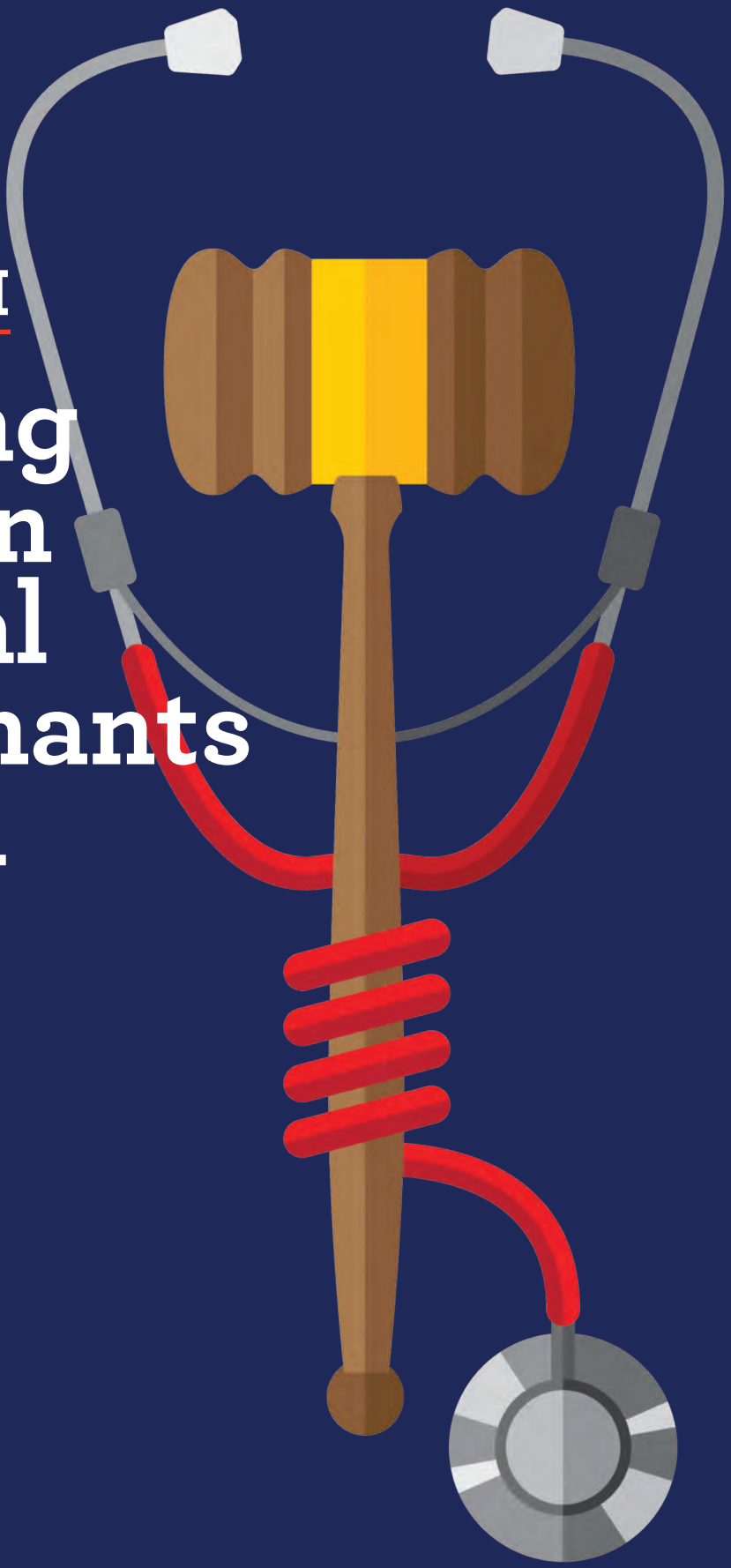
SALUS POPULI

Educating judges on the social determinants of health



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EMPIRICAL RESEARCH CONFIRMS WHAT MAY BE INTUITIVE: JUDICIAL DECISIONS CAN HAVE A POWERFUL EFFECT ON THE HEALTH OUTCOMES OF BOTH INDIVIDUALS AND COMMUNITIES.[1] CERTAINLY, WHEN JUDGES REVIEW OR INTERPRET LAWS, REGULATIONS, OR ADMINISTRATIVE ACTIONS THAT DEAL DIRECTLY WITH MATTERS OF HEALTH, THEIR INFLUENCE ON HEALTH IS READILY APPARENT. BUT JUDGES ALSO ROUTINELY HEAR CASES IN WHICH THE EFFECT ON HEALTH IS MORE SUBTLE.

