vaccines for profit and earned an estimated \$45 million when Merck purchased the rights to his now government-mandated RotoTeq vaccine.¹⁴⁹ Merck also sponsors part of his \$1.5 million academic salary.¹⁵⁰ Dr. Paula Annunziato, Merck’s Vice President of Vaccine Clinical Research, likewise serves on the Advisory Committee and helps determine which vaccines American children must receive.¹⁵¹

After the Advisory Committee clears a vaccine, it moves to the CDC for review.¹⁵² Julie Gerberding was CDC Director from 2002–2009.¹⁵³ During this period, Merck secured CDC and government approval for Gardasil.¹⁵⁴ At the time of its approval, Gardasil was the most expensive childhood vaccine for the least prevalent disease on the government vaccine schedule.¹⁵⁵ After the CDC approved Gardasil, Gerberding resigned and joined Merck as president of its vaccine division.¹⁵⁶ In 2015, Gerberding sold 38,368 shares of Merck stock for \$2.3 million; in 2020, she sold another 138,358 Merck shares for \$12 million.¹⁵⁷ In 2018,

147. Larry K. Pickering & Walter A. Orenstein, *Development of Pediatric Vaccine Recommendations and Policies*, 13 SEMINARS PEDIATRIC INFECTIOUS DISEASES 148, 148–49 (2002).

148. *Roster of the Vaccines and Related Biological Products Advisory Committee*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/advisory-committees/vaccines-and-related-biological-products-advisory-committee/roster-vaccines-and-related-biological-products-advisory-committee> (last visited Nov. 29, 2021); see also Sharyl Attkisson, *How Independent Are Vaccine Defenders?*, CBS NEWS (July 25, 2008, 6:20 PM), <https://www.cbsnews.com/news/how-independent-are-vaccine-defenders/> (noting Dr. Offit’s role on the Advisory Committee).

149. David Kroll, *Dr. Paul Offit: ‘Journalism Jail’ for Faulty Medical Reporting*, FORBES (Mar. 29, 2014, 8:20 PM), <https://www.forbes.com/sites/davidkroll/2014/03/29/dr-paul-offit-journalism-jail-for-false-equivalence-medical-reporting/#1689cbc01308>.

150. *Corrections for April 18*, ORANGE CNTY. REG. (Apr. 18, 2011, 3:49 PM), <https://www.oregister.com/2011/04/18/corrections-for-april-18-2/>.

151. *Roster of the Vaccines and Related Biological Products Advisory Committee*, *supra* note 148.

152. See Pickering & Orenstein, *supra* note 147, at 150.

153. *Past CDC Directors/Administrators*, CTRS. FOR DISEASE CONTROL & PREVENTION, <https://www.cdc.gov/about/history/pastdirectors.htm> (last visited Nov. 29, 2021).

154. See Holland, *supra* note 133, at 78.

155. *Id.*

156. *Julie Louise Gerberding, M.D., M.P.H.*, MERCK, <https://www.merck.com/leadership/julie-l-gerberding-m-d-m-p-h/> (last visited Nov. 29, 2021).

157. Thomas Dobrow, *Merck & Co. EVP Julie L. Gerberding Sells 38,368 Shares (MRK)*, DAKOTA FIN. NEWS (May 11, 2015), <https://web.archive.org/web/20150528003538/http://www.dakotafinancialnews.com/merck-co-evp-julie-l-gerberding-sells-38368-shares-mrk/159207/>; see also *Merck & Co., Inc. Insider Trades*, MKT. BEAT,

Gardasil generated \$3.2 billion in revenue for Merck, which was seven percent of the company's overall sales.¹⁵⁸

These conflicts also arise at the state level. New Jersey was the first state to mandate the flu vaccine for all children in daycare.¹⁵⁹ New Jersey Deputy Health Commissioner Eddy Breznitz spearheaded the mandate initiative, then resigned his position and joined Merck (which markets one of the few approved flu vaccines) as a vaccine executive.¹⁶⁰ In 2007, Texas became the first state to mandate Gardasil for school entry.¹⁶¹ Texas Governor Rick Perry issued this mandate via executive order.¹⁶² Texans were upset when they learned that Mike Toomey, Governor Perry's former chief-of-staff, was a high-powered Merck lobbyist working on a "multimillion-dollar campaign to persuade states to make the vaccine mandatory."¹⁶³ Part of this campaign included donating \$377,000 to the Republican Governor's Association, of which Governor Perry was the chair.¹⁶⁴ Governor Perry later indicated the vaccine mandate was a "mistake."¹⁶⁵

These blurred boundaries between the government and the pharmaceutical industry are common. The Department of Health and Human Services Secretary under the Trump administration was Alex Azar, who was previously the top executive at Eli Lilly, one of the nation's largest pharmaceutical companies.¹⁶⁶ Industry observers considered his

<https://www.marketbeat.com/stocks/NYSE/MRK/insider-trades/> (last visited Nov. 29, 2021) (listing Gerberding's stock sales).

158. Trefis Team, *Merck's Leadership in HPV Vaccines Market*, NASDAQ (Sept. 8, 2019, 4:59 AM), <https://www.nasdaq.com/articles/mercks-leadership-in-hpv-vaccines-market-2019-09-28>.

159. Sharyn Alfonsi, *N.J. Mandatory Flu Shots for Preschoolers Cause Outrage*, ABC NEWS (Oct. 16, 2008, 6:59 PM), <https://abcnews.go.com/Health/ColdandFluNews/story?id=6051917&page=1>.

160. See *Vaccine Hesitancy*, *supra* note 2, at 106–7.

161. Ralph Blumenthal, *Texas Is First to Require Cancer Shots for Schoolgirls*, N.Y. TIMES (Feb. 3, 2007), <https://www.nytimes.com/2007/02/03/us/03texas.html>.

162. *Id.*

163. Dan Eggen, *Rick Perry and HPV Vaccine-Maker Have Deep Financial Ties*, WASH. POST (Sept. 13, 2011), https://www.washingtonpost.com/politics/perry-has-deep-financial-ties-to-maker-of-hpvvaccine/2011/09/13/gIQAVKKqPK_story.html?utm_term=.80453d735648.

164. Wade Goodwyn, *In Texas, Perry's Vaccine Mandate Provoked Anger*, NPR (Sept. 16, 2011, 3:22 PM), <http://www.npr.org/2011/09/16/140530716/in-texas-perrys-vaccine-mandate-provoked-anger>.

165. Jay Root, *Under Scrutiny, Perry Walks Back HPV Decision*, TEX. TRIB. (Aug. 15, 2011, 5:00 AM), <https://www.texastribune.org/2011/08/15/facing-new-scrutiny-perry-walks-back-hpv-decision/>.

166. Gabriel Levitt, *Alex Azar is Big Pharma Personified. He Must Not Become US Health Secretary*, GUARDIAN (Dec. 1, 2017, 9:31 AM), <https://www.theguardian.com/commentisfree/2017/dec/01/alex-azar-health-secretary-drug-prescription-prices-medicaid>.

appointment to be the pharmaceutical industry's "biggest lobbying victory ever."¹⁶⁷ Indeed, "9 out of the last 10 FDA commissioners—representing nearly four decades of agency leadership—have gone on to work for pharmaceutical companies."¹⁶⁸ This includes Dr. Scott Gottlieb, who, prior to becoming FDA Commissioner, was a director at GSK and a venture capitalist at the pharmaceutical investment firm, New Enterprise Associates.¹⁶⁹ Due to a large number of pharmaceutical industry financial conflicts of interest, Gottlieb recused himself from 20 different matters before joining the FDA.¹⁷⁰ Two months after resigning as Commissioner, Gottlieb joined the board of directors at Pfizer.¹⁷¹ Senator Elizabeth Warren demanded he immediately step down, noting that "this kind of revolving door influence-peddling smacks of corruption, and makes the American people rightfully cynical and distrustful . . ."¹⁷² Nonetheless, Gottlieb remains on the Pfizer board.¹⁷³ Vaccine lobbying and the revolving door are additional examples of how commercial determinants appear to shape U.S. public health law.

C. Government Intervention

According to the American Medical Association's Code of Medical Ethics, informed medical consent is a fundamental ethical and legal right.¹⁷⁴ Informed medical consent arises when "communication between a patient and physician results in the patient's authorization or agreement to undergo a specific medical intervention."¹⁷⁵ The U.S.

167. *Id.*

168. Katherine Ellen Foley, *Trust Issues Deepen as Yet Another FDA Commissioner Joins the Pharmaceutical Industry*, QUARTZ (July 1, 2019), <https://qz.com/1656529/yet-another-fda-commissioner-joins-the-pharmaceutical-industry/>.

169. Reuters Staff, *FDA Nominee Moves to Untangle Potential Conflicts of Interest*, REUTERS (Mar. 29, 2017, 12:18 PM), <https://www.reuters.com/article/us-usa-health-fda-gottlieb/fda-nominee-moves-to-untangle-potential-conflicts-of-interest-idUSKBN1702DQ>.

170. *Id.*

171. Nicholas Wu, *Elizabeth Warren Calls on Trump's Former FDA Commissioner to Resign from Pfizer*, USA TODAY (July 3, 2019, 11:47 AM), <https://www.usatoday.com/story/news/politics/2019/07/03/elizabeth-warren-tells-scott-gottlieb-resign-pfizer-board/1637789001/>.

172. *Id.*

173. *Board Members*, PFIZER, <https://www.pfizer.com/people/leadership/board-of-directors> (last visited Nov. 29, 2021); see also Scott Gottlieb, *The Case for Vaccine 'Passports'*, WALL ST. J. (Apr. 11, 2021, 4:52 PM), <https://www.wsj.com/articles/the-case-for-vaccine-passports-11618174364> (advocating for a system that requires proof of vaccination in the United States).

174. *Informed Consent: Code of Medical Ethics Opinion 2.1.1*, AM. MED. ASS'N, <https://www.ama-assn.org/delivering-care/ethics/informed-consent> (last visited Nov. 29, 2021).

175. *Id.*

Supreme Court has held that Americans have a constitutional right to refuse any unwanted medical treatment—except for vaccinations.¹⁷⁶ Today, all fifty states mandate vaccination for school attendance.¹⁷⁷ In order to promote compliance, states have been eliminating religious and philosophical exemptions to these mandates.¹⁷⁸ Indeed, the FDA has threatened federal intervention if states permit vaccine-mandate exemptions.¹⁷⁹ The scientific rationale for these mandates is to achieve “herd immunity,” meaning enough people in a population are immune from an infection, such that the disease cannot easily spread.¹⁸⁰

The United States is a global outlier with regard to vaccine mandates.¹⁸¹ Many developed democracies recommend vaccinations, but do not require them.¹⁸² In Germany, one of the few nations that does require vaccines, non-compliance typically results in a fine—not a ban from school.¹⁸³ Public health officials in these nations may promote a voluntary approach because herd immunity is likely unattainable, due in large part to vaccine failure.¹⁸⁴ Vaccine failure (or the ineffectiveness of a vaccine at preventing infection) is a legitimate concern, as the United States has witnessed measles outbreaks in schools with at or near 100

176. See *Cruzan v. Dir., Mo. Dept. of Health*, 497 U.S. 261, 278–79 (1990); *Prince v. Massachusetts*, 321 U.S. 158, 166–70 (1944) (holding that the Constitution does not permit a parent to expose the community or their child to disease).

177. See OFF. FOR STATE, TRIBAL, LOC., & TERRITORIAL SUPPORT, *supra* note 3, at 7–9.

178. See *Vaccine Hesitancy*, *supra* note 2, at 88–89.

179. Megan Trimble, *FDA Commissioner: Government May Act if States Don't Change Vaccine Laws*, U.S. NEWS (Feb. 20, 2019, 12:30 PM), <https://www.usnews.com/news/national-news/articles/2019-02-20/fda-commissioner-government-may-act-if-states-dont-strengthen-vaccine-laws>.

180. Elizabeth Hatch, *To Vaccinate or Not to Vaccinate?: The Challenges and Benefits of the Implementation of the Jamie Schanbaum Act*, 15 TEX. TECH. ADMIN. L.J. 187, 200–01 (2013).

181. See *Vaccine Hesitancy*, *supra* note 2, at 90.

182. See Henson, *supra* note 4, at 61–62; *Laws Are Not the Only Way to Boost Immunization*, NATURE (Jan. 17, 2018), <https://www.nature.com/articles/d41586-018-00660-y> (explaining how France recently began mandating several vaccines for school attendance, but French doctors have resisted the mandate, arguing that “the measure is authoritarian and could backfire, not least by alienating parents and increasing wariness of vaccines . . .”).

183. Jasmin Bauomy, *Measles Vaccination Becomes Mandatory in Germany*, EURONEWS (Feb. 3, 2020), <https://www.euronews.com/2020/03/02/measles-vaccination-becomes-mandatory-in-germany> (detailing how Germany now requires the measles vaccine for school children, subjecting noncompliant parents to a fine).

