## WHY LAW IS A DETERMINANT OF HEALTH

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#### I. INTRODUCTION

There is a growing recognition of the connection between the law and population health, not only in public health practice but in the practice of law.¹ Legal practice generally focuses on how laws impact an individual client; however, laws and their implementation have broader implications for population health outcomes.² This is particularly true given that health outcomes at the population level are influenced not only by clinical and health services interventions but also by the various conditions and circumstances that influence people's daily lives. The determinants of health are the "range of personal, social, economic, and environmental factors that shape health status." Broadly, these factors include, but are not limited to, individual behavior, biology and genetics, social factors, health services, community, and policy making.³ Considered together, these determinants comprise the "context" in which people live.⁴

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<sup>1.</sup> See Micah Berman, Defining the Field of Public Health Law, 15 Depaul J. Health Care L. 45, 77–78 (2013); Wendy E. Parmet, Populations, Public Health and the Law 6, 51–77 (2009) (discussing "population-based legal analysis"); see generally Burris et al., The New Public Health Law: A Transdisciplinary Approach to Practice and Advocacy (2018); Ramanathan et al., Legal Epidemiology: The Science of Law, 45 J.L. Med & Ethics 69, 69–72 (2017) (explaining that legal epidemiology is a transdisciplinary approach to examine how laws factor into a population's overall health outcomes).

<sup>2.</sup> Id.

<sup>3.</sup> Determinants of Health, OFF. OF DISEASE PREVENTION AND HEALTH PROMOTION, https://www.healthypeople.gov/2020/about/foundation-health-measures/Determinants-of-Health (last updated Oct. 8, 2020).

<sup>4.</sup> World Health Organization, A Conceptual Framework for Action on the Social Determinants of Health 5 (2010); Thomas R. Frieden, A Framework for Public Health Action: The Health Impact Pyramid, 100 Am. J. Pub. Health 590, 591 (2010).

In the United States, the law plays a critical role in shaping this context by imposing restrictions on or creating incentives for actions that directly affect health at the individual, community, population, and institutional levels.<sup>5</sup> Law establishes the power of the state to regulate individual and group behavior.<sup>6</sup> Law allocates funds to public expenditures that affect health.<sup>7</sup> Law also articulates norms that express our society's values and highest ideals, including how we prioritize public health.<sup>8</sup> Accordingly, law is a *determinant* of health.<sup>9</sup>

As we discuss further below, law is unique among the determinants of health in that it functions as both a social and structural determinant of health. Law may be characterized as a *social* determinant of health or one of the many social, economic, and physical conditions that people confront in their day-to-day lives. People experience the law as a social determinant in most aspects of their lives, often without realizing it, in their interactions with the policing and criminal justice systems; in their workplaces and civic institutions; and in their access to healthy housing, education, and recreational areas and playgrounds. These social determinants have been deemed the "causes of health and social needs." 13

Because of its role in creating rules and enforcement mechanisms, allocating resources, and assigning social status to individuals and groups, law influences, shapes, and in some instances, drives the functioning of many aspects of our society, and, correspondingly, all the other determinants of health. In this way, law serves a *structural* 

<sup>5.</sup> Richard A. Goodman et al., *Law and Public Health at CDC*, CENTERS FOR DISEASE CONTROL, https://www.cdc.gov/mmwr/preview/mmwrhtml/su5502a11.htm (last updated Dec. 18, 2006).

<sup>6.</sup> See O.B.K. Dingake, The Rule of Law as a Social Determinant of Health, 19 HEALTH & HUM. RTS. J. 295, 298 (2017).

<sup>7.</sup> *Id.* 

<sup>8.</sup> Id.

<sup>9.</sup> Disparities, OFF. DISEASE PREVENTION AND HEALTH PROMOTION, https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities (last generally Lawrence 0. updated Oct. 8. 2020); see Gostin The Legal Determinants of Health: Harnessing the Power of Law for Global Health and Sustainable Development, 393 LANCET 1857, 1857 (2019).

<sup>10.</sup> Dingake, *supra* note 6, at 296–97.

<sup>11.</sup> See generally Scott Burris, Law in a Social Determinants Strategy: A Public Health Law Research Perspective, 126 Pub. Health Rep. 22, 22 (2011) [hereinafter Burris, Law in a Social Determinants Strategy: A Public Health Law Research Perspective]; Upstream Communication Toolkit, HealthBegins (May 2019), https://2hdp0l1trjr524kvdq3mg5sa-wpengine.netdnassl.com/wp-content/uploads/2020/07/

upstream\_communications\_toolkit\_-\_may\_2019.pdf.

<sup>12.</sup> See Social Determinants of Health, OFF. OF DISEASE PREVENTION AND HEALTH PROMOTION, https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health (last updated Oct. 8, 2020).

