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## 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.<sup>1</sup> Legal practice generally focuses on how laws impact an individual client; however, laws and their implementation have broader implications for population health outcomes.<sup>2</sup> 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.<sup>3</sup> Considered together, these determinants comprise the "context" in which people live.<sup>4</sup>

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.<sup>10</sup> 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.<sup>11</sup> 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

\*The findings and conclusions in this report are those of the author(s) and do not necessarily represent the official position of the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry.

playgrounds.<sup>12</sup> These social determinants have been deemed the “causes of health and social needs.”<sup>13</sup>

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* 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.<sup>14</sup> 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.<sup>15</sup>

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.”<sup>16</sup> Many individuals in American society are disadvantaged because of their socioeconomic status, race, sex, gender, sexual orientation, disability status, geography, or other circumstances.<sup>17</sup> 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.<sup>18</sup> 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.<sup>19</sup>

“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.”<sup>20</sup> The United States is the only developed country that has seen a consistent rise in the 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.<sup>22</sup> 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.”<sup>24</sup> “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.”<sup>25</sup> 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>

## 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>

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.<sup>40</sup> The 1991 provision was then repealed in 1995.<sup>41</sup> 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.<sup>42</sup> Until April 2012, Michigan required that “[a] person operating or riding on a motorcycle ... wear a crash helmet on his or her head.”<sup>43</sup> Within three years of the law’s repeal, a study of a Level 1 trauma center found an increase in both non-helmeted fatalities at the crash scene and in-patient mortality as a result of motorcycle crashes.<sup>44</sup> Traumatic brain injuries increased during the same period.<sup>45</sup>

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.

### 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.<sup>55</sup> Structural determinants shape individuals' and communities' access to power and resources, both of which are necessary for maximizing health outcomes.<sup>56</sup>

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 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 style="list-style-type: none"> <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, 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.”<sup>66</sup> 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.<sup>67</sup> There are five key areas of the social determinants of health:<sup>68</sup>

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
    - 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 cost-effectiveness 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 Medicaid.
4. To develop strategies to improve health and social outcomes without denying services to, or restricting the eligibility of, vulnerable populations.<sup>70</sup>

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.<sup>73</sup>

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 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.”<sup>77</sup> More specifically, access to stable, high-quality, safe and affordable housing and neighborhoods corresponds with better health and lower health care costs.<sup>78</sup> Increasingly, gentrification, which CDC defines as “the transformation of neighborhoods from low value to high value,”<sup>79</sup> has displaced community residents who are unable to afford increases in housing, food, and other associated costs.<sup>80</sup> Typically, gentrification has had more negative effects on individuals, families, neighborhoods, and communities with lower incomes or African American and Hispanic people.<sup>81</sup>

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 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.

#### 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.

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53. Upstream Communication Toolkit, *supra* note 11.
54. Social Determinants of Health, *supra* note 12.
55. World Health Organization, *supra* note 4, at 5.
56. 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.
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