184. Mary Holland & Chase E. Zachary, *Herd Immunity and Compulsory Childhood Vaccination: Does the Theory Justify the Law?*, 93 OR. L. REV. 1, 4–5 (2014) (noting that “[g]iven contemporary, imperfect vaccine technology and geographical and age-stratified vaccination mandates, herd immunity does not exist and is not attainable,” and that “[o]ur viewpoint may help explain why many developed countries, including those with political systems closest to our own, have only voluntary childhood vaccination programs”).

percent vaccination rates, prompting the CDC to concede that outbreaks can occur in fully vaccinated populations.¹⁸⁵ Recent pertussis (whooping cough) outbreaks resulted not from non-vaccination but because the approved pertussis vaccine actually provides little to no immunity against the disease in the long term.¹⁸⁶ After a mumps outbreak in a fully vaccinated population, the CDC admitted that “the mumps portion of the [measles, mumps, rubella (“MMR”)] vaccine is less effective than the other parts”¹⁸⁷ The only confirmed measles death in the United States since 2003 was a vaccinated adult.¹⁸⁸ The United States has recently grown accustomed to the phenomenon of vaccine “breakthrough” (i.e., vaccine failure), as it has emerged during the COVID-19 vaccine roll out.¹⁸⁹

America is an outlier with regard to vaccine mandates because of pervasive pharmaceutical industry influence over U.S. public health policy and legislation.¹⁹⁰ A survey of state public health officials, for instance, showed how the pharmaceutical industry aggressively lobbied state governments to impose school-entry HPV vaccine mandates.¹⁹¹ The industry successfully secured these mandates “by serving as an information resource, lobbying legislators, drafting legislation, mobilizing . . . legislators and physician organizations, conducting consumer marketing campaigns, and filling gaps in access to the vaccine.”¹⁹² In fact, respondents reported that drug company representatives and lobbyists actually proposed school-entry mandate

185. Tracy L. Gustafson et al., *Measles Outbreak in a Fully Immunized Secondary-School Population*, 316 NEW ENG. J. MED. 771, 771 (1987); see also CTRS. FOR DISEASE CONTROL & PREVENTION: MORBIDITY & MORTALITY WKLY. REP.: MEASLES OUTBREAK AMONG VACCINATED HIGH SCHOOL STUDENTS—ILLINOIS (1984) (explaining the government position on the outbreak given the high vaccination rates at the school).

186. Maryn McKenna, *Why Whooping Cough Vaccines Are Wearing Off*, SCI. AM. (Oct. 1, 2013), <https://www.scientificamerican.com/article/why-whooping-cough-vaccines-are-wearing-off>.

187. Annemarie Colbin, *A Holistic Health Perspective*, in VACCINE EPIDEMIC: HOW CORPORATE GREED, BIASED SCIENCE, AND COERCIVE GOVERNMENT THREATEN OUR HUMAN RIGHTS, OUR HEALTH, AND OUR CHILDREN 192, 196 (Louise Kuo Habakus & Mary Holland eds., 2011).

188. See *Vaccine Hesitancy*, *supra* note 2, at 96.

189. See Keri Enriquez, *New York Yankees’ Breakthrough Infections Demonstrate the Covid-19 Vaccine Works. Here’s Why*, CNN (May 21, 2021, 6:26 AM), <https://www.cnn.com/2021/05/20/health/yankees-covid-19-breakthrough-infections/index.html> (arguing that vaccine failure proves that vaccines are effective).

190. See Michelle M. Mello et al., *Pharmaceutical Companies’ Role in State Vaccination Policymaking: The Case of Human Papillomavirus Vaccination*, 102 AM. J. PUB. HEALTH 893, 893 (2012) (investigating industry involvement in the rollout of and policymaking around the human papillomavirus [HPV] vaccine).

191. *Id.* at 893–96.

192. *Id.*

legislation, drafted the bills, and then secured legislative sponsors for those bills.¹⁹³ As with Governor Perry in Texas,¹⁹⁴ drug companies lobby and influence government officials to mandate vaccines for school entry.

These efforts are intense, widespread, and commercially valuable. In the survey, one state health official described the “high intensity of lobbying for school-entry mandate legislation” as a “feeding frenzy.”¹⁹⁵ Another attested that, “just about every vaccine mandate that we have lately has been the result, at least partially, of the drug industry’s efforts.”¹⁹⁶ The pharmaceutical industry’s push for school-entry mandates makes commercial sense, because “[i]f you can force your customers to acquire your product, it eliminates all of the messy uncertainty and hassle of a competitive market. Instead of free market competition, their business strategies are built on compulsion.”¹⁹⁷ Thus, just as with vaccine science and lobbying, commercial determinants appear to influence government vaccine interventions.

D. Liability & Taxation

In 1985, drug companies faced \$3.5 billion in vaccine-injury lawsuit liability.¹⁹⁸ A few companies threatened to stop producing vaccines unless the government agreed to protect vaccine producers from financial liability for vaccine-related injuries and death.¹⁹⁹ During an aggressive pharmaceutical industry lobbying campaign, a Merck executive proposed a no-fault compensation system whereby the government, rather than the industry, would compensate vaccine-injured children.²⁰⁰ In 1986, Congress responded by enacting the National Childhood Vaccine Injury Act (the “Injury Act”).²⁰¹ Through this no-fault compensation system, the government (rather than industry) compensates vaccine-injury claims through a seventy-five cent excise tax applied to each government-

193. See Mello et al., *supra* note 190, at 894.

194. See *supra* Part II.B.

195. Mello et al., *supra* note 190, at 895.

196. *Id.* at 894.

197. Michael Belkin, *The Vaccine Bubble and the Pharmaceutical Industry*, in VACCINE EPIDEMIC, *supra* note 187, at 135, 142.

198. Henson, *supra* note 4, at 73.

199. Jaclyn Shoshana Levine, Note, *The National Vaccine Injury Compensation Program: Can It Still Protect an Essential Technology?*, 4 B.U. J. SCI. & TECH. L. 9, ¶ 2 (1998).

200. See Lainie Rutkow et al., *Balancing Consumer and Industry Interests in Public Health: The National Vaccine Injury Compensation Program and Its Influence During the Last Two Decades*, 111 PENN ST. L. REV. 681, 693, 704 (2007).

201. See 42 U.S.C. §§ 300aa-1 to -34.

mandated vaccine.²⁰² Since its inception, this taxpayer-funded program has reserved over \$4 billion to compensate vaccine-injury victims.²⁰³ The government designed the program to compensate vaccine-injured children “quickly, easily, with certainty and generosity.”²⁰⁴ To file a claim, the petitioner informally states her case to a government special master and submits the child’s medical records, vaccination records, or—in tragic cases—the child’s vaccine-related death certificate and autopsy results.²⁰⁵

Despite the government’s legislative intent, special masters have grown thrifty in redistributing these tax funds to vaccine-injury victims.²⁰⁶ Petitioners typically wait two years for the government to decide vaccine-injury cases.²⁰⁷ When the government concedes a vaccine injury or death, it sometimes resists paying full compensation.²⁰⁸ For instance, after conceding a vaccine paralyzed an individual, the government argued \$150 for annual wheelchair maintenance was excessive.²⁰⁹ After conceding a vaccine rendered another victim permanently incontinent, the government resisted a \$135 annual bedsheet allowance.²¹⁰ After deciding a vaccine resulted in a child’s severe brain damage, the government disputed a subsequent \$40 shoe purchase.²¹¹ The government also admitted that it threatens to appeal lost cases unless bereaved parents agree to keep vaccine-injury and death settlements confidential from the public.²¹²

202. *About the National Vaccine Injury Compensation Program*, HEALTH RES. & SERVS. ADMIN., <https://www.hrsa.gov/vaccine-compensation/about/index.html> (last visited Nov. 29, 2021).

203. TREASURYDIRECT, VACCINE INJURY COMPENSATION REPS. (2021) (providing a current accounting of compensation fund resources).

204. Charlotte A. Moser & Paul A. Offit, *News & Views: National Vaccine Injury Compensation Program*, CHILD’S HOSP. PHILA. (June 24, 2015), <https://www.chop.edu/news/news-views-national-vaccine-injury-compensation-program>.

205. 42 U.S.C. § 300aa-11(c)(2); U.S. CT. FOR FED. CLAIMS, APPENDIX B: VACCINE RULES OF THE UNITED STATES COURT OF FEDERAL CLAIMS 122 (2021).

206. *See Vaccine Hesitancy*, *supra* note 2, at 114–15.

207. *See id.* at 115; Gordon Shemin, Comment, *Mercury Rising: The Omnibus Autism Proceeding and What Families Should Know Before Rushing Out of Vaccine Court*, 58 AM. U. L. REV. 459, 512 (2008) (noting that the Vaccine Court takes “well over 800 days” to decide vaccine claims).

208. *See Vaccine Hesitancy*, *supra* note 2, at 115.

209. Myron Levin, *Vaccine Injury Claims Face Grueling Fight*, L.A. TIMES (Nov. 29, 2004, 12:00 AM), <https://www.latimes.com/archives/la-xpm-2004-nov-29-fi-vaccinecourt29-story.html>.

210. *Id.*

211. Clifton R. Parker, *Federal Program for Vaccine-Injured Children is Failing, Stanford Scholar Says*, STAN. NEWS SERV. (July 6, 2015), <https://news.stanford.edu/pr/2015/pr-vaccine-court-engstrom-070615.html>.

212. *See Levin*, *supra* note 209.

The government expanded the industry's liability protection in 2003 with the Smallpox Emergency Personnel Protection Act ("SEPPA") and in 2005 (and, again, in 2020) with the Public Readiness and Emergency Preparedness Act ("PREPA").²¹³ SEPPA and PREPA insulate the industry from vaccine-injury liability during public health emergencies and pandemics, respectively.²¹⁴ In 2016, Congress passed the 21st Century Cures Act, which insulates the pharmaceutical industry from liability in the event that a vaccine injures or terminates a fetus in utero.²¹⁵ Some critics believe that this approach to vaccine injuries subverts U.S. product liability policy, which typically incentivizes a manufacturer to innovate the safest possible product in order to avoid injury-related liability exposure.²¹⁶ As legal scholar Peter H. Myers put it, the Injury Act has a poor record with regard to helping vaccine-injury victims, but has been "a stupendous success in protecting the industry."²¹⁷

Some public health advocates suggest that the government should mitigate the negative externalities that individuals create when rejecting vaccinations by imposing an additional tax on such individuals.²¹⁸ Others take this inverted tax and liability structure further, arguing that the law should permit parents who vaccinate their children to sue parents who do not, in the event that the vaccinated children become ill (absent any proof of causation).²¹⁹ The pharmaceutical industry and its supporters have reshaped traditional tax and liability structures to put all of the risk on the public—despite the fact that the government *requires* the public to purchase and use the pharmaceutical industry's product.

213. 42 U.S.C. § 239a(f)(2); 42 U.S.C. §§ 247d-6d(a)(1), (d)(1).

214. 42 U.S.C. § 239a(f)(2) (barring any appellate review related to smallpox vaccine injuries); 42 U.S.C. §§ 247d-6d(a)(1), (d)(1) (limiting vaccine producer liability to cases of vaccine injury stemming from the producer's willful misconduct).

215. 21st Century Cures Act, Pub. L. No. 114-255, § 3093(c), 130 Stat. 1151-52 (amending provisions of the National Childhood Vaccine Injury Act of 1986, codified as amended at 42 U.S.C. § 300aa-14(e)).

216. See Levine, *supra* note 199, at ¶¶ 8-9.

217. See Levin, *supra* note 209.

218. Christine Parkins, *Protecting the Herd: A Public Health, Economics, and Legal Argument for Taxing Parents Who Opt-Out of Mandatory Childhood Vaccinations*, 21 S. CAL. INTERDISC. L.J. 437, 441-42 (2012).

219. Dorit Rubinstein Reiss, *Compensating the Victims of Failure to Vaccinate: What Are the Options?*, 23 CORNELL J.L. & PUB. POL'Y 595, 595-97 (2014).

E. Public Health Discourse and Framing

Public health scholars Lindsay Wiley and Ross Silverman advocate for “shaming” parents who do not vaccinate their children in order to mitigate vaccine hesitancy.²²⁰ The authors highlight headlines that declare “Rich, educated and stupid parents are driving the vaccination crisis” and “Anti-vaxxers are stupid and contagious.”²²¹ They encourage physicians to dismiss or refuse unvaccinated children as patients.²²² They encourage dismissal because concerned parents are asking doctors to “hold far more substantial conversations about vaccination with a growing proportion of their patients,” and such information sessions are not “easily integrated into the high-volume, low-reimbursement service environment in which such conversations are taking place.”²²³ These inconvenient and “un- or under-reimbursed” discussions lead one of every eight doctors to dismiss patients who are vaccine hesitant.²²⁴ Indeed, the American Academy of Pediatrics recently changed its longstanding guidance, and now advises pediatricians that it is acceptable to dismiss unvaccinated patients.²²⁵ Some pediatricians also file child neglect reports with the state if parents seek to forego or delay vaccination.²²⁶

Amazon, Netflix, Hulu, Facebook, and Twitter all removed content critical of U.S. vaccine policy because they “don’t just have the right to reject pseudo-science peddled by charlatans; they have a moral duty to do so, one that can’t be mitigated by the fact that a bogus documentary is trending.”²²⁷ The media likewise strongly condemns “anti-vaxxers,” with one *Washington Post* editorial headlined “Anti-vaxxers are

220. See Silverman & Wiley, *supra* note 7, at 571, 578.

221. *Id.* at 572.

222. See *id.* at 578 (concluding that a “permissive stance” towards physician refusal of unvaccinated patients does not “cross the line” into impermissibly harsh social stigma).