<sup>13.</sup> Upstream Communication Toolkit, supra note 11.

function and may be characterized as a structural determinant of health that establishes and operationalizes the social, political, and economic policies that govern society and create the contexts in which people live. 14 Structural determinants have been referred to as "the causes of the causes," and law is often the tool used to create these norms, resulting in the disparate experiences in individuals' day-to-day lives that determine health outcomes. 15

Applying a determinants of health framework can help public health and legal practitioners examine how law, apart from people's own individual efforts, shapes health and well-being. The utility of this framework is most acutely evident in the persistence of health disparities, which are preventable differences in health outcomes among populations and are "closely linked with social, economic, and/or environmental disadvantage." Many individuals in American society are disadvantaged because of their socioeconomic status, race, sex, gender, sexual orientation, disability status, geography, or other circumstances. Accordingly, this society has been unable to achieve health equity, which ensures that all people are able to maximize their health potential despite their social position. In fact, American society is deeply inequitable; as a result, many people have been unable to attain good health because of economic, political, and cultural barriers beyond their control.

"Americans with low [socioeconomic status] have levels of illness in their thirties and forties that are not seen in groups with higher [socioeconomic status] until three decades of age later." The United States is the only developed country that has seen a consistent rise in the

<sup>14.</sup> Dingake, supra note 6, at 297.

<sup>15.</sup> See generally Upstream Communication Toolkit, supra note 11; Burris, Law in a Social Determinants Strategy: A Public Health Law Research Perspective, supra note 11, at 23–24 (Note, these categories are neither absolute nor exhaustive, but rather employed here for rhetorical and conceptual purposes).

<sup>16.</sup> Disparities, supra note 9.

<sup>17.</sup> Adolescent and School Health: Health Disparities, CENTERS FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/healthyyouth/disparities/index.htm (last updated Nov. 24, 2020); COMMUNITIES IN ACTION: PATHWAYS TO HEALTH EQUITY 31 (James N. Weinstein et al. eds., 2017).

<sup>18.</sup> COMMUNITIES IN ACTION, *supra* note 17, at 32.

<sup>19.</sup> *Id.* at 33–34; Joe Alper, People Living with disabilities: Health Equity, Health Disparities, and Health Literacy 4 (2018) (By way of example, the report, "Communities in Action: Pathways to Health Equity," examines historical policies of discrimination against various populations in the United States and the persistence of gaps in health outcomes through to the present); Marjory Givens et al., *Power: The Most Fundamental Cause of Health Inequity?*, Health Aff. (Feb. 1, 2018) https://www.healthaffairs.org/do/10.1377/hblog20180129.731387/full/; David R. Williams & Pamela Braboy Jackson, *Social Sources of Racial Disparities in Health*, 24 Health Aff. 325, 325–27 (2005).

<sup>20.</sup> Williams & Jackson, supra note 19, at 327.

number of women who die during childbirth.<sup>21</sup> Between 1991 and 2014, the U.S. maternal mortality rate doubled from 10.3 per 100,000 live births to 23.8.22 Between 2014 and 2017, Black non-Hispanic women were three to four times more likely than their white non-Hispanic counterparts to die from causes related to pregnancy.<sup>23</sup> "The highest percentage of adults not completing high school were Hispanic, persons [with incomes at less than] 1.9% of the federal poverty level, those with a disability, or foreign born."24 "The highest percentage of adults living below the federal poverty level were non-Hispanic black or Hispanic, those with less than a high school education, those with a disability, or foreign born."25 The determinants of health better explain 1) the specific external conditions related to health outcomes; 2) why some populations are at greater risk for adverse health outcomes, even when they have access to good medical care; and 3) what kinds of interventions are needed to achieve health equity.<sup>26</sup> As one group of commenters noted, the determinants of health "are responsible for most health inequalities."<sup>27</sup> The law has been at the center of health disparities both by contributing to these barriers and by serving as a crucial tool for reducing or eliminating them.<sup>28</sup> Understanding the role of law as a determinant of health can help practitioners better understand the role of law in advancing health equity.<sup>29</sup>

<sup>21.</sup> Suzanne Delbanco et al., *The Rising U.S. Maternal Mortality Rate Demands Action from Employers*, HARV. BUS. REV. (June 28, 2019), https://hbr.org/2019/06/the-rising-u-s-maternal-mortality-rate-demands-action-from-employers.

<sup>22.</sup> Id. (citing Cynthia J. Berg et al., Pregnancy-Related Morality in the United States, 1991-1997, 101 Obstetrics & Gynecology 289 (2003); Marian F. MacDorman et al., Recent Increases in the U.S. Maternal Mortality Rate: Disentangling Trends from Measurement Issues, 128 Obstetrics & Gynecology 447 (2016)).