When judges rule on matters relating to housing and zoning, employment and workplace safety, and access to government income supports, they exert an influence on what are called the "social determinants of health," also increasingly described as the "social drivers of health." Social determinants of health (SDOH) are the social and environmental conditions that impact health and include factors such as socioeconomic status, housing access and quality, and the neighborhood and built environment.[2] These determinants are implicated in many ways every day in trial and appellate courthouses. To give judges a better understanding of the central role that social determinants play in their cases, we developed an educational program for judges called Salus Populi. The program, offered through Northeastern University, also provides judges with a fuller appreciation of the significant role that their decisions can have in shaping social determinants of health.

The United States spends more on health care than nearly every other similarly high-income country in the world — nearly twice as much per person as Germany and nearly four times as much as South Korea.[3] Yet, Americans die younger,[4] have higher rates of avoidable deaths, higher rates of people with multiple chronic conditions, and higher rates of maternal and neonatal mortality.[5] Health outcomes in the United States are also deeply inequitable.[6] Black Americans live approximately six years fewer than whites; American Indians and Alaskan Natives live approximately 11 fewer years than white Americans.[7] Black women are three times more likely to die from pregnancy-related complications than white women.[8] Improving public health is a societal challenge that should concern us all.

How is it possible that we can spend so much more than our peers on health care, yet fall so far below them with respect to fundamental measures of health, such as life expectancy and infant mortality? Public health science tells us that the quality and accessibility of health care is but one of the many factors that affect health outcomes. Public health research demonstrates that social factors are powerful determinants of health, accounting for an estimated 80 to 90 percent of modifiable factors that impact both individual and population health.[9] These factors broadly include economic stability, education access and quality, health care access and quality, and social and community context.[10]

Laws, regulations, and administrative actions that promote health and safety have an obvious impact on health outcomes. Indeed, such laws are themselves social determinants of health and are the subject of public health research and the burgeoning field of legal epidemiology.[11] Although less studied, judicial decisions also directly affect the health of individual litigants and their communities. Despite this, most judges have had little opportunity to receive training on the range of research and methods used in public health and population health studies — research that demonstrates the impact of the social determinants of health that they encounter in their courtrooms every day.[12] Since 2020, Salus Populi has worked to fill this gap.

Salus Populi is a collaboration of the Center for Health Policy and Law at Northeastern University School of Law and the Institute for Health Equity and Social Justice Research at Northeastern University. The program takes its name from the ancient legal maxim, *salus populi suprema lex* ("the health of the people should be the supreme law").[13] Salus Populi educates judges and other legal professionals on public health science and the social determinants of health and their relationship to judicial decision-making. The program's goal is to help judges understand how social determinants of health influence individual litigants and broader communities and how these factors manifest within cases that come before the courts.

By equipping judges with this information, Salus Populi seeks to provide judges with a deeper understanding of the complexities of the issues that come before them and a more complete view of the context and constraints that affect litigants who appear in their courts. The program also aims to increase judges' awareness of how their decisions may impact health and health equity so that they can seek to mitigate adverse impacts when doing so is required or permitted by law.[14] Preliminary results from the evaluation of Salus Populi's first three training programs show that the program is meeting its goal of increasing judges' knowledge of the social determinants of health and their relationship to judicial decision-making. ▸

The Social Determinants of Health and Judicial Decision-Making

Public health researchers seek to understand what drives good or poor health at the population level. In other words, rather than asking why a particular person is healthy or ill, they instead ask why a population has a particular rate of disease.