223. *Id.* at 573.

224. *Id.* at 574.

225. *Id.*

226. See Sara Schreiber, *Pediatrician’s Extreme Stance on Anti-Vaxxers Has Riled People Up*, GOOD HOUSEKEEPING (Apr. 21, 2017), <https://www.goodhousekeeping.com/health/news/a43825/pediatrician-vaccines-viral/>.

227. E.g. Brian Dickerson, *How Netflix, Amazon and Other Tech Giants Are Addressing Anti-Vaxxers: Today’s Talker*, USA TODAY (Apr. 16, 2019, 3:29 PM), <https://www.usatoday.com/story/opinion/2019/04/16/how-netflix-amazon-google-facebook-addressing-anti-vaxxers-talker/3483190002/>; Eva Mathews, *Facebook Removes Dozens of Vaccine Misinformation Superspreaders*, REUTERS (Aug. 18, 2021, 5:08 PM) <https://www.reuters.com/technology/facebook-removes-dozens-vaccine-misinformation-superspreaders-2021-08-18/>.

dangerous. Make them face isolation, fines, arrests.”²²⁸ This same author compared vaccine-hesitant parents to sex offenders, suggesting that the government should keep a public registry of unvaccinated individuals in order to allow society to shun them.²²⁹

Some scholars warn that this limited form of discourse eliminates “open debate and independent inquiry around the safety and efficacy of vaccines.”²³⁰ Censorship seems particularly out of place in a free society, especially since it is reasonable that “[a]ny mandated public health policy must be open to constant scrutiny, independent scientific inquiry and open debate.”²³¹ Indeed, critics see these restrictions as a pattern of corporate censorship in which anybody raising concerns about any aspect of vaccination is “vilified in the media, shunned by members of the public and excluded from areas of social life,” since vaccine proponents and the industry frame such questions as “emotional, dangerous, hysterical and unscientific.”²³²

Dr. Paul Offit, vaccine inventor and safety expert, contests these calls for open dialogue.²³³ He lauds news coverage that forgoes the “false mantra of balance, which is to tell two sides of the story when only one side is supported by the science.”²³⁴ Of course, this Article demonstrates that the “science” might not be as straightforward as Offit and others indicate. This is especially true given the propensity of pharmaceutical companies to engage in data laundering, clinical trial fraud, and financial conflicts of interest (such as Dr. Offit’s own undisclosed and *substantial* financial conflicts of interest with Merck).²³⁵ After all, the very existence of the Injury Act is a government concession that vaccines, despite their importance, are occasionally unsafe—so it is surprising that dialogue about vaccine safety is impermissible in public health discourse.²³⁶

It turns out that corporations might in fact purposefully limit such discourse as part of a larger effort to control narratives about their products. According to a former high-level U.S. public health official,

228. Juliette Kayyem, *Anti-Vaxxers Are Dangerous. Make Them Face Isolation, Fines, Arrests*, WASH. POST (Apr. 30, 2019), <https://www.washingtonpost.com/opinions/2019/04/30/time-get-much-tougher-anti-vaccine-crowd/>.

229. *Id.*

230. Rawlinson, *supra* note 24, at 87.

231. *Id.* at 89.

232. *Id.* at 88.

233. Paul A. Offit, MD, CHILD.’S HOSP. OF PHILA. RSCH. INST., <https://www.research.chop.edu/people/paul-a-offit> (last visited Nov. 29, 2021).

234. Rawlinson, *supra* note 24, at 92.

235. See *supra* Part II.B; see also *Corrections for April 18*, *supra* note 150 (detailing Offit’s undisclosed conflicts of interest).

236. Rawlinson, *supra* note 24, at 91–92.

corporations strategically manufacture one-sided public health narratives:

In just about every corner of the corporate world, conclusions that might support regulation are always disputed. Studies in animals will be deemed irrelevant, human data are dismissed as not representative, and exposure data are discredited as unreliable. Always, there's too much doubt about the evidence, and not enough proof of harm, or not enough proof of *enough* harm.²³⁷

The uniform media condemnation of vaccine hesitancy is all the more surprising, considering that vaccine-hesitant Americans tend to be highly educated individuals.²³⁸ In any event, the prescribed public health discourse related to vaccines fits squarely within the CDoH claim that corporations seek to control the public health narrative to sell more of their products.²³⁹ That narrative—like the U.S. laws that shape it—inevitably promotes consumption, while deemphasizing the product's risks and negating any concomitant corporate liability. Vaccines are undoubtedly a modern medical miracle, but U.S. vaccine legislation is a global outlier, especially given the nation's poor public health outcomes.²⁴⁰ As the next Section demonstrates, U.S. public health legislation regulating obesity likewise promotes consumption—but in a way that has fewer public health benefits than the government's strong vaccine policies.

III. THE COMMERCIAL DETERMINANTS OF U.S. OBESITY LEGISLATION

Obesity is a serious public health problem. Forty-two percent of U.S. adults suffer from obesity, which contributes to 529,299 American fatalities each year from diet-related heart disease, hypertension, stroke,

237. See Michaels, *supra* note 70.

238. See Philip J. Smith et al., *The Association Between Intentional Delay of Vaccine Administration and Timely Childhood Vaccination Coverage*, 125 PUB. HEALTH REP. 534, 539 (2010); see also Jessica E. Atwell et al., *Nonmedical Vaccine Exemptions and Pertussis in California, 2010*, 132 PEDIATRICS 624, 628 (2013) (noting that vaccine-hesitant parents tend to be associated with factors such as a “higher percentage of high school, college, or graduate school graduates; higher median household income; and lower percentage of families in poverty”).

239. See McKee & Stuckler, *supra* note 90, at 1168.

240. See *Vaccine Hesitancy*, *supra* note 2, at 132.

and diabetes.²⁴¹ Obesity is socially contagious,²⁴² and experts believe that by 2048 almost *all* Americans will be overweight or obese.²⁴³ Despite these catastrophic public health outcomes, the U.S. government has instituted extremely weak legal measures to combat obesity. Instead of legal compulsion and mandates, the government defers to each American's personal responsibility and individual freedom with regard to diet.²⁴⁴

This stark policy divergence arises because obesity is *extremely* profitable for private industry,²⁴⁵ which explains the government's otherwise inexplicable laissez-faire approach to the issue.²⁴⁶ Americans spend \$3.8 trillion on healthcare each year, and simply being obese increases healthcare expenses 36 percent and pharmaceutical costs 77 percent, respectively.²⁴⁷ Many top selling drugs treat obesity-related chronic conditions: Lipitor for cholesterol (approximately \$150 billion), Plavix for heart attack (\$84 billion), Nexium for acid reflux (approximately \$62 billion), Lantus for diabetes (approximately \$62 billion), and Diovan for hypertension (approximately \$61 billion).²⁴⁸ And these totals are a relative pittance compared to the food industry, which generates \$5.7 trillion in annual revenue from growing, processing, and selling as much food as possible to consumers.²⁴⁹ These industries want

241. See *Obesity Epidemic*, *supra* note 15, at 197; see also Mokdad et al., *supra* note 10, at 1449.

242. See Christakis & Fowler, *supra* note 12, at 377.

243. See Williams, *supra* note 12, at 37.

244. For a discussion on U.S. policies to combat obesity, see generally Rogan Kersh, *The Politics of Obesity: A Current Assessment and Look Ahead*, 87 MILBANK Q. 295 (2009).

245. See discussion *infra* Part III.A.

246. See *Obesity Epidemic*, *supra* note 15, at 201; see also McKee & Stuckler, *supra* note 90, at 1169 ("Corporations influence regulatory bodies by placing their advisors on committees or by creating revolving doors that enable officials to move into more lucrative consultancies once they have retired.").

247. *National Health Expenditure Data, Historical*, CTRS. FOR MEDICARE AND MEDICAID SERVS. (Dec. 16, 2020), <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical> ("U.S. health care spending grew 4.6 percent in 2019, reaching \$3.8 trillion or \$11,582 per person. As a share of the nation's Gross Domestic Product, health spending accounted for 17.7 percent."); see also Katherine Pratt, *A Constructive Critique of Public Health Arguments for Antiobesity Soda Taxes and Food Taxes*, 87 TUL. L. REV. 73, 84 (2012) ("Health care costs of obese people are 36% higher than the health care costs of people of normal weight and medication costs of obese people are 77% higher than the medication costs of people of normal weight.").

248. James Brumley, *The 15 All-Time Best-Selling Prescription Drugs*, KIPLINGER (Dec. 5, 2017), <https://www.kiplinger.com/slideshow/investing/t027-s001-the-15-all-time-best-selling-prescription-drugs/index.html>.

249. Mallorie McCue, *Follow the Money: Insulating Agribusiness Through Lobbying and Suppression of Individual Free Speech*, 6 PITT. J. ENV'T PUB. HEALTH L. 213, 213 (2012).

Americans to eat food—a *lot* of food, and the government appears happy to assist via weak legislation related to science, government intervention, liability and taxation, and discursive norms related to obesity.

As this Part demonstrates, the food industry corrupts dietary science, administrative agencies, and children's diets, while avoiding financial liability and shaping discourse to deemphasize the danger of obesity and its catastrophic public health consequences. Juxtaposing U.S. vaccination and obesity policy demonstrates that commercial determinants inappropriately control U.S. public health law.

A. Science

Nutrition and dietary science have been clear since at least the 1970s: the U.S. population needs to reduce its fat, cholesterol, sugar, and salt consumption, while eating more whole grains, fruits, and vegetables.²⁵⁰ While many factors contribute to obesity, people ultimately gain weight when they consume more calories than they burn.²⁵¹ Diet and nutrition are the keys to reducing calories, as physical activity does little to control weight.²⁵² Americans need to eat less, but the food industry resists this simple message because it must sell *more* profitable processed foods to maximize profits.²⁵³

The food industry maximizes profits by selling calorie-dense and nutrition-poor processed foods with added sugars, salts, and fats.²⁵⁴ The industry calls these products “value-added” foods, because processing food dramatically increases consumer costs and company profit margins.²⁵⁵ For example, simple rolled oats cost the consumer \$1.60/unit.²⁵⁶ After the industry processes the oats into a breakfast cereal

250. Schaffer, *supra* note 24, at 402.

251. See Tyler Rauh, *Regulating Sugar-Sweetened Beverages*, 27 U. MIAMI BUS. L. REV. 269, 272–73 (2019).

252. Erin Allday, *Experts: For Losing Weight, Diet Beats Exercise*, S.F. GATE (Aug. 27, 2009), <https://www.sfgate.com/health/article/Experts-For-losing-weight-diet-beats-exercise-3288732.php>; see also Stef W. Kight, *Health and Wellness Are Booming, but We're Fatter than Ever*, AXIOS (Oct 22, 2018), <https://www.axios.com/health-wellness-obesity-fat-weight-gain-loss-diet-industry-8b1f4fa4-0299-4986-9544-61af14786b1a.html> (“The problem: Despite promises made by gyms and fitness programs, physical activity does little to help people lose weight, says Ashkan Afshin from the Institute for Health Metrics and Evaluation at the University of Washington.”).

253. See *Obesity Epidemic*, *supra* note 15, at 201.

254. *Id.*

255. MARION NESTLE, *FOOD POLITICS: HOW THE FOOD INDUSTRY INFLUENCES NUTRITION AND HEALTH* 17–19 (rev. ed. 2013).

256. Rosemary Stanton & Christina Pollard, *Why Bad Food Is Good for Business*, CONVERSATION (Aug. 3, 2014, 4:05 PM), <https://theconversation.com/why-bad-food-is-good-for-business-23438>.

with added sugar, salt, and preservatives, it costs the consumer \$9.50/unit.²⁵⁷ In the process, the food also becomes substantially less healthy.²⁵⁸ Processed foods are also more profitable because they are more palatable, do not satiate the appetite, and allow the company to transform a cheap commodity (i.e., a potato) into a more expensive one (e.g., potato chips).²⁵⁹ The “value” of processed foods explains why 70 percent of food marketing is for “convenience foods” (i.e., processed junk foods), while only 2.2 percent of food marketing covers fruits, vegetables, and whole grains.²⁶⁰ Moreover, the food industry designs these processed foods to be addictive, such that Americans are sometimes biologically compelled to keep consuming them.²⁶¹

Like the pharmaceutical industry, the food industry uses its own brand of science to keep Americans consuming its products. In the 1950s, the meat industry responded to emerging evidence that saturated fat in meat caused heart attacks by sponsoring its own scientific studies to show that meat was, in fact, healthy.²⁶² These studies emphasized “only the scientific data that supported its position, while ignoring contrary evidence of arguably greater scientific relevance.”²⁶³ In 1965, John Hickson (a sugar-industry executive) paid three prominent Harvard scientists to publish a review to “debunk” studies pointing to evidence that sugar was unhealthy and contributed to coronary heart disease (despite clear evidence to the contrary).²⁶⁴ The Harvard scientists published the article in the influential *New England Journal of Medicine*, and nutrition experts believe that this study undermined five decades of nutrition science and catalyzed the obesity epidemic.²⁶⁵

The Coca-Cola Company (“Coke”) founded the Beverage Institute for Health & Wellness, through which Coke funnels millions of dollars to scientists who advocate for soda consumption as part of a healthy diet.²⁶⁶ Indeed, between 2010 and 2017, Coke spent \$146 million on “well-being related scientific research” and between 2008 and 2016, it paid 907

257. *Id.*

258. *Id.*

259. See *Obesity Epidemic*, *supra* note 15, at 202–04.

260. See NESTLE, *supra* note 255, at 22.

261. Marc Ambinder, *Bet You Can't Eat Just One*, ATL. (Mar. 29, 2010), <https://www.theatlantic.com/health/archive/2010/03/bet-you-cant-eat-just-one/38181/>.