<sup>23.</sup> Elizabeth A Howell, *Reducing Disparities in Severe Maternal Morbidity and Mortality*, 61 CLINICAL OBSTETRICS & GYNECOLOGY 387, 387 (2018) (explaining that this disparity "has existed for over a century and has actually widened over the last hundred years").

<sup>24.</sup> CDC Health Disparities and Inequalities Report–U.S. 2013, Center for Surveillance, Epidemiology, and Laboratory Services (2013) (outlining the key findings from the *CDC Health Disparities and Inequalities Report – 2013*, Morbidity & Mortality Wkly. Rep., Nov. 22, 2013, at 10–18).

<sup>25.</sup> *Id* 

<sup>26.</sup> Emily E. Petersen et al., *Vital Signs: Pregnancy-Related Deaths, United States, 2011–2015, and Strategies for Prevention, 13 States, 2013–2017,* 68 MORBIDITY & MORTALITY WKLY. REP. 423, 423–29 (2019); Amy Roeder, *America is Failing its Black Mothers*, HARV. PUB. HEALTH: MAG. OF THE HARV. T.H. CHAN SCH. OF PUB. HEALTH (2019), https://www.hsph.harvard.edu/magazine/magazine\_article/america-is-failing-its-black-mothers/.

<sup>27.</sup> Hilary Daniel et al., Addressing Social Determinants to Improve Patient Care and Promote Health Equity: An American College of Physicians Position Paper, 168 Annals of Internal Med. 577, 577–78 (2018).

<sup>28.</sup> Communities in Action, supra note 17, at 38.

<sup>29.</sup> For definitions of key terminology used throughout this Article, see Jennifer Alvidrez et al., *The National Institute on Minority Health and Health Disparities Research Framework*, 109 Am. J. OF PUB. HEALTH S16, S16–S17 (2019) (determinants may include multiple levels of influence

#### II. LAW IS A DETERMINANT OF HEALTH

First, this Article examines how law, by establishing the power of government to impose requirements on or incentivize actions by individuals or entities, functions as a determinant of health. As demonstrated by the example below, which considers motorcycle helmet laws, law serves this role at every level of government.<sup>30</sup>

Motorcycle helmet laws illustrate how both federal and state law can influence and therefore be a determinant of health outcomes for a population.<sup>31</sup> At both the federal and state levels, mandatory helmet laws have evolved, undergoing multiple cycles of passage and repeal.<sup>32</sup> These changes in the law have created natural control and comparison groups, allowing observers to study the health outcomes associated with a helmet law during the time the law was in effect and then again after the law was repealed.<sup>33</sup>

(individual, interpersonal, community, societal) interacting with multiple domains of influence (biological, behavioral, physical/built environment, sociocultural, health care system)); Determinants of Health, supra note 3 (Determinants of health include "the range of personal, social, economic, and environmental factors that influence health status"); Disparities, supra note 9 (Health disparities refer to "a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion"); Social Determinants of Health, supra note 12 (The social determinants of health (inequities) are defined as "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks. Conditions (e.g., social, economic, and physical) in these various environments and settings (e.g., school, church, workplace, and neighborhood) have been [collectively] referred to as 'place'"); WORLD HEALTH ORGANIZATION, supra note 4, at 4 (The World Health Organization's Commission on the Social Determinants of Health defines health equity as "the absence of unfair and avoidable or remediable differences in health among social groups  $\ldots$ "); WORLD HEALTH ORGANIZATION, supra note 4, at 5-6 (structural determinants of health (inequities) includes "structural mechanisms" or systems, strategies, and institutions that arise from the historical, political, and social context that place groups of people into socioeconomic categories and positions of power); Health Equity, CENTERS FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/chronicdisease/healthequity/index.htm (last updated Mar. 11, 2020) ("Health equity is achieved when every person has the opportunity to 'attain his or her full health potential' and no one is 'disadvantaged from achieving this potential because of social position or other socially determined circumstances.' Health inequities are reflected in differences in length of life; quality of life; rates of disease, disability, and death; severity of disease; and access to treatment.").

- 30. See Law in Public Health Practice 71 (Richard A. Goodman et al. eds., 2d ed. 2007).
- 31. Alexander Busko et al., *Motorcycle-Helmet Laws and Public Health*, 376 New Eng. J. Med. 1208, 1208–09 (2012).
- 32. Marian Moser Jones & Ronald Bayer, *Paternalism & Its Discontents: Motorcycle Helmet Laws, Libertarian Values, and Public Health*, 97 Am. J. of Pub. HEALTH 208, 208–10, 213, 215 (2007).
  - 33. Id. at 213.

