100 YEARS

Perspective

US State Policy Contexts and Population Health

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Policy Points:

- This Perspective connects the dots between the polarization in US states' policy contexts and the divergence in population health across states.
- Key interlocking forces that fueled this polarization are the political investments of wealthy individuals and organizations and the nationalization of US political parties.
- Key policy priorities for the next decade include ensuring all Americans have opportunities for economic security, deterring behaviors that kill or injure hundreds of thousands of Americans each year, and protecting voting rights and democratic functioning.

HIS PERSPECTIVE HIGHLIGHTS THE TECTONIC CHANGES IN US states' policy contexts in recent decades and their profound impact on population health. It discusses key interlocking forces—the political investments of wealthy individuals and organizations and the nationalization of political parties—that spurred changes in states' contexts. We then speculate about key policy areas, namely voting, civil, and reproductive rights, that will be at the center of the continued polarization in state policy contexts over the next decade. We conclude with recommendations for future research on the role of state policy contexts on population health; provide thoughts on how to

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improve communications between researchers, policymakers, and the public; and outline policy priorities.

Large and Growing Differences in Population Health Across States

The chances of living long and healthy differ markedly across states. In 2019 (the last year for which state-level data are available from the US Mortality Database¹), life expectancy ranged from 81.8 years in Hawaii to 74.7 years in Mississippi. If Hawaii were a country, it would have ranked 19th in the world in life expectancy, alongside Germany, the Netherlands, and Ireland. Mississippi would have ranked 80th, alongside Malaysia and Belarus. The 7.1-year difference in life expectancy across US states in 2019 was larger than that between the highest life expectancy country (Japan, 84.3 years) and the next 48 countries.²

People residing in states with relatively low life expectancy have a particularly high risk of dying young and suffering poor health while they are alive.^{3,4} As a staggering example, mortality data from 2019 indicate that, for every 100 babies born that year in Mississippi, three will not survive to their 30th birthday, 10 will not live to their 50th birthday, and 24 will die before they can enjoy retirement at age 65.⁵ Moreover, the years they do live are marked by elevated rates of morbidity and disability. A recent study using data from 2013–2017 found that men and women in Mississippi spend approximately 9% and 12%, respectively, of their adult years with a disability.³

Although these differences across states have long existed, the magnitude has fluctuated over time. During the 1960s and 1970s, states were becoming more alike in terms of life expectancy.⁶ However, this convergence ended in the early 1980s. Since then, states have become increasingly unequal, as some states experienced sizable gains in life expectancy while others saw few gains and, more recently, declines. For example, in 1960, life expectancy in both Connecticut and Oklahoma was 71 years.¹ Over the next six decades, these states would markedly diverge, as shown in Figure 1. Life expectancy in Connecticut climbed to 81 years by 2019, putting it in 6th place. Life expectancy in Oklahoma rose to just 76 years by 2019, putting it in 45th place, with most of that gain occurring before the early 1990s.

It is imperative to understand why life expectancy has diverged across states, particularly because the divergence shows no signs of slowing.



Many American lives are being cut short each year and this number will likely increase for years to come. In fact, life expectancy projections for the country overall are bleak. Without a concerted effort at the state or federal level to intervene, by 2040 the United States is projected to make fewer gains in life expectancy than other countries and fall more than any other high-income country in international rankings to 64th place.⁷

The Important Role of States' Policy Contexts

Differences in life expectancy across states result from factors operating at multiple levels. A useful framework for identifying these factors comes from a 2021 National Academies of Sciences, Engineering, and Medicine (NASEM) report, which was commissioned to examine the high and rising mortality rates among working-age adults in the United States.⁸ The framework shows that working-age mortality is affected by factors operating at the macro-structural level (e.g., state policies and corporations), meso level (e.g., workplaces), and individual-proximal level (e.g., health

behaviors and socioeconomic circumstances). The report emphasized the importance of the macro-structural level because it exerts a strong influence on other levels. For instance, state policies affect individuals' access to affordable health insurance; state policies can influence health behaviors through tobacco excise taxes, marijuana legalization, alcohol pricing, opioid-prescribing regulations, and more; and state policies can influence individuals' economic circumstances through education expenditures, minimum wage levels, housing policy, taxes, and more. Other scholars have similarly underscored the profound role of policies and the political choices behind them, asserting that they are the "*causes of the causes of the causes of geographic inequalities in health.*"⁹