262. See Schaffer, *supra* note 24, at 388–89.

263. *Id.* at 389.

264. Anahad O'Connor, *How the Sugar Industry Shifted Blame to Fat*, N.Y. TIMES: WELL (Sept. 12, 2016), <https://www.nytimes.com/2016/09/13/well/eat/how-the-sugar-industry-shifted-blame-to-fat.html>.

265. *Id.* (referencing Robert B. McGandy et al., *Dietary Fats, Carbohydrates and Atherosclerotic Vascular Disease*, 277 NEW ENG. J. MED. 186 (1967)).

266. MICHELE SIMON, APPETITE FOR PROFIT 188 (2006).

scientists to publish 389 journal articles indicating that exercise was the key to weight loss, not reducing calories from products like soda.²⁶⁷ General Mills founded the Bell Institute of Health and Nutrition, whose scientists posited that consuming General Mills processed foods contributes to weight loss.²⁶⁸ McDonalds founded the Global Advisory Council on Balanced Lifestyles, and its scientists advocate for integrating fast food into a healthy diet.²⁶⁹

Funded food-industry science has a unified message.²⁷⁰ First, there are no “good” or “bad” foods, only unbalanced diets.²⁷¹ Second, food does not cause obesity; an individual’s lack of personal responsibility for their own weight causes obesity.²⁷² Finally, to lose weight, individuals need to exercise more and worry less about minimizing caloric intake.²⁷³ Of course, the preponderance of evidence points toward the United States being an obesogenic culture: Americans can exercise all they want, but if they continue eating the American diet, they will become overweight or obese.²⁷⁴ In unison, corporate-sponsored “science” chants the mantra of dietary personal responsibility. As the next Section demonstrates, the government joins the refrain.

B. Lobbying & the Revolving Door

The USDA serves a dual function with regard to U.S. agriculture: it supports agricultural industry financial interests and provides Americans with nutrition and dietary advice.²⁷⁵ The food industry exploits this incompatible mandate through lobbying and the revolving

267. Liz Szabo, *Big Soda and the Ballot: Soda Industry Takes Cues from Tobacco to Combat Taxes*, NPR (Nov. 5, 2018, 4:59 PM), <https://www.npr.org/sections/thesalt/2018/11/05/664435761/big-soda-and-the-ballot-soda-industry-takes-cues-from-tobacco-to-combat-taxes>; see also Paulo M Serôdio et al., *Coca-Cola—a Model of Transparency in Research Partnerships? A Network Analysis of Coca-Cola’s Research Funding (2008–2016)*, 21 PUB. HEALTH NUTRITION 1594, 1594 (2018) (discussing how most of the company’s research support was “directed towards physical activity and disregards the role of diet in obesity”).

268. See SIMON, *supra* note 266, at 186–87.

269. See *id.* at 180.

270. See *Obesity Epidemic*, *supra* note 15, at 206.

271. Adam Benforado et al., *Broken Scales: Obesity and Justice in America*, 53 EMORY L.J. 1645, 1739 (2004).

272. Colin Hector, *Nudging Towards Nutrition? Soft Paternalism and Obesity-Related Reform*, 67 FOOD & DRUG L.J. 103, 103 (2012).

273. Anahad O’Connor, *Coca-Cola Funds Scientists Who Shift Blame for Obesity Away from Bad Diets*, N.Y. TIMES: WELL (Aug. 9, 2015, 5:25 PM), <https://well.blogs.nytimes.com/2015/08/09/coca-cola-funds-scientists-who-shift-blame-for-obesity-away-from-bad-diets/>.

274. See Wiley, *supra* note 16, at 145–46.

275. See Schaffer, *supra* note 24, at 391–93.

door.²⁷⁶ The food industry spends \$163 million annually lobbying the government to support its interests at the expense of public health.²⁷⁷ The USDA is also a revolving-door nexus between industry and government.²⁷⁸ Sonny Perdue was the USDA Secretary under the Trump administration.²⁷⁹ Perdue had deep ties to agribusiness and a history of placing agribusiness campaign donors in influential government positions.²⁸⁰ Perdue's Deputy Secretary, Stephen Censky, was previously CEO of the American Soybean Association, which represents "30 soybean-producing states and more than 500,000 U.S. soybean farmers."²⁸¹ A host of former food industry lobbyists served under both Perdue and Censky, and they worked to protect agricultural and food company interests.²⁸² President Biden appointed two-term Iowa Governor Tom Vilsack as USDA Secretary.²⁸³ Prior to joining the Biden administration, Vilsack was a dairy industry lobbyist making close to \$1 million a year supporting agribusiness interests.²⁸⁴ In fact, the biotech industry twice named Vilsack "governor of the year," because he "consistently championed policies that advanced industrial

276. *Id.*

277. *See Obesity Epidemic, supra* note 15, at 206.

278. *Id.* at 210–11.

279. KAREN PERRY STILLERMAN, BETRAYAL AT THE USDA: HOW THE TRUMP ADMINISTRATION IS SIDELINING SCIENCE AND FAVORING INDUSTRY OVER FARMERS AND THE PUBLIC 2 (2018), <https://www.ucsusa.org/sites/default/files/attach/2018/04/betrayal-at-the-usda-report-ucs-2018.pdf>.

280. *Id.* at 5.

281. *Deputy Secretary of Agriculture Stephen Censky*, U.S. DEPT. OF AGRIC., <https://web.archive.org/web/20201109154124/https://www.usda.gov/our-agency/about-usda/our-deputy-secretary>; *About*, AM. SOYBEAN ASS'N, <https://soygrowers.com/about/> (last visited Nov. 29, 2021).

282. *See Obesity Epidemic, supra* note 15, at 210 (first citing STILLERMAN, *supra* note 279, at 4; and then citing Alex Kotch, *Revolving Door: Lobbyists-Turned-USDA-Officials Work with Junk Food Industry to Keep Soda, Candy in SNAP Program*, SLUDGE (Sept. 27, 2018, 3:59 PM), <https://readsludge.com/2018/09/27/revolving-door-lobbyists-tuned-usda-officials-work-with-junk-food-industry-to-keep-soda-candy-in-snap-program/>).

283. The Counter Editors, *Biden's Choice to Lead USDA Is Sparking a Broad Backlash*, COUNTER (Dec. 10, 2020), <https://thecounter.org/biden-usda-tom-vilsack-ag-secretary-backlash/>.

284. Peter Hart, *Five Reasons to Reject Tom Vilsack*, FOOD AND WATER WATCH (Feb. 1, 2021), <https://www.commondreams.org/newswire/2021/02/01/five-reasons-reject-tom-vilsack>.

biotechnologies.”²⁸⁵ Food industry critic Michael Pollan called Vilsack’s political appointment “agribusiness as usual.”²⁸⁶

The USDA is responsible for issuing *Dietary Guidelines* at five-year intervals, which largely determine the food America will grow, buy, and eat.²⁸⁷ The Committee members who draft these guidelines consistently have “food industry financial conflicts of interest.”²⁸⁸ As a result, the *Dietary Guidelines* obscure the basic message that Americans need to “eat less” processed food.²⁸⁹ In many cases, the *Dietary Guidelines* comply with industry demands and encourage Americans to actually consume more unhealthy food.²⁹⁰ In fact, doctors have observed that the “government dietary guidelines for healthy eating are dangerously wrong in almost every respect,” because “the official recommendations of the USDA are determined by the commercial interests of agribusiness.”²⁹¹

The USDA founded and currently funds Dairy Management, an organization that promotes U.S. dairy consumption.²⁹² To help increase U.S. cheese consumption, Dairy Management helped the food industry innovate the cheese-stuffed crust pizza.²⁹³ The cheese-stuffed crust pizza is just one of Dairy Management’s (and, therefore, the government’s)

285. *Center for Food Safety Opposes Tom Vilsack’s Potential Nomination for Secretary of Agriculture*, CTR. FOR FOOD SAFETY (Dec. 7, 2020), <https://www.centerforfoodsafety.org/press-releases/6215/center-for-food-safety-opposes-tom-vilsacks-potential-nomination-for-secretary-of-agriculture>; see also Connor McKoy, *Former U.S. Secretary of Agriculture and Iowa Governor to Receive 2019 George Washington Carver Award*, BIOTECHNOLOGY INNOVATION ORG. (May 20, 2019), <https://www.bio.org/press-release/former-us-secretary-agriculture-and-iowa-governor-receive-2019-george-washington> (summarizing Vilsack’s biotechnology industry support).

286. The Counter Editors, *supra* note 283 (quoting *Michael Pollan on Vilsack, Agriculture—and Food*, NPR (Dec. 18, 2008, 12:02 AM) <https://www.npr.org/2008/12/18/98417440/michael-pollan-on-vilsack-agriculture-and-food>).

287. U.S. DEPT OF HEALTH & HUM. SERVS. and U.S. DEPT OF AGRIC., 2015–2020 DIETARY GUIDELINES FOR AMERICANS xi (8th ed. 2015) (citing National Nutrition Monitoring and Related Research Act, 7 U.S.C.A. §§ 5341(a)(1)-(2) (West 1990)); see also Markham Heid, *Experts Say Lobbying Skewed the U.S. Dietary Guidelines*, TIME (Jan. 8, 2016), <https://time.com/4130043/lobbying-politics-dietary-guidelines/>.

288. See *Obesity Epidemic*, *supra* note 15, at 211.

289. See NESTLE, *supra* note 255, at 66–67.

290. See *Obesity Epidemic*, *supra* note 15, at 209.

291. *Id.* (quoting Richard Jacoby & Raquel Baldelomar, *The FDA’s Phony Nutrition Science: How Big Food and Agriculture Trumps Real Science—And Why the Government Allows It*, SALON (Apr. 12, 2015, 9:30 AM), http://www.salon.com/2015/04/12/the_fdas_phony_nutrition_science_how_big_food_and_agriculture_trumps_real_science_and_why_the_government_allows_it/).

292. See Michael Moss, *While Warning About Fat, U.S. Pushes Cheese Sales*, N.Y. TIMES (Nov. 6, 2010), <https://www.nytimes.com/2010/11/07/us/07fat.html>.

293. See *id.*

many questionable collaborations with the food industry to promote dairy consumption.²⁹⁴

As a result of a series of “confidential agreements approved by agriculture secretaries in both the Bush and Obama administrations, Dairy Management has worked with restaurants to expand their menus with cheese-laden products” for decades.²⁹⁵ This is troubling, since the USDA has identified cheese as the primary source of saturated fat in American diets.²⁹⁶

The USDA is not the only government source of dietary misinformation. In 2010, the Obama administration demanded the food industry reformulate its processed foods and stop marketing junk food to children.²⁹⁷ Shortly thereafter, the CEOs of Nestle, Kellogg’s, and General Mills visited the White House to discuss this directive.²⁹⁸ The Obama administration (led by First Lady Michelle Obama) then summarily pivoted to the “Let’s Move” campaign, which emphasized the importance of exercise, rather than dietary intervention, for overall health.²⁹⁹ This is the precise “scientific” message the food industry seeks to convey to the public to keep it consuming unhealthy products.³⁰⁰ Nestle, Kellogg’s, and General Mills respectively made record lobbying donations during the remainder of the Obama presidency.³⁰¹ Cynical public health advocates observed of the Obama administration’s pivot: “I’d focus more on exercise, too, if my husband was up for re-election.”³⁰² The Trump administration likewise “caved in to food industry demands” and delayed FDA sugar-disclosure requirements on packaged food labels.³⁰³

294. *See id.*

295. *Id.*

296. *Id.*

297. *See* Duff Wilson & Janet Roberts, *How Washington Went Soft on Childhood Obesity*, REUTERS (Apr. 27, 2012), <https://www.reuters.com/article/us-usa-foodlobby/special-report-how-washington-went-soft-on-childhood-obesity-idUSBRE83Q0ED20120427>.

298. *Id.*

299. *Id.*

300. *See supra* Part III.A.

301. CTR. FOR RESPONSIVE POL., *Nestle SA, Annual Lobbying Totals: 1998–2020*, OPENSECRETS, <https://www.opensecrets.org/orgs/lobbying?id=D000042332> (last visited Nov. 29, 2021); CTR. FOR RESPONSIVE POL., *General Mills, Annual Lobbying Totals: 1998–2020*, OPENSECRETS, <https://www.opensecrets.org/orgs/lobbying?id=D000000467> (last visited Nov. 29, 2021); CTR. FOR RESPONSIVE POL., *Kellogg Co., Annual Lobbying Totals: 1998–2020*, OPENSECRETS, <https://www.opensecrets.org/orgs/lobbying?id=D000026978> (last visited Nov. 29, 2021).

302. *See* Wilson & Roberts, *supra* note 297.

303. *See* Woodhouse & Woodhouse, *supra* note 13, at 301.