Geoffrey Rose, in his now-classic article, explains why public health researchers do this.[15] He offers, as an example, differing incidences of hypertension in two populations: London civil servants, in which the incidence of hypertension was high, and Kenyan nomads, in which the incidence was low.[16] As Rose explained, one could ask "why do some *individuals* have hypertension?"[17] Or one could ask "why do some *populations* have so much hypertension?"[18] Answering the first question might help you identify individuals with the highest health risk in an already high-risk population and provide treatment or prevention to those individuals.[19] But answering the second, population-level, question might help you identify upstream, or root cause, health determinants that raise or lower the risk for everyone in that population.[20]

It is no surprise that the social conditions that drive health outcomes are rarely equally distributed. In fact, the social conditions that drive negative health outcomes tend to cluster in specific communities. For instance, racism has demonstrable negative health effects on individuals and communities.[21] Research has shown, for instance, the association between Jim Crow laws and premature death, as well as the association between historical discriminatory mortgage lending policies (known as red-lining) and asthma-related emergency department visits decades later.[22] Racism also often interacts with other social determinants of health — like poverty, lower educational attainment, fewer employment opportunities, and limited access to affordable housing or nutritious food — to produce deeply inequitable, unjust health disparities.[23]

When studying the social determinants of health, public health researchers use a wide range of scientific research methods to investigate their impact on individual and population health in order to understand why and how some populations are differentially impacted. Research methods from epidemiology and the social sciences, such as randomized control trials, quasi-experiments, administrative data, and mixed-methods that combine quantitative and qualitative approaches, enable researchers to disentangle the complicated relationships between upstream determinants of health and specific medical conditions.

In the case of racism, research engaging a wide range of methods, including quasi-experiments and epidemiologic methods, provides evidence of the connection between multiple levels of racism and health. This research shows that racism "increases allostatic load, [i.e., the] wear and tear on the body due to cumulative stress."[24] Such research also shows a link between residential racial segregation and later diagnosis of and higher mortality rates for both lung and breast cancer, to provide but two examples.[25]

Understanding public health research methodology and science can be especially useful to judges when they are called upon to exercise their discretion in deciding matters that implicate health directly or through social determinants.

The premise of Salus Populi is that judges who are familiar with both public health research methods and research results will better understand how social determinants impact the health of individuals and communities and how they shape health inequities. In turn, judges will be better equipped to appreciate the circumstances litigants face and better able to appropriately consider health impacts in their decision-making.

Understanding public health research methodology and science can be especially useful to judges when they are called upon to exercise their discretion in deciding matters that implicate health directly or through social determinants. It can be useful, as well, when they are ruling on the admissibility of epidemiologic evidence. Such issues can frequently arise in eviction cases, applications for compassionate release from prison, child custody disputes, applications for protective orders and enforcement proceedings, diversion proceedings, sentencing, and more.

Likewise, judges presiding over problem-solving courts such as drug courts, mental health courts, homeless courts, and reentry courts routinely consider a wide range of social determinants of health in devising plans to help litigants avoid future encounters with the justice system. How a judge exercises discretion in a single case can positively or negatively impact

an individual's health by affecting access to social determinants of good health.[26] Such decisions can also have ripple effects on the health of entire communities.

The Salus Populi Program

The Salus Populi program addresses this connection between public health and judicial decision-making. With support from the Robert Wood Johnson and W.K. Kellogg foundations, the program offers full-day, tuition-free Judicial Education Programs (JEPs) to judges and covers their travel expenses to attend trainings on Northeastern University's Boston campus. Salus Populi also offers shorter programs to courts and judicial associations. From its inception in 2021 through June 2024, Salus Populi has provided 13 trainings for approximately 610 attendees from 26 states. As many as 677 other judges, lawyers, and community members have viewed a virtual recording of a Salus Populi training.

The full-day eight-hour curriculum consists of four units. Each unit provides judges with the opportunity to consider the relevance of the social determinants of health to real cases. Unit one introduces participants to public health research methodologies and explains how social determinants affect both population and individual health outcomes. More specifically, the unit covers the distinction between how law, public health, and social epidemiology conceptualize causation. As part of this unit, program participants discuss a New York tort case in which the plaintiffs alleged that conditions in their landlord's apartment caused their asthma.[27]

Units two and three respectively examine how poverty and racism affect health. Unit two uses population health outcomes across geographic areas in relation to economic status to illustrate the relationship between poverty and health. The unit then asks participants to apply this information to a child welfare case in which the question is whether the parents, who live in a low-income rural area far from court-ordered health care services, willfully violated a court order with which they may have been unable to comply.[28] Similarly, unit three culminates in a discussion of a federal compassionate release case considering whether race was an extraordinary and compelling reason for compassionate release during the COVID-19 pandemic.[29]

Then, unit four describes housing as a social determinant of health, usually highlighted by a nuisance case that weighs the comparative hardship on a tenant versus the housing authority when the tenant seeks to open a default judgment.[30] The day usually ends with a judge's presentation on how the program relates to their own work.