Corroborating these frameworks, recent studies implicate the tectonic shifts in states' policy contexts since the 1980s, and especially since 2000,¹⁰ as a driver of the large and growing disparities across states in life expectancy⁶ and adult mortality.¹¹ States have become highly active in policymaking. Since the 1980s, the annual rate in which states enact new policies has accelerated and is higher than ever recorded since 1800.¹² The reasons for the high activity include factors such as the decentralization of certain policymaking authorities from the federal to state governments, rising influence of corporations and their interest groups on state policymaking, and many states' attempts to fill a vacuum in federal legislation on issues such as minimum wage, paid sick leave, and firearm safety.^{13,14} At the same time, many states enacted preemption laws to remove or restrict local authority. For instance, in 2000 only 2 states preempted local authority to raise the minimum wage, but by 2019, 26 states did. These laws have recently proliferated, particularly in conservative states, to block liberal-leaning policies (e.g., mandating paid leave, raising minimum wage, banning single-use plastics) of their cities.15,16

The impact of this policymaking activity on people's pocketbooks and health is exacerbated by the fact that it has occurred in an era of hyperpolarization.¹⁰ Consequently, many states have actively implemented policy "bundles" that lean politically left or right. For example, some states enacted Medicaid expansion *and* higher minimum wages *and* higher tobacco taxes *and* paid sick leave *and* supplemental earned income tax credits (EITC)—and these bundles appear to be paying dividends in improved health, health behaviors, and longevity in those states.^{6,17} Another example of bundling comes from a study of state policies that impact perinatal and infant outcomes.¹⁸ It showed that some states have combined higher minimum wages *and* paid parental leave *and* tax credits *and* higher tobacco taxes, all of which improve those outcomes, while many other states bundled low minimum wages, no parental leave or tax credits, and low tobacco taxes. Recently, researchers using an innovative counterfactual research design concluded that the growing disparities in working-age mortality across states were due to growing differences in policy contexts and the bundling of policies.¹⁷

A Tale of Two Tails

Table 1 illustrates how policies have *polarized between* and *bundled within* states by contrasting two states that are archetypes of the bundling, Connecticut and Oklahoma (similar contrasts have been made using New York and Mississippi¹⁹). In 1990, Connecticut and Oklahoma had similar labor and economic policies. The hourly minimum wage in Connecticut was just 45 cents higher than that in Oklahoma (\$4.25 versus \$3.80, respectively). Neither state had a supplemental EITC, paid sick leave laws, or right-to-work laws or preempted local authority to raise the minimum wage or mandate paid leave. They also had similar policies regarding key health behaviors. For example, the maximum weekly allotment for the Supplemental Nutrition Assistance Program (SNAP) was \$331 in each state, excise taxes on a pack of cigarettes were a low 40 cents in Connecticut and 23 cents in Oklahoma, and while Connecticut had more firearm laws than Oklahoma (27 versus 10), this gap pales in comparison to the one that would emerge in subsequent decades.

Between 1990 and 2019, the policy contexts in these two states fundamentally shifted. Connecticut invested in its labor force and their families by raising its hourly minimum wage (\$11) above the federal level (\$7.25), implementing an EITC (with a credit of 23% of the federal EITC in 2019), and enacting paid sick leave. Oklahoma held its minimum wage at the federal level, implemented an EITC with a credit of 5% of the federal EITC, and did not mandate paid sick leave. In addition, it enacted right-to-work laws, which undercut the power of unions by prohibiting them from requiring membership dues, as well as preemption laws to prohibit local areas from raising their minimum wage or mandating paid leave. These two archetype states made many other opposite decisions. Connecticut participated in the Affordable Care Act Medicaid expansion (Oklahoma participated in 2021, seven years after Connecti-

	Conne	ecticut	Oklal	homa
	1990	2019	1990	2019
Iuman capital development Per pupil expenditure on primary and secondary education ^{20, a} (\$)	15,466	21,965	6,825	9,563
abor and economic well-being				
Minimum wage ²¹ (\$)	4.25	11.00	3.80	7.25
State EITC rate as percentage of federal credit ²¹ (%)	0	23	0	2
Has a paid sick leave mandate ²²	ou	yes	ou	ou
Has a right-to-work law ²³	ou	no	no	yes
Preempts local authority to raise minimum wage and mandate paid sick leave ²⁴ fealth hehaviors	ои	оп	оп	yes
Excise taxes on a pack of cigarettes ^{25, b} (\$)	0.40	4.35	0.23	2.03
Number of firearm laws ²⁰ , ^c	27	91	10	8