In 2001, the Surgeon General issued an urgent “Call to Action to Prevent and Decrease Overweight and Obesity.”³⁰⁴ The Surgeon General observed that “[a]pproximately 300,000 deaths a year in this country are currently associated with overweight and obesity.”³⁰⁵ In 2015, the Surgeon General issued a decidedly less urgent “Call to Action to Promote Walking and Walkable Communities.”³⁰⁶ In this more recent call to action, the Surgeon General (in notable contrast to the 2001 Call to Action) does not specifically enumerate the number of annual obesity-related fatalities in the United States.³⁰⁷ However, in line with the Obama administration’s pivot, the Surgeon General did note that “[p]hysical activity can help people with chronic diseases manage their conditions.”³⁰⁸ The Surgeon General’s new approach coincided with a period that witnessed the U.S. adult obesity rate rise from 30.5 to 42.4 percent.³⁰⁹ Commercial determinants appear to bend nutrition regulations to private industry purposes.

C. *Government Intervention*

In stark contrast to interventions like school-entry vaccine mandates, the government appears to *promote* obesity in American schools. The government defines both french fries and pizza as “vegetables” for public school lunches.³¹⁰ Senator Amy Klobuchar led the successful legislative effort to designate pizza as a “vegetable” after accepting campaign

304. See generally U.S. DEP’T HEALTH & HUM. SERVS., THE SURGEON GENERAL’S CALL TO ACTION TO PREVENT AND DECREASE OVERWEIGHT AND OBESITY 2001 (2001) <https://www.ncbi.nlm.nih.gov/books/n/ctaobese/pdf/>.

305. *Id.* at xiii.

306. See generally U.S. DEP’T HEALTH & HUM. SERVS., STEP IT UP! THE SURGEON GENERAL’S CALL TO ACTION TO PROMOTE WALKING AND WALKABLE COMMUNITIES (2015), <https://www.hhs.gov/sites/default/files/call-to-action-walking-and-walkable-communities.pdf>.

307. *Id.* at 1 (observing, instead, that “[o]ne out of every two U.S. adults is living with a chronic disease, such as heart disease, cancer, or diabetes. These diseases contribute to disability and premature death”).

308. *Id.*

309. CRAIG M. HALES ET AL., PREVALENCE OF OBESITY AND SEVERE OBESITY AMONG ADULTS: UNITED STATES, 2017–2018 4 (Feb. 2020), <https://www.cdc.gov/nchs/data/databriefs/db360-h.pdf> (“From 1999–2000 through 2017–2018, the age-adjusted prevalence of obesity increased from 30.5% to 42.4%, and the prevalence of severe obesity increased from 4.7% to 9.2%.”).

310. See Wiley, *supra* note 16, at 159; Brian Kateman, *Pasta Is now a Vegetable? USDA’s School Lunch Guidelines Threaten the Health of Our Nation’s Children*, FORBES (Jan. 30, 2020, 3:22 PM), <https://www.forbes.com/sites/briankateman/2020/01/30/pasta-is-now-a-vegetable-usdas-school-lunch-guidelines-threaten-the-health-of-our-nations-children/?sh=216bc7c2581c/>.

donations from Schwan Food Co.³¹¹ (Schwan is headquartered in Klobuchar's home state of Minnesota, and held a seventy-percent share of the public school frozen pizza market.)³¹² To various degrees, the government allows U.S. schools to enter into exclusive "pouring rights contracts" with soda companies, whereby a soda company secures the right to "supply all the beverages sold in [a school's] on-site snack bars, stores, and soda machines as well as at sports events."³¹³ As recently as 2005, "nearly half of all public elementary schools and about 80 percent of public high schools operated under pouring rights contracts."³¹⁴ Almost every U.S. college has an exclusive pouring rights contract with a major soda company.³¹⁵ The industry's goal with these contracts is to create life-long consumption habits and brand loyalty during a formative period of a child or young adult's life.³¹⁶ The government likewise permits hospitals that receive federal funding to have fast food restaurants inside the hospital.³¹⁷ A 2006 study found that nearly thirty percent of U.S. hospitals with pediatric residency programs had fast food restaurants on-site.³¹⁸

The government turns a blind eye to the food industry's predatory junk food advertising to children. It allows the food industry to engage in a regime of "self-regulation," whereby companies agree to voluntarily limit dangerous or misleading junk food advertising to children.³¹⁹ As a result of these efforts, Kraft Foods and Kellogg's partnered to create the "Smart Choices" certification program to help consumers choose healthy foods; products that bore the Smart Choices label included Froot Loops

311. Brett Neely, *Washington Pizza Sauce Fight Has Deep Minnesota Ties*, MINN. PUB. RADIO (Nov. 18, 2011, 8:44 PM), <https://www.mprnews.org/story/2011/11/18/schwan-foods-pizza-as-vegetable-minnesota-delegation>; see Wilson & Roberts, *supra* note 297.

312. See Wilson & Roberts, *supra* note 297.

313. Tom Philpott, *80 Percent of Public Schools Have Contracts with Coke or Pepsi*, MOTHER JONES (Aug. 15, 2012), <https://www.motherjones.com/food/2012/08/schools-limit-campus-junk-food-have-lower-obesity-rates/>.

314. *Id.*

315. See Andréa Maria Cecil, *Pouring Rights: Academic Misconduct*, CROSSFITJ. (June 18, 2017), <https://journal.crossfit.com/article/pouring-rights-cecil-2> ("In the sea of 3,000-plus American colleges, less than roughly .09 percent are known to have successfully broken ties with Big Soda.")

316. See *id.*

317. Erin Schumaker, *Fast Food Chains Are Allowed Inside Hospitals in These 15 States*, HUFFINGTON POST (Dec. 6, 2017), https://www.huffpost.com/entry/fast-food-hospitals_n_7033300#:~:text=Of%20the%202008%20hospitals%20surveyed,Chick%2Dfil%2DA%20restaurants.

318. Hannah B. Sahud et al., *Marketing Fast Food: Impact of Fast Food Restaurants in Children's Hospitals*, 118 PEDIATRICS 2290, 2296 (2006).

319. See *Obesity Epidemic*, *supra* note 15, at 214.

and Fudgesicles.³²⁰ The government likewise permits the food industry to self-regulate front-of-package labeling, which results in misleading claims to consumers, such as how Apple Jacks “keep children focused at school” and Cocoa Krispies “help[] support your child’s immunity.”³²¹ Other “heart smart” and “heart-healthy foods” include Pop-Tarts, Frosted Flakes, and Fruity Marshmallow Krispies.³²² Indeed, based on recent U.S. government guidance, Pop-Tarts are healthy, while almonds are not.³²³

While the government mandates Hepatitis B vaccines for newborn babies, 14 million American children are obese, which is roughly 20 percent of all U.S. minors.³²⁴ Due to the increasing incidence of childhood type 2 diabetes, the public has ceased referring to the disease by its former name: “adult-onset diabetes.”³²⁵ While type 2 diabetes used to be “unheard of” in people under thirty years of age, “[t]he number of children and adolescents with the condition (most of whom are diagnosed in their early teens) has skyrocketed over the last 20 years and is still climbing, prompting experts to call it an epidemic.”³²⁶ As opposed to the stringent rules the government implements with its mandatory childhood vaccination program, its laissez-faire approach to childhood obesity is confusing and, perhaps, unethical. This policy inconsistency arose because private industry has captured U.S. public health policymaking. In too many instances, public consumption supersedes public health.

D. Liability & Taxation

The government is consistent when it comes to limiting corporate liability and inverting the tax structure to benefit private industry at the public’s expense. Just as the Injury Act exempted the pharmaceutical industry from vaccine-injury liability, twenty states have passed

320. Kathryn E. Hayes, *Front-of-Package Nutrition Claims: Trustworthy Facts or Deceptive Marketing? Closing the Loopholes in Labeling*, 19 CARDOZO J.L. & GENDER 545, 559 (2013).

321. *Id.* at 545, 566.

322. See NESTLE, *supra* note 255, at 124–25.

323. Amy-Lee Goodman, *A “Natural” Stand Off Between the Food and Drug Administration and the Courts: The Rise in Food Labeling Litigation & the Need for Regulatory Reform*, 60 B.C. L. REV. 271, 293 (2019).

324. See *Childhood Obesity Facts*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <https://www.cdc.gov/obesity/data/childhood.html#:~:text=Prevalence%20of%20Childhood%20Obesity%20in%20the%20United%20States&text=The%20prevalence%20of%20obesity%20was,to%2019%2Dyear%2Dolds> (last visited Nov. 29, 2021).

325. Chris Woolston, *Type 2 Diabetes and Kids: The Growing Epidemic*, HEALTH DAY (Dec. 31, 2020), <https://consumer.healthday.com/encyclopedia/diabetes-13/misc-diabetes-news-181/type-2-diabetes-and-kids-the-growing-epidemic-644152.html>.

326. *Id.*

“cheeseburger laws,” which shield the food industry from obesity-related lawsuits.³²⁷ Going further, thirteen states have passed food libel laws, which grant the food industry special standing to sue individuals who disparage food products as unhealthy.³²⁸ These laws relax the defamation burden of proof for the food industry, while increasing the burden of proof for individuals who seek to defend themselves after “disparaging” unhealthy foods.³²⁹ States that pass these laws make no attempt to disguise the commercial motivations behind the legislation: “[T]he production of agricultural and aquacultural food products and commodities constitutes an important and significant portion of the state economy and . . . it is imperative to protect the vitality of the agricultural and aquacultural economy for the citizens of this state”³³⁰ While the agricultural economy is admittedly important, so too is American public health. And too often the liability scales tip in industry’s favor.

Just as the government taxes mandatory vaccines so taxpayers subsidize their own vaccine injury compensation, the federal government likewise requires Americans to subsidize their own obesity. Lobbyists have persuaded the government to spend \$35 billion annually in taxpayer funds to subsidize commodity crops like corn and soybeans, which makes them cheaper for industry to incorporate into profitable “value-added” foods.³³¹ The food industry uses corn, the most heavily subsidized crop, to produce “inexpensive, high-calorie, highly-processed foods like soda, candy, and hotdogs.”³³² The industry processes soy, another heavily subsidized commodity, to make the soy oil in which the fast food industry fries its “value-added” foods—as a result, soy oil constitutes 70 percent of America’s fat consumption.³³³ In other words, taxpayers subsidize the food industry so that the industry can turn around and sell Americans the precise food that causes obesity and contributes to over half a million U.S. deaths a year.³³⁴

At the same time, the federal government and states routinely refuse to pass soda or sugar taxes, despite proof that they curb obesity.³³⁵ In

327. Melissa Mortazavi, *Tort as Democracy: Lessons from the Food Wars*, 57 ARIZ. L. REV. 929, 960 (2015).

328. McCue, *supra* note 249, at 225.

329. *See id.* at 229–30.

330. GA. CODE ANN. § 2-16-1 (Supp. 1998).

331. McCue, *supra* note 249, at 230. *See* Roberta F. Mann, *Controlling the Environmental Costs of Obesity*, 47 ENV’T. L. 695, 707 (2017); NESTLE, *supra* note 255, at 19.

332. Benforado, *supra* note 271, at 1792–93.

333. Caroline Franck et al., *Agricultural Subsidies and the American Obesity Epidemic*, 45 AM. J. PREV. MED. 327, 328 (2013). *See also* NESTLE, *supra* note 255, at 19.

334. *See Obesity Epidemic*, *supra* note 15, at 212–13.

335. *See id.* at 213.

2009, the soda industry spent \$40 million lobbying Congress to defeat a proposed federal soda tax and \$13 million lobbying the New York legislature to defeat the state's proposed soda tax.³³⁶ The government's limited liability measures and perverted tax incentives indicate that commercial determinants distort U.S. public health law to support private industry.

E. Public Health Discourse and Framing

U.S. public health discourse related to obesity has a decidedly different tone to the narrative surrounding vaccination. Public health scholar Lindsey Wiley considered campaigns to shame and stigmatize vaccine-hesitant parents for their "stupid" behavior.³³⁷ On the contrary, Wiley states elsewhere that "[s]tigmatization of obesity is an entirely different kind of phenomenon," such that "legal scholars, advocates, and policymakers concerned with public health and social justice should adopt a destigmatization strategy for obesity."³³⁸ Wiley argues that any attempt to stigmatize obesity as unhealthy is unethical and should, in many contexts, be illegal based on privacy, anti-discrimination, and anti-bullying laws.³³⁹ She condemns as stigmatization the American Medical Association's categorization of obesity as a "disease."³⁴⁰ Legal scholar Yofi Tirosh advocates for a "constitutional right to be fat," such that anti-obesity measures in the school environment constitute "an illegitimate violation of liberty."³⁴¹ The right to be obese, says Tirosh, is a fundamental liberty akin to "speech or religious faith."³⁴² As such, the right to be fat "is the right to be free of governmental (and sometimes societal) intervention regarding one's weight."³⁴³ These positions stand in stark contrast to the discourse that frames school-entry vaccine mandates discussed above.

The food industry and its public health allies likewise employ a discursive strategy to avert government dietary intervention.³⁴⁴ They seek to "[r]aise fears that government action usurps personal freedom, [v]ilify critics with totalitarian language, characterizing them as the food police, leaders of a nanny state, and even 'food fascists,' and accuse them

336. See Wilson & Roberts, *supra* note 297.

337. See Silverman & Wiley, *supra* note 7, at 571.

338. See Wiley, *supra* note 16, at 130.

339. *Id.* at 131.