At the federal level, there have been multiple efforts to promote mandatory motorcycle helmet laws.<sup>34</sup> In 1966, Congress passed the Highway Safety Act which withheld federal highway safety funds from states that did not have a mandatory helmet law.<sup>35</sup> Consequently, forty-seven states had passed mandatory helmet laws by 1975.<sup>36</sup> Researchers found that the state helmet laws reduced motorcyclist deaths by approximately 30%.<sup>37</sup> In 1975, Congress repealed the withholding of funds.<sup>38</sup> During the ten years following the repeal, medical costs of riders without helmets increased 200% compared with those riders with helmets.<sup>39</sup>

Congress, in passing the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), again encouraged helmet laws; ISTEA used incentive grant program funding for states that adopted and implemented motorcycle helmet laws, and also required states without these laws to divert a portion of their general highway funds to safety programs. The 1991 provision was then repealed in 1995. Again, many jurisdictions responded by repealing their state helmet laws, which affected health outcomes. For example, in 2012, Michigan repealed a thirty-five-year-old helmet law. Until April 2012, Michigan required that [a] person operating or riding on a motorcycle... wear a crash helmet on his or her head. Within three years of the law's repeal, a study of a Level 1 trauma center found an increase in both nonhelmeted fatalities at the crash scene and in-patient mortality as a result of motorcycle crashes. Traumatic brain injuries increased during the same period.

<sup>34.</sup> Denise A. Atwood, Comment, *Riding Helmetless: Personal Freedom or Societal Burden?*, 1 Phoenix L. Rev. 269, 273–74 (2008).

<sup>35.</sup> *Id.* at 273; Adam E. M. Eltorai et al., *Federally Mandating Motorcycle Helmets in the United States*, BMC PUB. HEALTH, Mar. 9, 2016, at 1, 2.

<sup>36.</sup> Atwood, supra note 34, at 273.

<sup>37.</sup> Leon S. Robertson, *Federal Funds and State Motor Vehicle Deaths*, 5 J. OF PUB. HEALTH POL'Y, 376, 376 (1984).

<sup>38.</sup> Eltorai, supra note 35, at 2.

<sup>39.</sup> Jones & Bayer, *supra* note 32, at 213–14.

<sup>40.</sup> D.F. Preusser, J.H. Hedlund & R.G. Ulmer, Evaluation of Motorcycle Helmet Law Repeal in Arkansas and Texas, NAT'L HIGHWAY TRAFFIC SAFETY ADMIN. (Sept. 2000), https://www.nhtsa.gov/sites/nhtsa.dot.gov/files/evalofmotor.pdf; Christopher P. Ogolla & Frederic E. Shaw, Is the Repeal of Mandatory Motorcycle Helmet Legislation a Contributing Factor to Traumatic Brain Injury as a Public Health Problem? Recommendations for the Future, 14 MICH. ST. U. J. MED. & L. 163, 190 (2010).

<sup>41.</sup> Ogolla & Shaw, supra note 40, at 190.

<sup>42.</sup> Rebecca H. Striker et al., Repeal of the Michigan Helmet Law: The Evolving Clinical Impact, 211 Am. J. SURGERY 529, 529 (2016).

<sup>43.</sup> MICH. COMP. LAWS ANN. § 257.658(4) (West 2012) (repealed 2012).

<sup>44.</sup> Striker, supra note 42, at 530.

<sup>45.</sup> Id. at 531.

Studies also describe the impact of state motorcycle helmet laws at the local level.<sup>46</sup> Researchers examined how the July 1, 2000 repeal of Florida's motorcycle helmet law affected the state's most populous metropolitan area, Miami-Dade County, by looking at hospital data on motorcycle crashes from the University of Miami/Jackson Memorial Medical Center during July–December 1999 and then again during July–December 2000.<sup>47</sup> From 1999 to 2000, helmet usage among riders dropped from 83% to 56%, while the number of brain injuries and related fatalities increased.<sup>48</sup>

State governments, territorial governments, and tribes have also passed motorcycle helmet laws, demonstrating that all levels of government can implement laws that directly impact health outcomes.<sup>49</sup> For example, Guam has had a motorcycle helmet law since 1997.<sup>50</sup> Guam's law not only requires that a motorcycle passenger or driver wear a helmet but also specifies the design, color, and padding of the helmets that are to be worn.<sup>51</sup> Tribes such as Navajo, Oneida, Leech Lake Band of Ojibwe, Swinomish, and Little Traverse Bay Bands of Odawa Indians all have motorcycle helmet laws.<sup>52</sup>

The unique cycle of adoption, repeal, and adoption suggests that this topic serves as a good example to study how laws influence health outcomes because a researcher can study both how the law's implementation and how the law's repeal then impacted similar health outcomes. Ultimately, motorcycle helmet laws, including statutes, regulations, territorial, and tribal requirements, provide just one illustration of the direct relation between laws and health outcomes.