Table 1. (Continued)				
	Connec	ticut	Oklah	loma
	1990	2019	1990	2019
SNAP maximum allotment for family of four ²¹ (\$)	331	642	331	642
Attordable medical care Participates in ACA Medicaid expansion ^{27, d} Population	l	yes	I	оп
Size ²¹ Size ²¹ Percent of population that were immigrants ²⁸ (%)	3,287,116 8.5	3,565,287 14.8	3,145,576 2.1	3,956,971 6.1
Number of immigrants ²⁸ Percent of persons ages 25+ with college degree ²⁹ (%)	279,400 27.2	528,400 39.3	65,500 17.8	240,200 25.5
Abbreviations: ACA, Affordable Care Act; EITC, Earned Income ⁷ Data on education expenditures is given in 2020 dollars for all ye ^b The excise tax in Oklahoma had been \$1.03 until 2019. ^c ^d Data contained in the 1990 column are from 1991 (the earliest y ^d Oklahoma adopted ACA Medicaid expansion in 2021.	fax Credit; SNAP, Supple ars shown in the table. ear the data are available)	emental Nutrition Assi.	istance Program.	

cut), substantially raised excise taxes on a pack of cigarettes to \$4.35 in 2019 (\$2.03 in Oklahoma), and increased the number of firearm laws from 27 to 91 between 1990 and 2019 (Oklahoma decreased the number of these laws from 10 to 8). This bundling of state policies has created one context that bolsters opportunities for people to achieve economic well-being and health, and another that puts formidable obstacles in the way by either taking no action (e.g., not raising the minimum wage to keep up with inflation) or deliberate action (e.g., right-to-work laws and preemption laws).

State policies such as those listed in Table 1 impact people's pocketbooks, physical and mental health, and longevity.³⁰ For example, they impact material well-being; access to medical care, housing, and clean air; and people's ability to avoid economic hardship and associated stressors. These policies are critical for lower-income workers and families.³¹ Higher minimum wages^{31–34} and EITC^{31,35} significantly reduce mortality risks among lower-income adults, especially from causes of death driving trends in working-age mortality like cardiovascular disease (CVD)³⁴ and suicide.^{31,32} Access to paid sick leave lowers the odds of forgoing needed medical care,³⁶ job loss, and economic hardship,³⁷ as well as working-age mortality from suicide among men and from alcohol-induced causes among women.³⁸ Right-to-work laws undercut unions' resources to advocate for better wages and workplace safety. These laws have exacerbated the deleterious effect of declining manufacturing employment in certain counties on suicide and drug overdose mortality among working-age men.³⁹ State preemption of local authority to raise the minimum wage has stymied reductions in infant mortality rates⁴⁰ and, along with state preemption of local authority to mandate paid sick leave, has stymied declines in working-age mortality from alcohol poisoning, drug poisoning, and suicide.³⁸ Behavior-related policies also have consequences. Tobacco taxes and clean indoor air laws affect the prevalence of smoking, exposure to secondhand smoke, allcause mortality, and deaths from causes such as CVD.⁴¹ The number of firearm laws has also diverged across states,⁴² and these laws are a strong predictor of working-age mortality.¹¹ SNAP reduces food insecurity, poverty, and the need to decide between nutritious meals and other essentials. Partly as a consequence, it improves adherence to medications and lowers risks of obesity, diabetes, CVD, and working-age mortality.43,44 Medicaid expansion has a host of health-related benefits including lower mortality from drug overdose⁴⁵ and cardiometabolic

diseases.^{46,47} By reducing the odds that low-income adults must choose between medical care and other necessities, Medicaid expansion resulted in fewer evictions and unpaid bills.⁴⁸

Of course, state policies are not the only factor driving differences in population health between states. Changes in population characteristics also matter. States gaining immigrant populations and interstate migrants may see population health improve because of a healthy (im)migrant effect. States with populations whose human capital is rising may also see improvements. Such changes are likely a part of the explanation for diverging state life expectancies; however, available evidence indicates that they are not the dominant part.^{17,49} For instance, changes in overall education levels of states' populations (whether through immigration, migration, or rising human capital) have played a minor role in the growing divergence in adult mortality rates between states.¹⁷ Using a more granular geographic unit of analysis, another study concluded that growing disparities in mortality across counties were unlikely due to (im)migration across counties.⁵⁰

We provide some estimates of changes in the populations of Oklahoma and Connecticut in Table 1. Between 1990 and 2019, the population of Oklahoma grew by 26% (adding 811,395 people) while that of Connecticut grew by 8% (adding 278,171 people). The number of immigrants increased by 267% in Oklahoma and 89% in Connecticut. Increases in human capital were similar: the share of the population ages 25 and older with a college degree increased by 43% in Oklahoma and 44% in Connecticut. Although the data in Table 1 are neither exhaustive nor able to adjudicate the relative roles of policies (or other place-based characteristic) and population characteristics on health, they align with studies finding a key role of state policy contexts.^{6,17,51}

How Did We Get Here?