340. *Id.* at 178.

341. See Tirosh, *supra* note 20, at 267.

342. *Id.* at 269.

343. *Id.* at 313.

344. See Brownell & Warner, *supra* note 103, at 265.

of desiring to strip people of their civil liberties.”³⁴⁵ This stance is the polar opposite to that regarding government vaccine mandates—despite the fact that obesity is contagious and kills more Americans than communicable disease, while healthy diets pose absolutely no risk of adverse events in children.³⁴⁶

These positions relate to a larger “fat acceptance” movement, which “seeks to end the discrimination, stigma, and shame based on fatness,” because any kind of “[d]iscrimination is harmful and unacceptable regardless of a person’s health.”³⁴⁷ Within the fat acceptance community, the government’s compromised “Let’s Move” campaign is stigmatizing, as it “is in fact supporting childhood bullying, suggesting the ‘otherness’ (e.g., size, shape, and/or weight)” is unacceptable.³⁴⁸ Indeed, any legislative effort to curtail childhood obesity “communicates to students that being overweight or obese should not be the norm.”³⁴⁹ Given that unhealthy diets and obesity kill 529,299 Americans a year, it is alarming that society cannot agree on the basic premise that obesity should not, in fact, be the norm.

While schools deny unvaccinated children the right to an education, universities offer courses in Fat Studies, where students learn about issues ranging from “weight justice” and “fat liberation” to “fatness as a social construct.”³⁵⁰ The academic journal *Fat Studies* publishes scholarly articles advocating for students to reject “healthism,” or the notion that it is unhealthy to be overweight.³⁵¹ The academic discourse related to obesity consistently deemphasizes the health risks associated with being overweight.

The very same public health advocates who support doctors dismissing unvaccinated patients, claim that physicians should not have to occupy the position of “enforcer” with regard to obesity-related health

345. *Id.*

346. See Christakis & Fowler, *supra* note 12, at 377. See generally Mokdad et al., *supra* note 10, at 1145, 1449–50 (noting that obesity is a main cause associated with US morbidity and mortality, then comparing death rates between obesity-related disease and communicable diseases).

347. Lauren E. Jones, *The Framing of Fat: Narratives of Health and Disability in Fat Discrimination Litigation*, 87 N.Y.U. L. REV. 1996, 1997–98 (2012).

348. Susan Yeh, *Laws and Social Norms: Unintended Consequences of Obesity Laws*, 81 U. CIN. L. REV. 173, 182 (2012) (quoting Jenny A. Armentrout, *Sugar, Salt, and Fat: Michelle Obama’s Rhetoric Concerning the Let’s Move! Initiative: Binary Opposition, Weight Obsession, and the Obesity Paradox* 129 (Aug. 2011) (Ph.D. dissertation), https://etd.ohiolink.edu/apexprod/rws_olink/r/1501/10?clear=10&p10_accession_num=bgsu1307554274).

349. *Id.* at 188.

350. Toni Airaksinen, *Colleges Dropping ‘Fat Studies’ Courses in 2018*, CAMPUS REFORM (Jan. 17, 2018, 3:03 AM), <https://www.campusreform.org/?ID=10393>.

351. *Id.*

protocols.³⁵² Doctors should avoid anti-obesity rhetoric because it “can have a negative effect on the doctor-patient relationship.”³⁵³ Instead, doctors should play a supportive role with regard to obesity-related health care. This role, according to Dr. Robert Lustig, emerges because the food and pharmaceutical industries have acquired “pervasive influence over policy that coerces doctors into prescribing unnecessary and potentially harmful treatments rather than providing [obese] patients with basic lifestyle solutions.”³⁵⁴ In other words, corporations encourage doctors to prescribe drugs to obese patients—not, as is the case with vaccine-hesitant patients, to refuse them care or file child neglect reports with the state.

Dr. Richard Atkinson, an American Obesity Association (“AOA”) spokesperson, adopted this supportive stance when he announced that it is “time to stop thinking of obesity as a problem of willpower,” because “diet, exercise and behavior modification just don’t work [in the] long term.”³⁵⁵ As Dr. Atkinson put it: “the time has come to start thinking about drugs.”³⁵⁶ It was later revealed that the AOA and Atkinson received the bulk of their funding from drug companies, prompting Atkinson to respond “I think I’ve been pretty honest and uncorrupted by the money. But who knows, maybe it’s so insidious that I don’t notice it.”³⁵⁷ Indeed, doctors and researchers who accept industry funding are up to eight times more likely to reach conclusions favorable to industry sponsors as compared to unfunded scientists.³⁵⁸

This Section suggests that private industry influence over public health discourse is, in fact, so insidious that many public health scholars, advocates, and doctors simply do not recognize the role they play in promoting unhealthy commodity consumption. Recall, the primary danger of CDoH is that its power is subtle and almost invisible—even to individuals like Dr. Atkinson, who accept direct corporate payments to promote industry products.³⁵⁹ Witting or unwitting, obesity-related public health discourse ignores a growing public health crisis that contributes to more than half-a-million American deaths each year.³⁶⁰

352. See Wiley, *supra* note 16, at 180.

353. *Id.*

354. Rob Lustig, *Big Food and Big Pharma: Killing for Profit*, ROBERTLUSTIG.COM (Apr. 15, 2018), <https://robertlustig.com/2018/04/malhotra-eu-big-food-pharma/>.

355. See KASSIRER, *supra* note 125, at 34.

356. *Id.*

357. *Id.* at 9.

358. Lenard I. Lesser et al., *Relationship Between Funding Source and Conclusion Among Nutrition-Related Scientific Articles*, 4 PLOS MEDICINE 41, 44–45 (2007).

359. See McKee & Stuckler, *supra* note 90, at 1168.

360. See Mokdad et al., *supra* note 10, at 1449.

IV. THE COVID-19 PANDEMIC

The government's divergent obesity and vaccine public health policies converged during the COVID-19 pandemic. This convergence serves as a case study for testing this Article's thesis that commercial determinants produce U.S. public health laws that prioritize corporate consumption and profit over health. It is imperative to note that the U.S. prioritization of vaccine development during the pandemic was admirable, and undoubtedly saved—and will continue to save—countless lives. However, the U.S. government largely ignored obesity's correlation to COVID-19 fatalities in the United States and has taken no steps to mitigate obesity's future pandemic-related dangers.³⁶¹ Indeed, the government likely exacerbated the obesity crisis with its pandemic response. A close examination of the government's public health response to the pandemic reinforces the claim that commercial forces play an inappropriate role in U.S. public health law.

A. *Science*

During the pandemic, the American public grew accustomed to (and sometimes weary from) the common refrain that politicians, public health officials, and the media were “following the science.”³⁶² However, the science has been unequivocal throughout the pandemic: “[i]t was clear early in the outbreak that obesity heightened the risk for people infected with the coronavirus” and that overweight and obesity were “always positively associated with severity of COVID-19.”³⁶³ Nations around the globe confirmed that “those who are obese are more likely to die from COVID-19 than are those of normal weight, even when factors such as diabetes and hypertension are taken into account.”³⁶⁴ The World Obesity Federation determined that nations (like the United States) where more than half of the population is overweight experienced *ten times* the fatality rates of nations with normal-weight populations.³⁶⁵

361. See Meera Senthilingam, *Covid-19 Has Made the Obesity Epidemic Worse, but Failed to Ignite Enough Action*, *BMJ* (Mar. 4, 2021) <https://www.bmj.com/content/372/bmj.n411>; Heidi Ledford, *How Obesity Could Create Problems for a COVID Vaccine*, *NATURE* (Oct. 20, 2020), <https://www.nature.com/articles/d41586-020-02946-6>.

362. Christa Case Bryant & Story Hinckley, *In a Polarized World, What Does 'Follow the Science' Mean?*, *CHRISTIAN SCI. MONITOR* (Aug. 12, 2020), <https://www.csmonitor.com/Science/2020/0812/In-a-polarized-world-what-does-follow-the-science-mean>.

363. Ledford, *supra* note 361.

364. *Id.*

365. Mascarenhas & Rahim, *supra* note 27.

The CDC estimates that roughly three out of every four Americans who died from COVID-19 (and four out of every five who were hospitalized) were overweight or obese.³⁶⁶ Armed with definitive scientific evidence about obesity's determinative role in negative COVID-19 outcomes, the government ignored the obesity issue; instead, it initiated Operation Warp Speed.³⁶⁷ The government describes Operation Warp Speed as "a public-private partnership to facilitate, at an unprecedented pace, the development, manufacturing, and distribution of COVID-19 countermeasures," such as vaccines.³⁶⁸ Some government officials privately expressed fear that Operation Warp Speed was not entirely motivated by science—and that perhaps financial and political interests played a role in the government's policies.³⁶⁹

B. Lobbying & the Revolving Door

Operation Warp Speed was riddled with pharmaceutical industry financial conflicts of interest.³⁷⁰ The government chose former GSK executive Moncef Slaoui to lead the vaccine effort; Slaoui was a sitting board member of Moderna, which received substantial government investment early in Operation Warp Speed.³⁷¹ Shortly after Slaoui took the helm of Operation Warp Speed and Moderna became a COVID vaccine frontrunner, he sold his Moderna stock for \$8 million.³⁷² Two other key Operation Warp Speed advisors, William Erhardt and Rachel Harrigan, held financial stakes in Pfizer.³⁷³ President Trump's former FDA Commissioner (and pharmaceutical industry venture capitalist), Scott Gottlieb, sat on Pfizer's Board of Directors throughout Operation

366. Steven Briggs, *Nearly 3 Out of 4 of Those Who Died of COVID-19 Were Overweight or Obese*, SCRUBBS MAG. (Mar. 9, 2021), <https://scrubsmag.com/nearly-3-out-of-4-of-those-who-died-of-covid-19-were-overweight-or-obese/>; see also Marion Nestle, *Overweight Is a Major Risk Factor for Covid-19 Hospitalization and Death*, FOOD POL. (Mar. 17, 2021), <https://www.foodpolitics.com/2021/03/24297/>.

367. *Trump Administration Announces Framework and Leadership for 'Operation Warp Speed'*, DEPT. OF HEALTH AND HUM. SRVS. (May 15, 2020), <https://public3.pagefreezer.com/browse/HHS%20%E2%80%93%20A0About%20News/20-01-2021T12:29/> <https://www.hhs.gov/about/news/2020/05/15/trump-administration-announces-framework-and-leadership-for-operation-warp-speed.html>.

368. *Id.*

369. Sharon LaFraniere, *Scientists Worry About Political Influence Over Coronavirus Vaccine Project*, N.Y. TIMES (Aug. 2, 2020), <https://www.nytimes.com/2020/08/02/us/politics/coronavirus-vaccine.html>.

370. Rachana Pradhan, *How Pharma Money Colors Operation Warp Speed's Quest to Defeat COVID*, KAISER HEALTH NEWS (Nov. 30, 2020), <https://khn.org/news/article/how-pharma-money-colors-operation-warp-speeds-quest-to-defeat-covid/>.

371. *Id.*

372. *Id.*

373. *Id.*

Warp Speed.³⁷⁴ In 2019 and 2020, Pfizer was the leading pharmaceutical company lobbyist, donating \$11 million and \$13 million to public officials, respectively.³⁷⁵ On December 11, 2020, the FDA issued an emergency use authorization (“EUA”) for Pfizer’s vaccine, which allowed the company to begin selling the vaccine in the United States.³⁷⁶ One week later, the FDA issued an EUA for Moderna’s COVID-19 vaccine.³⁷⁷ Steve Hahn was the FDA Commissioner who authorized Moderna’s vaccine.³⁷⁸ A few months after authorizing the vaccine, Hahn left the FDA to become the chief medical officer of Flagship Pioneering, the venture capital firm that founded (and shares leadership with) Moderna.³⁷⁹ Johnson & Johnson, a top President Biden political donor, received FDA EUA for its vaccine on February 27, 2021.³⁸⁰ These vaccines have saved countless lives; they have also generated unprecedented industry profit.³⁸¹

374. *Id.*; see also *supra* Part II.B.

375. *Industry Profile: Pharmaceuticals/Health Products*, OPENSECRETS.ORG, <https://www.opensecrets.org/federal-lobbying/industries/summary?cycle=2020&id=H04>.

376. News Release, *FDA Take Key Action in Fight Against COVID-19 by Issuing Emergency Use Authorization for First COVID-19 Vaccine*, U.S. FOOD & DRUG ADMIN. (Dec. 11, 2020), <https://www.fda.gov/news-events/press-announcements/fda-takes-key-action-in-fight-against-covid-19-issuing-emergency-use-authorization-first-covid-19>; *Pfizer-BioNTech COVID-19 Vaccine*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/pfizer-biontech-covid-19-vaccine> (last visited Nov. 29, 2021).

377. *Moderna COVID-19 Vaccine*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/moderna-covid-19-vaccine> (last visited Nov. 29, 2021).