<sup>46.</sup> Gillian A. Hotz et al., *The Impact of a Repealed Motorcycle Helmet Law in Miami-Dade County*, 52 J. Trauma, Injury, Infection, & Critical Care 469, 469 (2002).

<sup>47.</sup> Id. at 469; Population Atlas, FLA. DEP'T OF HEALTH, http://www.flhealthcharts.com/ChartsReports/rdPage.aspx?rdReport=PopAtlas.PopulationAtlasDASHBOARD (last visited Mar. 16, 2021).

<sup>48.</sup> Hotz, *supra* note 46, at 470–72.

<sup>49.</sup> Motorcycle Helmet Use Laws by State, INS. INST. FOR HIGHWAY SAFETY, https://www.iihs.org/topics/motorcycles/motorcycle-helmet-laws-table (last visited Mar. 16, 2021); e.g., 16 GUAM CODE ANN. § 3305(a), (c) (2020); Nisqually Indian Tribe – Tribal Code, NAT'L INDIAN L. LIBR., https://narf.org/nill/codes/nisqually/index.html (last visited Mar. 16, 2021).

<sup>50. 27</sup> GUAM ADMIN. R. & REGS. § 1314 (West 2019).

<sup>51.</sup> Id.

<sup>52.</sup> NAVAJO NATION CODE ANN. Tit. 14, § 401 (West 2014); 49.5-1 ONEIDA WI CODE § 49.5-3 (West 2010); LEACH LAKE BAND OF OJIBWE, OFF HIGHWAY VEHICLE CODE § 5.3 (2011); 1 SWINOMISH CODE Tit. 5, § 5-01.720(G) (2020); LITTLE TRAVERSE BAY BANDS OF ODAWA INDIANS WAGANAKISING ODAWAK TRIBAL CODE § 9.332 (2020); POTAWATOMI LAW & ORDER CODE TIt. 17, § 17-4-33 (2020).

#### III. LAW IS A STRUCTURAL AND SOCIAL DETERMINANT OF HEALTH

This Article will now discuss how laws function as both structural and social determinants of health. Structural determinants include the large institutions and activities that derive from the confluence of historical legacies, cultural values, political machinations, and economic principles.<sup>53</sup> Social determinants include the immediate, situational realities of place, community, surroundings, economic opportunity, resource access, and individual decision-making that comprise people's day-to-day lives.<sup>54</sup> The remainder of this Article will illustrate how these forces shape health.

#### A. Law is a Structural Determinant of Health

The World Health Organization's "Conceptual Framework for Action on the Social Determinants of Health" characterizes the structural determinants as driven by "structural mechanisms" that create institutions and assign groups of people to social positions based on their socioeconomic status, race, gender, sex, age, and so on. 55 Structural determinants shape individuals' and communities' access to power and resources, both of which are necessary for maximizing health outcomes. 56

The Constitution establishes the principles on which this country's legal and political systems are built.<sup>57</sup> It authorizes Congress to impose taxes and grants Congress spending authority for the country's "general [w]elfare."<sup>58</sup> It reserves the primary responsibility to govern health and welfare to states.<sup>59</sup> Strategies that public actors—policymakers and political representatives—employ to operationalize these powers can determine the allocation of funding at the federal, state, local, tribal, and territorial levels. These strategies can also influence which populations

 $<sup>53. \ \</sup>textit{Upstream Communication Toolkit, supra} \ note \ 11.$ 

<sup>54.</sup> Social Determinants of Health, supra note 12.

<sup>55.</sup> WORLD HEALTH ORGANIZATION, supra note 4, at 5.

<sup>56.</sup> Frequently Asked Questions, CENTERS FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/nchhstp/socialdeterminants/faq.html (last updated Dec. 19, 2019). Social determinants of health are "economic and social conditions that influence the health of people and communities. These conditions are shaped by ... the amount of money, power, and resources that people have, all of which are influenced by [policy choices]." *Id.* Social determinants of health affect factors that are related to health outcomes. *See* Givens et al., *supra* note 19.

 $<sup>57. \ \</sup> Our\ Government:\ The\ Constitution,\ The\ White\ House,\ https://www.whitehouse.gov/about-the-white-house/the-constitution/\ (last\ visited\ Mar.\ 16,\ 2021).$ 

<sup>58.</sup> U.S. CONST. art. I, § 8.

<sup>59.</sup> U.S. CONST. amend. X.

are most likely to receive access to resources necessary to maximize health.