Why did these two archetypes emerge? We highlight two particularly important and interlocking forces. The first force is the tightening grip of corporations, their interest groups, and wealthy donors on state policymaking.¹³ While US corporations are not politically monolithic, they have tended to support lower taxes, fewer labor protections, and a smaller welfare state.⁵² Their collective influence on state policy has grown in large part through the conduits of the American Legislative Exchange Council (ALEC), State Policy Network, and the Koch-funded

Americans for Prosperity.¹³ The footprint of this "troika" on state policies is profound.¹³ For instance, ALEC has written numerous

policies is profound.¹³ For instance, ALEC has written numerous pro-business bills (e.g., stand-your-ground laws, right-to-work laws, and state preemption of local authority to raise the minimum wage), with input and funding from its corporate members. ALEC has been very successful in changing the policy contexts of many, mainly conservative states such as Oklahoma. For example, in his book documenting the influence of ALEC on state policies from 1995 to 2013, Hertel-Fernandez shows that Oklahoma was among the five states with the highest enactment rate of ALEC-crafted legislation and Connecticut was among the five states with the lowest rate.¹³ The targeting of state governments by groups like ALEC was intentional.^{13,53} The presumption of ALEC and its corporate members was that it would be easier to enact unpopular legislation if the public was unaware of it (Americans pay less attention to state policymaking than federal policymaking, owing partly to the decline of state and local journalism). In addition, it was considered preferable to be successful in some states than no states, the latter of which would happen if efforts to enact federal legislation failed. In sum, the coordinated efforts of corporations, their interest groups, and wealthy donors to change the nation's policy context "one state capital at a time" have been a stealthy force beind the policy bundling and polarization in recent decades.¹³

The other interlocking factor is the polarization and nationalization of political parties in recent decades.^{54,55} This trend has created an environment in which state governments controlled by the same party increasingly act the same, regardless of their economic, geographic, or other characteristics, while acting more differently from the other party.⁵⁴ In other words, instead of a Tennessee version, an Arizona version. and a Florida version of the Republican Party, there is increasingly one national version, and it is increasingly at odds with the (also increasingly national) Democratic Party. This polarization and nationalization of the parties, especially the Republican Party, has been the result of long-term political investments by donors, organizations, and media, as well as the racial "sorting" of the parties. Over decades but especially recently, the Republican "Southern strategy" attracted racially conservative white voters, providing the party an electoral base that would vote based on racial, cultural, and immigration-based conflict rather than the party's performance in health and economic policy.⁵⁶ By making political media more national and much more conservative, the rise of Fox News and Sinclair Broadcasting has also been a key part of this transformation of American politics.^{54,57,58}

Momentum and Metastasis

The polarization of state policies will likely continue and metastasize across existing and emerging policy domains. Economic and public health policies spurred by the COVID-19 pandemic are one example, where each state's prepandemic policy ethos molded its policy response to the pandemic.^{598,60} In fact, the two factors that best predict how quickly a state enacted stay-at-home orders and when they reopened were the states' prepandemic safety net policies and Republican partisan control.⁶⁰ These factors were more important than the COVID-19 case rate itself. Unsurprisingly, Connecticut enacted policies to curtail the spread of the virus more rapidly than did Oklahoma.⁶¹ In fact, only four states (California, Illinois, New Jersey, and New York) acted faster than Connecticut to issue stay-at-home or shelter-in-place orders. Oklahoma was one of the slowest to act, along with states like Florida, Texas, and Georgia. Connecticut also issued a public face mask mandate and a face mask mandate in schools for the 2021-2022 school year. Not only did Oklahoma refrain from enacting a public face mask mandate, but the state banned face mask mandates in schools and all buildings that the state leased or owned.