378. Kyle LaHucik, *He Authorized Moderna’s Vaccine 6 Months Ago. Now, Ex-FDA Chief Hahn Joins Biotech’s Backer*, FIERCE BIOTECH (June 14, 2021), <https://www.fiercebiotech.com/biotech/six-months-after-granting-moderna-covid-19-eua-ex-fda-commish-joins-biotech-s-founding> (“Under Hahn’s watch, the FDA granted emergency use authorization to [Moderna’s] COVID-19 vaccine just behind a similar OK for Pfizer and BioNTech’s jab. Tens of millions of Americans have now received a Moderna shot”).

379. *Id.* (noting that “[n]ow, Hahn will head for another high pressure environment: biotech investing. He is now joining Flagship, the venture fund that birthed Moderna, the very company that earned Hahn’s nod six months ago” and “Hahn will help lead Flagship’s nascent Preemptive Medicine and Health Security business. Flagship founder and CEO Noubar Afeyan, Ph.D., is also chairman of Moderna”); see also *Companies, Moderna*, FLAGSHIP PIONEERING, <https://www.flagshippioneering.com/companies/moderna> (last visited Nov. 29, 2021).

380. *Janssen COVID-19 Vaccine*, U.S. FOOD & DRUG ADMIN., <https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/janssen-covid-19-vaccine> (last visited Nov. 29, 2021); see also *Johnson & Johnson*, OPENSECRETS.ORG, <https://www.opensecrets.org/orgs/johnson-johnson/summary?id=D000000386> (last visited Nov. 29, 2021) (showing that the company’s largest lobbying contributions went to President Joe Biden).

381. John LaMattina, *Disturbing Attempts to Rewrite Covid-19 Vaccine History*, FORBES (Jun. 15, 2021, 3:10 PM), <https://www.forbes.com/sites/johnlamattina/>

To mitigate the spread of COVID-19, state governments around the United States imposed stay-at-home and shelter-in-place orders, which shut down most social institutions.³⁸² However, the government permitted “essential businesses,” such as fast food restaurants, to remain open, because they provided “inexpensive and speedy” food options.³⁸³ This contributed to a “bonanza in the food delivery market,” as America experienced “the most revolutionary change in the food business in decades, creating an unprecedented boom in this projected \$154 billion industry.”³⁸⁴ Although these essential services flourished, U.S. public health did not.³⁸⁵ The nation suffered a “striking” increase in childhood obesity during the pandemic, with the childhood obesity rate rising an “alarming” two percent in a single year.³⁸⁶ According to the American Psychological Association, 42 percent of U.S. adults reported unwanted weight gain, with an average increase of twenty-nine pounds.³⁸⁷ The

2021/06/15/disturbing-attempts-to-rewrite-covid-19-vaccine-history/?sh=276f8d287d00 (“Pfizer has forecasted \$26 billion in coronavirus revenues this year and Moderna’s 2021 vaccine sales projections are about \$19 billion.”); *see also* Chris Isidore, *Pfizer Revenue and Profits Soar on Its Covid Vaccine Business*, CNN (Nov. 2, 2021), <https://www.cnn.com/2021/11/02/business/pfizer-earnings/index.html> (Pfizer has increased its earnings estimates, disclosing that “it expects a total of \$36 billion from the vaccine for all of 2021 – nearly \$12 billion more in revenue the final quarter of the year. And it said based on contracts it now has signed it expects revenue \$29 billion from the Covid vaccine in 2022. And that’s not necessarily all it will bring in.”); *see also* Hanna Ziady, *Covid Vaccine Profits Mint 9 New Pharma Billionaires*, CNN (May 21, 2021, 4:03 PM), <https://www.cnn.com/2021/05/21/business/covid-vaccine-billionaires/index.html> (noting that nine new pharmaceutical executives and industry insiders became billionaires due to COVID vaccine sales).

382. Sarah Mervosh et al., *See Which States and Cities Have Told Residents to Stay at Home*, N.Y. TIMES (Apr. 20, 2020), <https://www.nytimes.com/interactive/2020/us/coronavirus-stay-at-home-order.html>.

383. Kate Taylor, *Why Fast-food Workers Are Considered Essential, Even as Employees Worry They Could Risk Catching or Spreading Coronavirus at Work*, BUS. INSIDER (Mar. 26, 2020, 10:44 AM), <https://www.businessinsider.com/coronavirus-why-fast-food-workers-essential-2020-3>.

384. *Wall Street is Banking Billions on the Food Delivery Boom*, CISION PR NEWSWIRE (Dec. 23, 2020), <https://www.prnewswire.com/news-releases/wall-street-is-banking-billions-on-the-food-delivery-boom-301197931.html>.

385. Joshua Cohen, *Covid-19’s Impact on Public Health, Healthcare, and the Economy Will Linger in 2021*, FORBES (Jan. 1, 2021, 9:34 AM), <https://www.forbes.com/sites/joshuacohen/2021/01/01/covid-19s-impact-on-public-health-healthcare-and-the-economy-will-linger-in-2021/?sh=7cf0baa727ba> (“The Covid-19 crisis has exposed major defects in U.S. public health.”).

386. Jake Remaly, *‘Striking’ Increase in Childhood Obesity During Pandemic*, WEBMD (Mar. 30, 2021), <https://www.webmd.com/lung/news/20210330/striking-increase-in-childhood-obesity-during-pandemic>.

387. *One Year On: Unhealthy Weight Gains, Increased Drinking Reported by Americans Coping with Pandemic Stress*, AM. PSYCH. ASS’N (Mar. 11, 2021), <https://www.apa.org/news/press/releases/2021/03/one-year-pandemic-stress>.

government appears to have taken some counterintuitive health measures with regard to obesity and its clear impact on COVID-19 outcomes—unless commercial determinants played a role in shaping these public health policies.

C. Government Intervention

During Operation Warp Speed, COVID vaccine hesitancy was high due to the rapid nature of vaccine development and the pandemic's politicized nature.³⁸⁸ Vaccine hesitancy continues to be a problem, as many Americans still have “concerns about safety, side effects and distrust in government.”³⁸⁹ To combat vaccine hesitancy, the Biden administration launched the “We Can Do This” public health campaign, as an “initiative to increase confidence in COVID-19 vaccines.”³⁹⁰

As part of this initiative, the government entered into a public-private partnership with McDonald's “to make access to information on vaccines even easier for the millions of customers who enjoy McDonald's each day in the U.S.”³⁹¹ As part of the partnership, McDonald's includes important vaccine information and vaccine-appointment links on its fast food packaging.³⁹² As a result, when Americans enjoy their next McDonald's “Big Mac meal” (totaling 1,100 calories, 44 grams of fat, 149 grams of carbs, and 1,225 milligrams of sodium), they will learn about the importance of vaccination in preventing serious COVID-19 health outcomes.³⁹³ In California, McDonald's locations administer vaccines, with one vaccine recipient and McDonald's customer noting that “[w]ell you know, some people will do almost anything for a free Happy Meal.”³⁹⁴

388. Laura Santhanam, *Why Americans Have Grown More Hesitant About the COVID-19 Vaccine*, PBS (Oct. 9, 2020, 4:57 PM), <https://www.pbs.org/newshour/health/why-americans-have-grown-more-hesitant-about-the-covid-19-vaccine>.

389. Cara Murez, *Poll Reveals Who's Most Vaccine-Hesitant in America and Why*, WEBMD (Apr. 29, 2021), <https://www.webmd.com/vaccines/covid-19-vaccine/news/20210429/poll-reveals-whos-most-vaccine-hesitant-in-america-and-why>.

390. See *COVID-19 Public Education Campaign*, U.S. DEPT OF HEALTH & HUMAN SERVS. (Feb. 25, 2021), <https://wecandothis.hhs.gov>.

391. *McDonald's Partners with the Biden Administration to Provide Trusted, Independent Information on COVID-19 Vaccines*, MCDONALDS (May 11, 2021), <https://corporate.mcdonalds.com/corpmcd/en-us/our-stories/article/.biden-covid-vaccines.html>.

392. *Id.*

393. *Id.*; Jill Corleone, *The Shocking Amount of Calories in McDonald's Big Mac Meal*, LIVESTRONG.COM (Jul. 22, 2019), <https://www.livestrong.com/article/312522-how-many-calories-are-in-a-big-mac-meal/>.

394. Ryan Hill, *Local McDonald's Locations Partnering with CDPH to Get People Vaccinated*, CBS SACRAMENTO (Jun. 23, 2021, 5:55 AM), <https://sacramento.cbslocal.com/2021/06/23/mcdonalds-partnering-cdph-covid-vaccine/>.

The government might better serve U.S. public health if it partnered with McDonald's to use fast food packaging to inform consumers that the overweight comprised three out of every four U.S. COVID deaths.³⁹⁵ Krispy Kreme and Taco Bell have also helped with the vaccination push, offering free glazed donuts and a "free seasoned beef Nacho Cheese Doritos Locos Taco" to customers with proof of vaccination.³⁹⁶

To protect public health, many American colleges have imposed vaccine mandates for students.³⁹⁷ Rutgers was the first university to mandate the vaccine.³⁹⁸ Notably, Johnson & Johnson "has a long-standing collaborative drug manufacturing partnership with Rutgers [University]."³⁹⁹ Rutgers' decision set the precedent for widespread college COVID vaccine mandates.⁴⁰⁰

COVID vaccine hesitancy persisted, which prompted President Biden to issue a sweeping federal vaccine mandate that would require two-thirds of American workers to be vaccinated.⁴⁰¹ Public health advocates described the vaccine mandate as "unprecedented."⁴⁰² The government mandate is currently wending its way through the federal court system to determine its legality.⁴⁰³ In the meantime, to address the waning

395. See *supra* Part IV.A.

396. *COVID-19 Vaccine Offer*, KRISPY KREME, <https://www.krispykreme.com/promos/vaccineoffer> (last visited Nov. 29, 2021); Kerry Breen, *Taco Bell is Shelling Out Free Tacos to Vaccinated People Today — But Only in this State*, TODAY (Jun. 15, 2021, 2:41 PM), <https://www.today.com/food/taco-bell-giving-free-tacos-vaccinated-california-residents-t222211>.

397. Elizabeth Redden, *Rutgers Will Require Students to Get Vaccine*, INSIDE HIGHER ED. (Mar. 26, 2021), <https://www.insidehighered.com/news/2021/03/26/rutgers-will-require-covid-vaccine-students-fall>.

398. *Id.*

399. Ken Congdon, *Janssen's Fruitful Continuous Manufacturing Collaboration*, PHARM. ONLINE (June 24, 2015), <https://www.pharmaceuticalonline.com/doc/janssen-s-fruitful-continuous-manufacturing-collaboration-0001>.

400. See Rukmini Callimachi, *For Colleges, Vaccine Mandates Often Depend on Which Party Is in Power*, N.Y. TIMES (updated Aug. 12, 2021), <https://www.nytimes.com/2021/05/22/us/college-vaccine-universities.html>.

401. Katie Rogers & Sheryl Gay Stolberg, *Biden Mandates Vaccines for Workers, Saying, 'Our Patience Is Wearing Thin'*, N.Y. TIMES (updated Nov. 12, 2021), <https://www.nytimes.com/2021/09/09/us/politics/biden-mandates-vaccines.html> (During his vaccine-mandate announcement, the President informed Americans that the government's "patience is wearing thin" with the vaccine hesitant, and he indicated to governors who opposed his mandate that he would "use [his] power as president to get them out of the way.").

402. *Id.*

403. Andrea Hsu, *6th Circuit Court 'wins' Lottery to Hear Lawsuits Against Biden's Vaccine Rule*, NPR (Nov. 16, 2021), <https://www.npr.org/2021/11/16/1056121842/biden-lawsuit-osh-vaccine-mandate-court-lottery> (noting that "[t]he 6th Circuit Court of Appeals has won the lottery to hear legal challenges to the Biden administration's vaccine rule that affects some 84 million workers. The lottery was announced after multiple lawsuits against

efficacy of COVID vaccines, the government has authorized “booster” shots, or an additional vaccine dose for all American adults.⁴⁰⁴ As this Section demonstrates, during the pandemic the government’s vaccine and obesity interventions followed a similar course to its pre-pandemic policies.

D. Liability & Taxation

In February 2020, Health and Human Services Secretary Alex Azar invoked PREPA, effectively shielding Pfizer, Moderna, and Johnson & Johnson from any plausible vaccine-related liability.⁴⁰⁵ As the COVID-19 vaccines are still governed under PREPA, injured parties cannot seek government compensation through the Injury Act.⁴⁰⁶ Americans may seek government compensation via the highly restrictive “countermeasures compensation program,” which provides little-to-no vaccine-injury compensation and amounts to nothing more than “a right to file [a claim] and lose.”⁴⁰⁷ As of May 2021, the government has authorized \$6 trillion in taxpayer-funded COVID relief, with \$90 billion

the administration were filed in several federal appeals courts” and that “[l]awsuits challenging the rule came in quick succession. Within 10 days, 34 lawsuits were filed, covering all 12 regional circuit courts and giving each of those courts one entry into the lottery.”)

404. Sharon LaFraniere & Noah Weiland, *F.D.A. Authorizes Coronavirus Booster Shots for All Adults*, N.Y. TIMES (Nov. 19, 2021), <https://www.nytimes.com/2021/11/19/us/politics/coronavirus-boosters-fda.html> (noting that “[o]ther public health experts have argued that the government needed to act quickly to expand access to boosters both to counteract waning immunity and to eliminate confusion” and that some government officials were “[f]earful that waning protection and the onset of winter will set off a wave of breakthrough infections.”).