The Constitution also enumerates a basic set of protections to which all citizens are entitled.<sup>60</sup> These protections can also influence the structures created by law. The Constitution protects individual rights such as citizenship and the right to vote and guarantees those rights to historically disadvantaged populations, such as African Americans, women, and other populations who have faced discrimination.<sup>61</sup>

Key Constitutional Amendments for the Determinants of Health <sup>62</sup>		
Constitutional Provision	Year	Legal Change
Thirteenth Amendment	1865	Abolished slavery or involuntary servitude in the United States or any place subject to its jurisdiction
Fourteenth Amendment	1868	<ul> <li>Established birthright citizenship or citizenship through naturalization</li> <li>Imposes due process protections</li> <li>Grants equal protection of the laws</li> </ul>
Fifteenth Amendment	1870	Prohibits discrimination in voting based on "race, color, or previous condition of servitude"
Nineteenth Amendment	1920	Prohibits discrimination in voting on the basis of sex

The Fourteenth Amendment established the fundamental rights that shape many of the social and political conditions that ultimately influence health.<sup>63</sup> These rights include the right to protection from encroachment on one's "life, liberty, or property, without due process of law" and "equal protection of the laws." <sup>64</sup> Caselaw has interpreted these rights to grant freedom from discrimination based on race/ethnicity,

<sup>60.</sup> U.S. CONST. amend. I-X.

<sup>61.</sup> U.S. CONST. amend. XV, XIX, XXVI, § 1.

<sup>62.</sup> Adapted from Angela K. McGowan et al., Civil Rights Laws as Tools to Advance Health in the Twenty-First Century, 37 Ann. Rev. Pub. Health 186, 187 (2016).

<sup>63.</sup> See Wendy K. Mariner et al., Jacobson v Massachusetts: It's Not Your Great-Great-Grandfather's Public Health Law, 95 Am. J. Pub. HEALTH 581, 584 (2005).

<sup>64.</sup> U.S. CONST. amend. XIV.

sex, and religion, among other categories.<sup>65</sup> As a result, the Fourteenth Amendment has been critical to reducing discrimination and inequality in both the social determinants of health and the accompanying structural determinants of health.

## B. Law Is a Social Determinant of Health

CDC defines the social determinants of health as the "conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." 66 These conditions, which have been influenced by structural factors, comprise the economic, social, and environmental forces that individuals and their communities negotiate on a day-to-day basis. 67 There are five key areas of the social determinants of health: 68

## 1. Economic Stability

- Employment
- Income
- Expenses
- Debt (academic, consumer, medical)
- Food Insecurity
- Housing Instability
- Poverty

#### 2. Education

- Early Childhood Education and Development
- Language and Literacy
- High School Graduation
- Vocational Training
- Enrollment in Higher Education
- 3. Social and Community Context

<sup>65.</sup> See Historic Supreme Court Cases, SANTA CLARA UNIV. MABIE L. LIBR., https://lawguides.scu.edu/c.php?g=5677&p=24912 (last updated Dec. 7, 2015). To see different categories of constitutional caselaw, click on the desired category in the menu on the left-hand side of the page.

<sup>66.</sup> Social Determinants of Health, supra note 12.

<sup>67.</sup> See id.

<sup>68.</sup> This list is derived from *Social Determinants of Health*, *supra* note 12 and Harry J. Heiman & Samantha Artiga, *Beyond Health Care: The Role of Social Determinants in Promoting Health and Health Equity*, The Henry J. Kaiser Family Found. (Nov. 2015), https://www.issuelab.org/resources/22899/22899.pdf. Notably missing from this framework is personal or individual factors, such as "knowledge, beliefs, health behaviors," as well as those psychosocial factors like "self-efficacy [and] social support." *See also* Howell, *supra* note 23.

- Civic Participation
- Discrimination
- Incarceration
- Social Cohesion
- Support Systems
- Social Integration
- 4. Health and Health Care
  - Access to Health Care
  - Access to Primary Care
  - Health Care Coverage
  - Health Literacy
  - Health Care Provider Linguistic and Cultural Competency
  - Health Care Provider Implicit Bias
  - Quality of Care
- 5. Neighborhood and Built Environment
  - Hunger and Malnutrition
  - Access to Foods that Support Healthy Eating Patterns
  - Crime and Violence
  - Environmental Conditions
  - Quality of Housing
  - Transportation
  - Parks
  - Playgrounds
  - Walkability

The "health of individuals depends at least partly on social and environmental factors outside their control." <sup>69</sup> Many, if not all of the five key areas of the social determinants may be the result of circumstance and not individual choice. And these circumstances, including access to and quality of many of these factors, are directly tied to the laws and policies developed at all levels of government. For example, in July 2019, a bipartisan group in the U.S. House of Representatives introduced the Social Determinants Accelerator Act (SDAA) in order to pursue the following efforts:

(1) To establish effective, coordinated Federal technical assistance to help State and local governments to improve outcomes and cost-effectiveness of, and return on investment from, health and social services programs.