With growing fervor, many states have been enacting policies to dismantle rights that have long been protected by federal law, notably voting and reproductive rights. According to the Brennan Center for Justice, in 2021 alone, "11 states passed voting laws that were entirely restrictive, while 17 states passed laws that were entirely expansive.⁶² The center warns that "access to the right to vote increasingly depends on the state in which a voter happens to reside. That divide only stands to widen … unless Congress acts."⁶² State laws on access to abortion, another long-protected right, have been diverging for years.¹⁰ The divergence has erupted following the overturning of *Roe v. Wade.* Here again, Oklahoma and Connecticut followed suit. While the former enacted a total ban on abortion, the latter expanded the types of providers who can perform abortions and created a legal "safe harbor" for patients from other states as well as providers.

Beyond these long-standing policy domains, states are diverging in newly created ones as well. For example, some states have enacted laws that ban single-use plastic bags (to protect the environment), while others have enacted laws that prohibit local areas from banning singleuse plastic bags (to protect the plastics industry).⁶³ Unsurprisingly, Connecticut is among the former and Oklahoma is among the latter.⁶⁴ Some states have passed laws prohibiting so-called sanctuary cities. In recent years, many conservative states have proposed or passed legislation in direct response to culture wars. For instance, states have passed legislation that prohibits certain topics in schools like critical race theory and sexuality and gender identity (e.g., Florida's Parental Rights in Education Act). In addition to restricting classroom discussion on gender and sexual orientation, Alabama's 2022 Vulnerable Child Compassion and Protection Act requires students to use restrooms and locker rooms based on the sex listed on their original birth certificate and makes it a felony to perform gender-affirming surgeries or prescribe hormones or puberty-blocking medication. Other states like Tennessee have proposed bills that would prohibit public school libraries from having materials considered harmful to minors. These are just a few examples of how responses to the culture war are being baked into state policies. There is little uncertainty about the positions that Connecticut and Oklahoma will take on these issues.

Looking at the decade ahead, we speculate that state contexts will continue to polarize unabated and that some of the most active policy areas will include (1) voting rights and electoral policies and (2) reproductive and civil rights policies. These issues may be a "final frontier" in the decades-long transformation of the state policy landscape. Their consequences are likely to cement the diverging trajectories in states' democratic performance and the life and death experiences of their populations.

The effects on democratic institutions are already visible. An analysis of democratic institutions in the states during the 2000–2018 period found substantial democratic contraction in some states and expansion in others.⁵⁷ It also found that the main explanation for democratic contraction was "gerrymandering and electoral policy changes following Republican gains in state legislatures and governorships in the 2010 election."⁵⁷ North Carolina is a striking example. Changes to its voting laws and procedures after 2011 resulted in the Republican Party receiving 77% of congressional seats in 2018 even though they won 50% of the two-party vote.⁵⁷

Investigating the population health impact of these "final frontier" policy areas will be challenging because any impact is likely to be indirect, diffuse, and long term, taking years to manifest. Two recent studies investigated the association between states' civil rights policies and life

expectancy and adult health and found intriguing results.^{6,65} They found that more liberal versions of civil rights policies predicted longer lives and better health. In addition, one of the studies found that more liberal civil rights policies predicted higher education levels, employment rates, and income among the states' population, which may explain why those policies predicted better health.⁶⁵

Implications for Research, Communication, and Policy in the Next Decade

The tectonic changes in US state policy contexts necessitate new approaches for studying their impact on population health. New approaches should (1) use multilevel frameworks to both identify and interpret the effects of macro, meso, and micro level factors on health, (2) elevate a focus on commercial and legal determinants of health, (3) assess how state policies amplify or attenuate the effects of federal and local policies on health, and (4) examine the effect of policy bundling on health. The next section discusses these four recommendations.

Multilevel Frameworks and Multilevel Interpretation

Multilevel frameworks and multilevel interpretation are both essential for advancing the science on how state policy contexts affect population health. The framework in the NASEM report is well suited for this purpose.⁸ As explained earlier, it illustrates how population health is shaped by factors operating across multiple levels, and that macrolevel factors like state policies and corporations exert a powerful influence on factors like work environments, poverty, and smoking that operate at meso and individual levels. A key implication is that focusing on macrolevel factors can help researchers and policymakers avoid missing the "big picture,"⁹ conflating root causes with symptoms, and, consequently, developing ineffective policies and interventions.⁶⁶

We are not proposing that all research to explain health disparities across US states should investigate only macrolevel factors. Instead, we are underscoring the importance of (1) focusing on actionable macrolevel factors, and (2) interpreting research on more proximal factors in light of the structural forces that made them relevant for health. We refer to the second item as multilevel interpretation. It is essential yet often lacking in published studies. For example, a study lacking a multilevel interpretation might conclude that a state like Mississippi has lower levels of life expectancy because its population is less educated and has a higher share of Black residents. However, as an explanation, it is inadequate and unactionable because it neglects the reasons why education and race matter in states like Mississippi. Consequently, it risks being misinterpreted by policymakers and the public as implying that life expectancy disparities across states are inevitable, unmalleable, and simply a matter of demographics or "bad choices" or "bad behaviors" among their residents. In contrast, a multilevel interpretation would connect the dots. It would explain how structural forces made education and race relevant for health in Mississippi through public schooling expenditures, minimum wage levels, structural racism embedded in certain policies and other conditions in the states, and more.