To develop the program, we investigated the existing landscape to determine whether and to what extent judges had opportunities to learn about public health or the social determinants of health. Although we found JEPs that train judges about specific health topics — for example, the neuroscience of substance abuse, as well as the relationship of race, socioeconomic status, and gender to justice — no programs focused on the social determinants of health as such.

To gain a deeper understanding of what judges might need or want to know on the subject, we surveyed 44 judges and four law clerks to assess their previous education and current interest in topics related to public health and its social determinants.[31] Although approximately 40 percent of respondents had taken courses on health-related topics, only 5 percent had taken a course that explicitly discussed social determinants of health. Thus, although judges might have received information relevant to public health, it is unlikely that they learned how social factors affect the health of individuals and shape health inequities. Nor have most judges had the opportunity to learn how judicial decision-making is itself a social driver of both individual and public health.

Table 1. ***Social determinants of health topics judicial survey respondents would find most useful to address in a JEP.***

TOPIC	N (%)
Mental Health	29 (83%)
Violence and Abuse	28 (80%)
Poverty	23 (66%)
Aging	20 (57%)
Neighborhood Safety/Security	18 (51%)
Education	18 (51%)
Health Behaviors	18 (51%)
Housing	17 (49%)
Jobs and Income	13 (37%)
Access to Clinical Care	11 (31%)
Access to Childcare	8 (23%)
Infrastructure and Transportation	8 (23%)

Judges who responded to our survey expressed a clear interest in learning more about mental health, violence and abuse, and poverty (Table 1).

Respondents also reported a preference for interactive programs such as those offering discussions and mock case examples. Sixty percent of respondents indicated that they would be more likely to participate in a JEP on the social determinants of health if they could draw a clear connection between the JEP training and legal issues. We also interviewed six JEP administrators from four programs to learn more about best practices for JEPs. Judicial educators underscored the importance of making the curriculum interactive and including opportunities for judges to apply what they had learned.

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Evaluating the Program

We piloted our first three JEPs in fall 2021 through June 2022 (a virtual training in fall 2021 of all four units described above, a customized and abbreviated virtual training for the Superior Court of the District of Columbia in May 2022, and an in-person training in Boston in June 2022 of all four units). To assess the impact of the trainings, we surveyed participants before and after the training. Of the 178 attendees invited to participate across all three trainings, 35 (19.7 percent) completed the survey before the training and 19 (10.7 percent) completed the survey after the training. While the results that follow are promising, it should be noted that only a small portion of attendees completed the surveys.

The surveys asked attendees to rank how strongly they agreed with statements on a four-point scale (1 = *strongly disagree*, 4 = *strongly agree*). To determine whether mean ratings on the pretest were statistically significantly different than mean ratings on the post-test, we conducted independent sample t-tests.

First, survey results showed that judges self-reported a better understanding of the relationship of social determinants to judicial decision-making. Despite some differences between the trainings, the evidence suggests that on average, participants' knowledge of the SDOH increased by 15 percent to 27 percent because of the program. (Preliminary findings suggest that participants in the full Salus Populi curriculum gained more knowledge of SDOH concepts than participants attending one of our shorter trainings at an internal judicial conference.) Judges also believed they would use this knowledge in their work and reported that they found the program well organized and effective and would recommend it to other judges.

Second, post-training surveys showed stronger agreement with three statements about participants' understanding of how legal decisions impact SDOH, individual health, and population health.

Third, on average, attendees who took the post-training survey agreed or strongly agreed that the training content is important to their work and that the course did a good job of connecting the content to their work. They also agreed on average that the information in the course on research methodology will be useful to them. However, attendees were least satisfied with the training's applicability to day-to-day work and the usefulness of learning about the research methods that document the impact of the SDOH. The program has started to address this feedback, including by adding closing remarks by judges on how the training applies to their work. It may also be that the presented research methods content is not as applicable to the judiciary or that further revisions should be made to ensure that the content is relevant.