- (2) To build a pipeline of State and locally designed, cross-sector interventions and strategies that generate rigorous evidence about how to improve health and social outcomes, and increase the costeffectiveness of, and return on investment from, Federal, State, local, and Tribal health and social services programs.
- (3) To enlist State and local governments and the service providers of such governments as partners in identifying Federal statutory, regulatory, and administrative challenges in improving the health and social outcomes of, cost-effectiveness of, and return on investment from, Federal spending on individuals enrolled in
- (4) To develop strategies to improve health and social outcomes without denying services to, or restricting the eligibility of, vulnerable populations.70

Federal, state, and local laws are all important to public health outcomes, including health equity. For example, federal laws can influence public health because they allocate resources.<sup>71</sup> One illustration is the Individuals with Disabilities Education Act, which makes educational opportunities available to children with disabilities by providing federal funds to states.<sup>72</sup> Access to an appropriate education is tied to outcomes in employment, housing, education, health care, and overall satisfaction with adult life.73

Federal and state laws can also work together to influence determinants of health. Using the example of access to healthcare as a determinant of health, both federal and state laws have imposed requirements on insurance companies to cover mental health and substance use disorder benefits to the same degree and scope that surgical and other kinds of medical benefits are covered.<sup>74</sup> Many state governments have passed laws prohibiting discrimination against

<sup>70.</sup> H.R. 4004, 116th Cong. (1st Sess. 2019).

<sup>71.</sup> Memorandum from Jessica Shahin, Acting Associate Administrator, Food Stamp Program, to Regional Administrators, USDA Food and Nutrition Service, Implementing Memorandum on Food Stamp Provisions of the Farm Bill, USDA Food and Nutrition Service (July 3, 2008), https://www.fns.usda.gov/snap/leghistory/food-stamp-provisions-farm-bill; Social Security, Ways & Means Committee, https://waysandmeans.house.gov/

subcommittees/social-security-115th-congress (last visited Mar. 16, 2021).

<sup>72.</sup> CONGRESSIONAL RESEARCH SERVICES, THE INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA) Funding: A Primer, Cong. Research Rep. No. R44624, at 1 (2019).

<sup>73.</sup> Joseph Telfair & Terri L. Shelton, Educational Attainment as a Social Determinant of Health, 73 N.C. MED. J. 358, 358-61 (2012).

<sup>74.</sup> The Mental Health Parity and Addiction Equity Act (MHPAEA), CENTERS FOR MEDICARE & MEDICAID SERVICES, https://www.cms.gov/cciio/programs-and-initiatives/ other-insurance-protections/mhpaea\_factsheet.html (last visited Mar. 16, 2021); see 215 ILL. COMP. STAT. § 5/370c (2019).

individuals and families seeking housing.<sup>75</sup> As this Article explains below, local laws with an eye toward reshaping the social determinants can also facilitate change.<sup>76</sup>

Local laws also serve as social determinants of health. Neighborhoods, built environments, transportation, and housing are social determinants of health that exemplify the principle that where people live corresponds with individual (and population) "economic, health, and educational outcomes." More specifically, access to stable, high-quality, safe and affordable housing and neighborhoods corresponds with better health and lower health care costs. Increasingly, gentrification, which CDC defines as "the transformation of neighborhoods from low value to high value," has displaced community residents who are unable to afford increases in housing, food, and other associated costs. Typically, gentrification has had more negative effects on individuals, families, neighborhoods, and communities with lower incomes or African American and Hispanic people.

Zoning laws can have important implications for health. Zoning is how local governments divide up land and make rules about how it can be used.<sup>82</sup> As a result, local laws, known as ordinances, can play a critical role in setting forth standards for housing in a local community.<sup>83</sup> Zoning laws can be crafted to advance health by mitigating the displacing effects

<sup>75.</sup> State Fair Housing Protections, PoL'Y SURVEILLANCE PROGRAM (Aug. 2019), http://lawatlas.org/datasets/state-fair-housing-protections-1498143743.

<sup>76.</sup> Determinants of Health, supra note 3, at 1.

<sup>77.</sup> Id. at 1–2; see also Social Determinants of Health, supra note 12; Raj Chetty et al., The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment, 106 Am. Econ. Rev. 855, 855 (2016); Lauren A. Taylor, et al., Leveraging the Social Determinants of Health: What Works? 11–12 (2015).

<sup>78.</sup> Lauren A. Taylor, *Housing and Health: An Overview of the Literature*, HEALTH AFF. (June 7, 2018), https://www.healthaffairs.org/do/10.1377/hpb20180313.396577/full/HPB\_2018\_RWJF\_01\_W.pdf.