Commercial and Legal Determinants of Health

The NASEM framework also drew attention to corporations as a key macrolevel factor in shaping population health.⁸ As we highlighted earlier in the paper, corporations, their interest groups like ALEC, and other such commercial actors have exerted an increasingly powerful influence on policies in many states.¹³ These actors touch nearly every aspect of people's lives, including the air we breathe, the water we drink, the food we eat, our income, access to affordable medical care, risk of firearm injury or death, exposure to secondhand smoke, and the information that we receive from the media. Despite unequivocable evidence showing that corporations and their interest groups have molded the policy contexts of many states,¹³ and that corporations shape numerous determinants of health,^{66–70} there has been a paucity of research examining their role in the large and growing disparities in health across states. In our view, this is a serious omission in the literature and addressing it should be paramount.

A formidable obstacle to addressing this omission is the challenge of collecting disparate sources of data on the multifaceted and sometimes subterranean political activities of corporations and interest groups that influence state policies, and ultimately health outcomes. This would be

a major undertaking. Although there are various data sources that cover transparent "hard money" campaign contributions and lobbying spending (e.g., the Center for Responsive Politics), many important political tactics of corporations and the wealthy-including organization building, media influence, the subsidization of "astroturf" movements,⁷¹ and many other strategies-require creative data collection and merging. Developing such a data resource would require significant funding, ingenuity, and multiple stakeholders. It would be difficult but not insurmountable. The scientific community has undertaken other daunting data collection efforts (e.g., collecting blood samples from thousands of people in national data sets like the Health and Retirement Study) and could marshal its ingenuity to do the same here. This effort will require sustained funding from sources such as the National Institutes of Health, National Science Foundation, and Robert Wood Johnson Foundation. We implore funders to facilitate and support the creation of this data and its linkage with individual-level survey data sets. In sum, the next generation of research on the large and growing disparities in health across states, as well as the troubling trends in health at the national level, must elevate a focus on corporations and their interest groups.

Policy Amplification and Attenuation

State policy contexts are important for population health, but local and national contexts also matter. It is imperative that research begins to examine how these contexts "combine" to affect population health. These contexts may have synergistic or offsetting effects on population health, but research on such effects is scant. In fact, two new studies find that state policy contexts may be more consequential for population health in certain types of local environments. One shows that state contexts may be especially important in nonmetropolitan areas—the areas in which working-age mortality rates have increased in recent decades.⁷² Another study examined the impact of rising deindustrialization in certain counties on working-age mortality during 1993 to 2007.³⁹ The harmful impact on men's working-age mortality was exacerbated in states with weaker social safety nets, lower minimum wages, and right-to-work laws. These new studies underscore the need to examine synergistic impacts of state, local, and national policy contexts.

Policy Isolation and Bundling

The tighter bundling of policies within states necessitates new approaches to studying their population health impact. Conventional econometric approaches to quantifying the effects of state policies on health generally attempt to isolate the effect of a single policy. However, bundling makes isolating the effects of specific policies challenging. For example, in 2019, the correlation across states between the number of firearm laws and amount of tobacco tax on a pack of cigarettes was 0.71; the correlation between minimum wage levels and Medicaid generosity was 0.61; and 21 of the 23 states without right-to-work laws had a minimum wage above the federal level while just 8 of the 27 states with such laws had a minimum wage above the federal level.

Another complication of the single-policy approach is that policies can be enacted around the same time. Take, for example, the year 2014, when 25 states implemented Medicaid expansion through the Affordable Care Act,⁷³ 30 states implemented important criminal justice reforms such as legalizing or decriminalizing marijuana,⁷⁴ and 17 states raised their minimum wage.²¹ Importantly, 11 states implemented all three policy changes that year and another 11 states implemented two changes, greatly complicating efforts to understand the effect of any single policy.