The attendees who believed most strongly that the training was applicable to their work were those who attended an in-person training that they sought out themselves and that covered all four units. We have recently added a question to the post-training survey asking participants whether and how they expect to use the information in their work. Preliminary thematic analysis of responses has revealed that the most common themes include using the information from the course in specific decisions (including sentencing and release orders and evidentiary motions), and better understanding the context of cases. As we continue to analyze these survey responses and our ongoing in-depth interviews with participants, we gain a better understanding of how attendees think they will use, and do in fact use, the training in their work.

Figure 1. ***Perceived Understanding of Judicial Decision-Making and the SDOH***

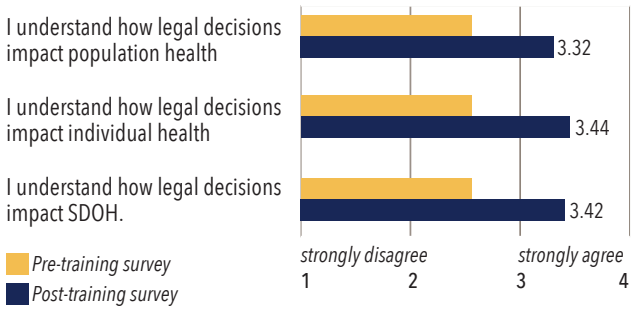
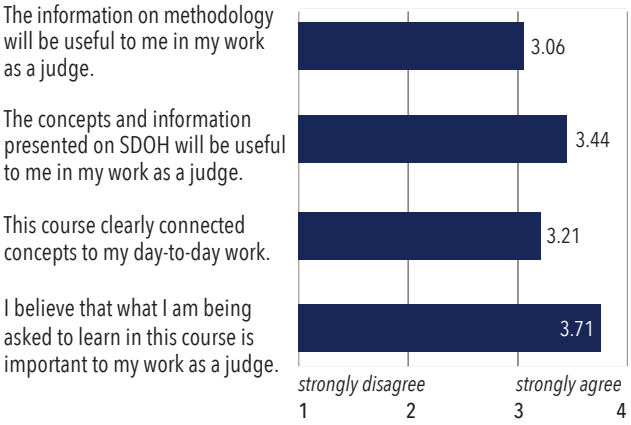


Figure 2. ***Applicability to Work***



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Our preliminary findings that knowledge and understanding of the SDOH

increased following the training provide initial support for our theory of change: that with adequate training, judges can increase their knowledge of the relationships between law and health and ultimately may be able to use this knowledge in their work.

Our aim is to promote the health of both litigants and their communities and to reduce the inequitable impact of the social determinants of health, while also furthering the administration of justice. To that end, we intend to continue to refine the program based on evaluation findings and develop an additional curriculum on racism, health equity, and judicial decision-making.

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10 *See Social Determinants of Health Literature Summaries*, *supra* note 2.

11 *See generally* Scott Burris et al., The New Public Health Law: A Transdisciplinary Approach to Public Health Law, 43–52 (2nd ed. 2022) (discussing a transdisciplinary approach to public health law, including legal epidemiology which is the "scientific study and use of law as a factor in the cause, distribution, and prevention of disease and injury in a population").

12 Khalik & Lincoln, *supra* note 1, at 262.

13 *See* Marcus Tullius Cicero, On the Republic and On the Laws 184 (Thomas L. Pangle & Allan Bloom eds., David Fott trans., Cornell University Press 2014) (51 B.C.E.) ("Let the safety of the people be the highest law for [public officials]."); *see also* Khalik & Lincoln, *supra* note 1, at 261.

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17 *Id* (emphasis added).

18 *Id* (emphasis added).

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25 *Id.* (citing Hope Landrine et al., *Residential Segregation and Racial Cancer Disparities: A Systemic Review*, 4 J. Racial & Ethnic Health Disparities 1195 (2017)).

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28 *See In re* Brittany T., 835 N.Y.S.2d 829 (N.Y. Fam. Ct. 2007), *rev'd*, 852 N.Y.S.2d 475 (2008).

29 United States v. Harris, 505 F. Supp. 3d 1152, 1162–65 (D. Kan. 2020).

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31 The findings from Salus Populi's research cited from this point forward have not been previously published. Please inquire with Salus Populi for any questions related to data or data analysis.