<sup>79.</sup> Healthy Places: Health Effects of Gentrification, CENTERS FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/healthyplaces/healthtopics/gentrification.htm (last updated Oct. 15, 2009) (explaining that displacement occurs when "long-time or original neighborhood residents move from a gentrified area because of higher rents, mortgages, and property taxes").

<sup>80.</sup> Emily Badger, *The Neighborhood is Mostly Black. The Home Buyers Are Mostly White*, N.Y. TIMES, Apr. 27, 2019, https://www.nytimes.com/interactive/2019/04/27/upshot/diversity-housing-maps-raleigh-gentrification.html; Brentin Mock, *Where Gentrification is an Emergency, and Where It's Not*, BLOOMBERG CITYLAB (Apr. 5, 2019, 4:07 PM EDT) https://www.citylab.com/equity/2019/04/where-gentrification-happens-neighborhood-crisis-research/586537/.

<sup>81.</sup> Badger, supra note 80.

<sup>82.</sup> Jennifer M. Morgan, Zoning for All: Using Inclusionary Zoning Techniques to Promote Affordable Housing, 44 EMORY L.J. 359, 360 (1995).

<sup>83.</sup> Id. at 361.

of gentrification.<sup>84</sup> These are called "inclusionary zoning laws," which require new market-based housing developments to allocate a certain percentage of units to affordable housing.<sup>85</sup> More than three hundred counties, cities, and towns around the United States have passed inclusionary zoning ordinances.<sup>86</sup> Inclusionary zoning has had mixed success: some laws have produced very few units,<sup>87</sup> while others have produced thousands.<sup>88</sup> At the same time, while inclusionary zoning laws do not directly target health, they have the potential to influence those conditions that drive health outcomes including access to other social determinants, such as education and economic implications, as well as some direct drivers of health, such as the ability to purchase food and pay for health insurance.<sup>89</sup>

# IV. CHALLENGES FOR PUBLIC HEALTH PRACTITIONERS & RESEARCHERS

The passage, interpretation, application, and practice of law as a determinant of health is a rich area for researchers and practitioners in both the legal and public health disciplines. There are also some challenges for both lawyers and public health practitioners in this field, particularly regarding how best to gather and interpret data about the determinants of health and factoring in the empirical effects of law on health outcomes. Solutions will likely require innovative research design and methodologies that incorporate new approaches to examining public health challenges, such as legal epidemiology<sup>90</sup> incorporating sociological and economic data into public health analyses.

<sup>84.</sup> Healthy Places: Strategies, CENTERS FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/healthyplaces/healthtopics/gentrification\_strategies.htm (last updated Aug. 21, 2013).

<sup>85.</sup> David Tuller, *Housing and Health: The Role of Inclusionary Zoning*, HEALTH AFF. (June 7, 2018), https://www.healthaffairs.org/do/10.1377/hpb20180313.668759/full/.

<sup>86.</sup> AMY ARMSTRONG ET AL., THE EFFECTS OF INCLUSIONARY ZONING ON LOCAL HOUSING MARKETS: LESSONS FROM THE SAN FRANCISCO, WASHINGTON DC AND SUBURBAN BOSTON AREAS 1 (2008).

<sup>87.</sup> See, e.g., Stephannie Stokes, A Year In, Atlanta's Inclusionary Zoning Does Little for Affordable Housing, WABE (Mar. 6, 2019), https://www.wabe.org/a-year-in-atlantas-inclusionary-zoning-does-little-for-affordable-housing/.

<sup>88.</sup> Emily Thaden & Ruoniu Wang, *Inclusionary Housing in the United States: Prevalence, Impact and Practices* 31–32 (Lincoln Inst. of Land Policy, Working Paper No. WP17ET1, 2017), https://www.lincolninst.edu/sites/default/files/pubfiles/thaden\_wp17et1\_0.pdf.

<sup>89.</sup> See Taylor, supra note 78, at 2–3; Tuller, supra note 85 (explaining that "[i]n Montgomery County, Maryland, children from families in IZ-associated affordable housing achieved better results in elementary school, compared to those in other types of affordable housing that did not provide access to a low-poverty educational setting").

<sup>90.</sup> See generally Burris et al., The New Public Health Law: A Transdisciplinary Approach to Practice and Advocacy (2018); Ramanathan et al., Legal Epidemiology: The Science of Law, 45 J.L.

## V. CONCLUSION

Understanding law as a determinant of health that shapes health outcomes can help public health researchers and practitioners to study and evaluate law as a factor in the prevention of disease or an injury in a population. More specifically, law is a *structural determinant* creating institutions and distributing resources, and law is a *social determinant* impacting the conditions of people's daily lives. This framing helps public health practitioners to recognize law as a critical public health tool in efforts to advance health equity. It may also invite practitioners in the legal and health law community to explore how the passage and enforcement of laws impact health, as well as their roles in improving health outcomes for all.