A better understanding of the large and growing health disparities across states requires new approaches that examine policy bundles. Examining bundles is also consistent with "the reality that people live more than one policy at a time."⁷⁵ However, less than a third of articles on the effects of social policies on health report that they checked or accounted for other policies that bundled, or co-occurred, with the focal policy.^{76,77} Matthay and colleagues stress that research must "systematically assess policy co-occurrence and apply analytic solutions to strengthen studies on the health effects of social policies" and they provide strategies for designing such research.^{75,77} In addition to drawing on these research designs, researchers should integrate methods from other fields that have been developed to handle correlated exposures such as Bayesian group index regression models,⁷⁸ dynamic factor models,⁷⁹ and dynamic principal components.⁸⁰ Research to understand the population health impact of state policy contexts would also benefit from interdisciplinary teams with knowledge spanning multiple policy domains.

In sum, although studies isolating the effect of specific policies are important, so are studies of policy bundles. No single policy can explain the growing disparities in population health across states. Returning to our Connecticut and Oklahoma comparison, life expectancy in these two states diverged after 1980 not because Connecticut raised its minimum wage, or increased cigarette taxes, or enacted firearm safety policies, or expanded Medicaid, or any other single policy change. Instead, we must look for answers in the bundling of such changes

Communication and Impact

Much has been written about how to effectively communicate with policymakers and the public, so we share two recommendations that we took from a recent meeting with state policymakers. At the meeting, we shared our finding that changing state policies could increase or decrease life expectancy by several years, and that trends in states' policies had contributed to the troubling trends in US life expectancy.⁴ Our excitement about the findings was not shared by the group, and, after some probing, we discovered why: life expectancy was not as compelling of a measure as we considered it to be. However, interest suddenly piqued once we explained that the gap in life expectancy between Mississippi and Hawaii (75 versus 82 years) in 2019 did not mean that 75-year-old people got 7 more years of life if they resided in Hawaii; it meant that Mississippians were dying young. Explaining that, for every 100 babies born in Hawaii in 2019, 14 would likely die before their 65th birthday but for every 100 born in Mississippi, 24 would die before their 65th birthday, was more compelling to policymakers than a 7-year gap in life expectancy between the states. The implication is that researchers should better understand the types of information that policymakers and the public find compelling. Some may be motivated by information about how to live a long life while others may be compelled by information on how to avoid dying young.

Our second recommendation is for researchers to bear in mind that there is considerable variation among policymakers and the public about whether the pursuit of good health and long lives should take priority in all decisions. Communicating research results in a manner that endorses a "health at all costs" approach is unlikely to be compelling to many policymakers and the public, as seen during the COVID-19 pandemic.^{80,82} It fails to recognize that policymakers must balance budgets and many critical priorities and that a "health at all costs" lifestyle may not be desirable for many Americans. During our meeting with state policymakers, one shared a baseball analogy that colorfully illustrated this point: they stated that their constituents want to run around the bases (i.e., life) at the pace they preferred and slide into home base (i.e., die) as soft or as hard as they want. Public reaction to COVID-19 mitigation policies, such as mask mandates and stay-at-home orders, in large swaths of the country echo this sentiment. It is an important lesson for population health researchers and practitioners. A key implication is that population health research may have a greater impact and change minds if that research, or at least the communication of the research, considers health to be one of several critical priorities of policymakers and the public.

State Policy Priorities

We conclude with two overarching policy priorities for the next decade. We selected these two because they have profound implications for population health and well-being and because states have been and continue to be moving in opposite directions in these priorities. One priority is to ensure that all individuals have adequate opportunities for economic security. State policymakers have numerous ways to achieve this priority; we highlight seven of them here. One way is raising the minimum wage to at least keep up with inflation. The current federal minimum wage of \$7.25 per hour is worth 14.8% less than it was in 2009 (the last year the wage was raised) and 28.6% less than it was in 1968.83 By one estimate, raising the federal minimum wage to \$15 by 2024 would benefit nearly 40 million workers, raising many of them and their families out of poverty and its deleterious impacts.⁸³ Another state-level economic policy with spillover benefits on the health of workers and their families is the EITC. While states like New York and Minnesota offer a refundable EITC, states like Idaho and Tennessee offer no EITC at all. Another priority is to halt the destruction of unions by, for example, eliminating so-called right-to-work laws, which could lift the economic boats of working individuals, their families, and surrounding communities. Paid sick and family leave laws and robust child care supports can help individuals remain in the labor force while caring for young children and aging parents. Taxation structures are also critical. In their book Taxing the Poor, Newman and O'Brien write, "Virtually everything that matters in determining the life chances of Americans' children is affected by how their families are taxed."84 Focusing on state and local taxes, they showed that progressive tax structures that allow deductions and credits that