405. MacKenzie Sigalos, *You Can’t Sue Pfizer or Moderna if You Have Severe Covid Vaccine Side Effects. The Government Likely Won’t Compensate You for Damages Either*, CNBC (Dec. 23, 2020, 12:32 AM), <https://www.cnn.com/2020/12/16/covid-vaccine-side-effects-compensation-lawsuit.html>.

406. Peter Loftus & Susan Pulliam, *People Harmed by Coronavirus Vaccines Will Have Little Recourse*, WALL ST. J. (Oct. 11, 2020, 12:00 PM), <https://www.wsj.com/articles/people-harmed-by-coronavirus-vaccines-will-have-little-recourse-11602432000>; *see also Compensation Programs for Potential COVID-19 Vaccine Injuries*, CONG. RSCH. SERV. (Oct. 20, 2021), <https://crsreports.congress.gov/product/pdf/LSB/LSB10584> (noting that “[p]ursuant to the PREP Act Declaration and its subsequent amendments, manufacturers, distributors, and health care providers are generally immune from legal liability (i.e., they cannot be sued for money damages in court) for losses related to the administration or use of covered countermeasures against COVID-19” and that only “[a]fter the Secretary terminates the PREP Act Declaration for the COVID-19 pandemic, any injuries or death from COVID-19 vaccines administered after the declaration ends would be addressed in court under tort law unless the COVID-19 vaccines are added to the [Injury Act]”).

407. *See* Loftus & Pulliam, *supra* note 406.

allocated for COVID-19 vaccines and treatments and \$29 billion to support restaurants.⁴⁰⁸

E. Public Health Discourse and Framing

The tone of public health discourse during the pandemic echoes pre-pandemic public health rhetoric. *USA Today* published an article stating “[i]t’s time to start shunning the ‘vaccine hesitant.’ They’re blocking COVID herd immunity,” which states “[b]ut the time for analyzing why these human petri dishes have chosen to ignore the medical science that could save them, and us, is over. We need a different strategy. I propose shunning.”⁴⁰⁹ The author advocates for cutting all personal ties with anybody who declines COVID-19 vaccination.⁴¹⁰ The *Washington Post* finds COVID vaccine-hesitant individuals are “bad citizen[s]” and shameful.⁴¹¹ The *Review* informs the public that the COVID vaccine hesitant are selfish, and should “grow the f*ck up.”⁴¹² Pfizer board member (and former FDA Commissioner) Scott Gottlieb advocates for “vaccine passports,” or a requirement for digital proof of vaccination to participate in social activities.⁴¹³ Vaccine passport proponents note that the official credential of vaccination does not “take away your freedom,” as the new credentials would simply mean that “once people get their inoculations, the ‘passports’ would grant them access to venues denied to those without them,” such as “[a]irlines, sports stadiums, concert halls, malls, office complexes or schools.”⁴¹⁴ The public health message is clear: vaccination is the only way to avoid negative COVID-19 outcomes.⁴¹⁵

408. Katie Lobosco & Tami Luhby, *\$6 Trillion Stimulus: Here’s Who Got Relief Money so Far*, CNN, <https://www.cnn.com/2021/05/26/politics/6-trillion-stimulus-where-it-went/index.html> (June 2, 2021, 4:37 PM).

409. Michael J. Stern, *It’s Time to Start Shunning the ‘Vaccine Hesitant.’ They’re Blocking COVID Herd Immunity*, USA TODAY (May 2, 2021, 1:25 PM), <https://www.usatoday.com/story/opinion/2021/04/30/require-covid-vaccine-resume-normal-life-herd-immunity-column/4886673001/>.

410. *Id.*

411. Michael Gerson, Opinion, *If You Are Healthy and Refuse to Take the Vaccine, You Are a Free-rider*, WASH. POST (Apr. 15, 2021, 3:42 PM), <https://www.washingtonpost.com/opinions/2021/04/15/healthy-refusing-covid-vaccine-shame-you/>.

412. Rachel Sawicki, Opinion, *Waiting to Get Your COVID-19 Vaccine Is Selfish*, REV. (Mar. 27, 2021), <https://udreview.com/opinion-waiting-to-get-your-covid-19-vaccine-is-selfish/>.

413. Gottlieb, *supra* note 173.

414. Nicholas Goldberg, *Opinion: Vaccine Passports Are the Nudge We Need to Achieve Herd Immunity*, VIRGINIAN-PILOT (Apr. 30, 2021, 6:05 PM), <https://www.pilotonline.com/opinion/columns/vp-ed-column-goldberg-0501-20210430-qywt6tjmnfqpds6rivwxqhe3m-story.html>.

415. See Stern, *supra* note 409; see also Gerson, *supra* note 397; see also Sawicki, *supra* note 412; see also Gottlieb, *supra* note 173; see also Goldberg, *supra* note 414.

As for the topic of obesity's role in the pandemic, the discourse remained unchanged from pre-pandemic protocols. The *Huffington Post* declares that linking obesity to increased COVID-19 risk and criticizing free donuts as an unhealthy vaccine incentive "isn't really about health — it's about fatphobia."⁴¹⁶ Making the connection between eating donuts, obesity, and COVID-19 severity is "harmful discourse that only serves to ostracize the fat community."⁴¹⁷ As the author points out, Krispy Kreme being altruistic and "[g]etting more people vaccinated is undeniably good for public health. Food-shaming messages about doughnuts, on the other hand, are rooted in fatphobia and aren't health-promoting at all. Go ahead and eat the doughnut."⁴¹⁸ According to another article, media reports that point out the correlation between obesity and negative COVID-19 outcomes are abusive, because "the plus-size community is not only left terrified by news of increasing numbers of Covid-19 cases; it's also being shamed by these reports."⁴¹⁹ A recent *L.A. Times* headline observes that "Fat shaming, BMI and alienation: COVID-19 brought new stigma to large-sized people."⁴²⁰ During the pandemic, the window of acceptable public health discourse remains the same: the vaccine hesitant are dangerous, while obesity is neither a serious public health concern nor worthy of discussion.⁴²¹

The pandemic demonstrates how commercial determinants appear to shape U.S. public health law and discourse. These commercial determinants influence how the government purportedly follows the science, distributes influence, intervenes in Americans' daily lives, applies taxes, allocates liability, and permits (or limits) public health discourse. These pandemic policies mirror the government's larger vaccine and obesity policies. In each case, it prioritizes consumption, while flatly ignoring obesity's dangers and the importance of maintaining a healthy diet and lifestyle.

416. Christine Byrne, *Weight Shaming (Not Free Doughnuts) Is the Real Health Threat. Here's Why*, HUFFINGTON POST, https://www.huffpost.com/entry/fatphobia-health-threat-krispy-kreme_l_6061db72c5b67593e05aa6e4 (Mar. 30, 2021).

417. *Id.*

418. *Id.*

419. Gianluca Russo, *The Dangers of Fat-Shaming COVID-19 Victims*, REFINERY29 (June 19, 2020), <https://www.refinery29.com/en-us/2020/06/9871021/weight-coronavirus-risk-problem>.

420. MARIA L. LA GANGA, *Fat Shaming, BMI and Alienation: COVID-19 Brought New Stigma to Large-sized People*, L.A. TIMES (May 8, 2021), <https://www.latimes.com/california/story/2021-05-08/analyzing-covid-vaccine-inequity-through-obesity-lens>.

421. See Stern, *supra* note 409; Byrne, *supra* note 416.

CONCLUSION

The next time you find yourself at the grocery store, the airport, or a public park, look around and you will notice America has an obvious public health problem—and it is *not* childhood Hepatitis B. America is overweight. The CDC reports that the vast majority of U.S. adults are currently overweight and—because obesity is contagious—nearly *all* Americans will be overweight within a generation.⁴²² Unhealthy diets and obesity kill half a million Americans every year.⁴²³ Yet, despite these alarming facts, the government's public health policy toward obesity is highly inconsistent with its approach to less dire public health threats, such as communicable childhood diseases. If, to save 42,000 lives, it is appropriate for the government to mandate vaccination (while denying school and medical care to the noncompliant), it should be an ethical imperative to mandate healthy diets (while likewise denying school and medical care to the noncompliant) to save 529,299 lives.⁴²⁴ The government's inconsistent policy approach raises legitimate questions about its seemingly inexplicable public health divergence with regard to vaccine and obesity legislation. This Article attempts to answer these questions by exposing the inappropriate role that commercial determinants play in the government's disproportionate public health policies. Identifying and explaining this inconsistency serves two important purposes.

First, the government's divergent approach to vaccination and obesity proves that the nascent CDoH theory is correct. For-profit corporate interests have captured the U.S. public health apparatus at the expense of American health. Corporations are vectors of disease.⁴²⁵ This corporate threat is enormous, invisible, and operates above the level of democratic accountability.⁴²⁶ Corporate interests have corrupted science, the political will, and the public discourse that shapes everyday American life. These three levels of corruption selectively oscillate between strict compulsion and dangerous denial to promote a single outcome: commodity consumption. Vaccine mandates and obesity acceptance facilitate U.S. public consumption of corporate commodities, which in turn generates vast corporate wealth. This conclusion appears

422. *Obesity and Overweight*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Oct. 13, 2021), <https://www.cdc.gov/obesity/index.html>.

423. See Mokdad et al., *supra* note 10, at 1449.

424. See *supra* Sections II and III; see also Karako-Eval, *supra* note 9, at 6.

425. See Moodie et al., *supra* note 58, at 671.

426. See McKee & Stuckler, *supra* note 90, at 1168.

to be the only viable explanation for the government's otherwise inexplicable policy divergence in this regard.

Second, this Article reveals the government's complicity with corporate interests and demonstrates that the "medical-industrial complex" is exploiting—and endangering—American health for profit. The government mandates extensive intervention to prevent 42,000 deaths, yet promotes obesity complacency and sweeps 529,299 diet- and obesity-related deaths under the rug every year.⁴²⁷ It would be naïve to propose that scientists, the government, and the media should simply stop selling out Americans to corporate interests, considering that each has consistently promoted the corporate public health agenda since the 1950s.⁴²⁸ It is likewise overly optimistic to believe that the government will suddenly take a balanced and proportionate approach to U.S. public health legislation. Commercial determinants are simply too powerful and pervasive. Rather, this Article points out this radical divergence in U.S. public health law in the sincere belief that Americans hate being duped—and that knowledge of this deception will goad them into doing something about it.

Americans must free themselves from corporate discourse, and instead engage in dialogue with one another. Discourse seeks to control, while dialogue sparks critical examination and thought.⁴²⁹ Americans should start talking to one another again—not silencing those with whom they disagree about vaccines, obesity, or any other public health topic, for that matter.⁴³⁰ After Americans engage in an honest conversation free of corporate (and media-magnified) rhetoric, they will find some common ground. Vaccines are a miracle, but U.S. policies are somewhat incongruent with policies in other developed democracies—all of which enjoy superior (and less expensive) public health outcomes to the United States.⁴³¹ Obesity is unhealthy, and America is long overdue for an honest conversation about this public health crisis. In one year, the COVID-19 pandemic killed over half-a-million Americans; *every year*,

427. See *supra* Sections II and III.

428. See *Obesity Epidemic*, *supra* note 15, at 200–05.

429. Michel Foucault, *THE HISTORY OF SEXUALITY: AN INTRODUCTION* 92–102 (Robert Hurley trans. 1978) (noting that discourse is a mechanism of power that controls individual bodies and populations); see also Georg Wilhelm Friedrich Hegel, *THE SCIENCE OF LOGIC* 117 (1966) (noting “we term dialectic that higher movement of Reason where terms appearing absolutely distinct pass into one another because they are what they are, where the assumption of their separateness cancels itself.”); Raya Dunayevskaya, *RUSSIA: FROM PROLETARIAN REVOLUTION TO STATE-CAPITALIST COUNTER-REVOLUTION* 23 (2017).

430. See Steven Greenhut, ‘Cancel Culture’ Is a Dangerous, Totalitarian Trend, *REASON* (Aug. 7, 2020, 8:00 AM), <https://reason.com/2020/08/07/cancel-culture-is-a-dangerous-totalitarian-trend/>.

431. See *Vaccine Hesitancy*, *supra* note 2, at 93–96, 134.

unhealthy diets and obesity kill just as many Americans.⁴³² It is time for the U.S. government to implement a proportionate public health response to address this crisis. America has lost faith in U.S. public health officials.⁴³³ To help restore that faith, Americans must demand that the government address the obesity epidemic with the same legislative urgency that it uses in promoting vaccines. Until the government exhibits a degree of legislative consistency, it is complicit in allowing commercial determinants to undermine U.S. public health.

432. Logan Lutton, *Coronavirus Case Numbers in the United States: March 25, 2021 Update*, MED. ECON. (Mar. 25, 2021) (noting 545,281 U.S. COVID deaths on the one-year anniversary of the U.S. declaration of the pandemic state of emergency); see also Mokdad et al., *supra* note 10, at 1449 (noting 529,299 obesity- and diet-related deaths annually in the United States).

433. Robert Preidt, *Public Lost Trust in CDC During COVID Crisis: Poll*, U.S. NEWS & WORLD REP. (Apr. 7, 2021), <https://www.usnews.com/news/health-news/articles/2021-04-07/public-lost-trust-in-cdc-during-covid-crisis-poll>.