disproportionately benefit poor individuals (e.g., renter's credits, EITC, child tax credits, subsidies for utility bills), and that emphasize property taxes over sales taxes as revenue, lead to a host of societal benefits such as lower teenage pregnancy rates, lower crime rates, higher educational attainment, and lower mortality rates. The sixth policy that we emphasize for achieving adequate opportunities for economic security for all individuals is to ensure *access to abortion*, as doing so can significantly reduce the risks of poverty among women and children.^{85,86} Our final recommendation under this policy priority is for state and local governments to *invest in public schooling*. This is essential for giving individuals the skills needed to thrive in the 21st century.

A second overarching policy priority is to deter behaviors that injure and kill hundreds of thousands of Americans every year. Behaviors such as cigarette smoking, heavy alcohol consumption, reckless driving, and unsafe firearm use not only injure and kill the people who engage in them; they also harm and kill people who do not, and they impose significant financial costs on the government, employers, and taxpayers. For instance, each year cigarette smoking costs roughly \$170 billion in health care costs⁸⁷ and more than \$185 billion in productivity losses.⁸⁸ Also staggering are the health care and economic costs of firearm injuries, fatalities, and their collateral consequences for families and communities.⁸⁹ State policymakers have many means to deter these behaviors such as raising tobacco and alcohol excise taxes, mandating indoor clean air laws, and bolstering firearm safety laws. States differ dramatically in their approaches to these behaviors. For instance, state excise taxes on cigarettes are an effective way to reduce smoking prevalence and smoking-related deaths, yet, in 2022, taxes on a pack of cigarettes ranged from a mere 17 cents in Missouri to \$4.35 in New York and Connecticut.⁹⁰ Likewise, firearm safety laws differ markedly across the country, despite evidence that they can significantly reduce firearm homicides. Three laws that appear to be particularly powerful are mandatory handgun waiting periods,⁹¹ laws that restrict possession of firearms by intimate partner violence offenders,⁹² and permit-to-purchase laws.93,94

Under current political conditions, these policy priorities are unlikely to be addressed at sufficient scale to make substantial improvements in population health. We thus turn here to additional policies and organizational strategies that can increase political capacity toward improving economic security and the regulation of firearms, environmental quality, tobacco, and alcohol. A first strategy is to pursue institutional reforms that ensure that state policymaking reflects the votes and will of the people in each state. State governments hold constitutional authority over voting rights, election certification, and legislative districting. Over the past two decades, some states have created new burdens and obstacles to voting, as well as drawn legislative district maps (for state legislative and US House seats) that have set records in terms of their partisan bias. This state-level weakening of democracy has contributed to recent policy changes that are "out of step" with states' voters, such as legal bans on abortion.

Policymakers at both the state and national levels can achieve this priority. At the state level, research shows that initiatives such as automatic voter registration, offering early voting, removing felony disenfranchisement laws, and establishing bipartisan commissions to draw fair legislative maps can improve the relationship between popular preferences and state policy. Ensuring that the will of voters is actually reflected in the states' policy contexts will also require efforts such as banning partisan gerrymandering, preventing the disproportionate influence of corporations and their lobbying groups n state policymaking, and discontinuing the use of preemption laws to block local areas' ability to improve the health and well-being of their residents. Perhaps more important, Congress can set new rules at the national level that set baseline democratic standards across states, as the Voting Rights Act of 1965 did. A national ban on partisan gerrymandering, as well as national automatic voter registration, would go far in preventing further democratic backsliding in the states.

Finally, an additional strategy to build capacity in support of policies to improve health is to reinvest in the American labor movement. Since the early 20th century, labor unions have played a key role in nearly every expansion of economic security (including policies expanding access to health care) and civil rights in the United States. However, labor union membership has been in steep decline since the 1970s due to increased employer opposition and state-level policies that restrict labor organizing. Today, labor unions are experiencing a resurgence in popularity, and they offer a potential long-term mechanism for building the policies that improve the health of the American public.

Conclusion

The polarization in states' policy contexts continues unabated, is fueled by a few interlocking forces, and has had life-and-death consequences for millions of Americans. Those forces must be a focus of future research on the increasingly poor performance of the country in population health. Nevertheless, research alone is insufficient. It must be matched with smart policy choices and communication strategies that resonate with the values and constraints of all stakeholders.

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