

# Promoting Health and Cost Control in States:

## How States Can Improve Community Health & Well-being Through Policy Change



## Acknowledgements

**Trust for America's Health** (TFAH) is a nonprofit, nonpartisan public health policy, research, and advocacy organization that promotes optimal health for every person and community and makes the prevention of illness and injury a national priority.

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# Table of Contents

<b>Acknowledgements</b> .....	<b>2</b>
<b>Executive Summary</b> .....	<b>4</b>
<b>Report Methodology</b> .....	<b>11</b>
<b>GOAL 1: Support the Connections Between Health and Learning</b> .....	<b>13</b>
Policy Recommendation 1a: Universal Pre-Kindergarten Programs .....	14
Policy Recommendation 1b: Enhancing School Nutrition Programs and Standards .....	19
<b>GOAL 2: Employ Harm-Reduction Strategies to Prevent Substance Misuse Deaths and Related Diseases</b> . . .	<b>22</b>
Policy Recommendation 2a: Syringe Access Programs .....	24
<b>GOAL 3: Promote Healthy Behavior</b> .....	<b>27</b>
Policy Recommendation 3a: Smoke-Free Policies .....	28
Policy Recommendation 3b: Tobacco Pricing Strategies .....	31
Policy Recommendation 3c: Alcohol Pricing Strategies .....	33
<b>GOAL 4: Promote Active Living and Connectedness</b> .....	<b>37</b>
Policy Recommendation 4a: Complete Streets .....	38
<b>GOAL 5: Ensure Safe, Healthy, and Affordable Housing for All</b> .....	<b>41</b>
Policy Recommendation 5a: Housing Rehabilitation Loan and Grant Programs .....	43
Policy Recommendation 5b: Rapid Re-Housing Programs/Housing First .....	45
<b>GOAL 6: Create Opportunities for Economic Well-Being</b> .....	<b>49</b>
Policy Recommendation 6a: Earned Income Tax Credit .....	50
Policy Recommendation 6b: Earned Sick Leave .....	54
Policy Recommendation 6c: Paid Family Leave .....	57
Policy Recommendation 6d: Fair Hiring Protections .....	59
<b>Related Policies and Issues</b> .....	<b>62</b>
<b>Current State Policies Table</b> .....	<b>68</b>

# Executive Summary

Despite advances in healthcare, too many Americans will continue to needlessly fall ill unless we change the conditions that contribute to poor health. Adopting policies that improve access to quality education, safe housing, jobs, and more can have lasting effects on individual health.

The circumstances we all encounter in our everyday lives shape our health. Whether it's where we live, how we eat, where we go to school, our workplaces, who we care for, or what opportunities we have (or don't have) to succeed, it all has a profound effect on long-term health—regardless of what type of medical care we receive.

The United States spends trillions of dollars a year on health, but currently more of that money goes toward treating disease than it does to preventing it. Prevention starts with people leading a healthy lifestyle, yet for too many Americans, poverty, discrimination, access to education, the immediate environment, and other systemic barriers make it difficult to prioritize a healthy lifestyle and even more difficult to lead one. Fortunately, state-level decision makers are in a strong position to change the conditions in which people live, work, learn, and play. They can prevent the onset of disease, help residents lead healthier lives, lower healthcare costs, and increase productivity by removing obstacles and expanding opportunities.

But in an age of endless information, identifying the most effective and efficient strategies for improved health and reduced healthcare costs can seem like an impossible and overwhelming task. Trust for America's Health (TFAH) created *Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change*, to pinpoint evidence-based policies and provide state leaders with information on how to best promote healthy lifestyles and control costs.

This report is the first product of the PHACCS initiative, it identifies policies for good health that look beyond healthcare, part of a larger effort to foster cross-sector collaboration; because, changes to any given policy area can impact the population's well-being and states' ability to control costs. Additionally, PHACCS recognizes the value of state- and local-level collaboration and includes considerations for those relationships so that policy can be implemented successfully.

PHACCS acknowledges that the needs of every state are unique and therefore provides a range of options for each state to consider. Specifically, this report supports the following goals and policies for states:



## GOAL 1: Support the Connections Between Health and Learning

- 1a. Universal Pre-Kindergarten Programs
- 1b. Enhancing School Nutrition Programs and Standards



## GOAL 2: Employ Harm-Reduction Strategies to Prevent Substance Misuse Deaths and Related Diseases

- 2a. Syringe Access Programs



## GOAL 3: Promote Healthy Behavior

- 3a. Smoke-Free Policies
- 3b. Tobacco Pricing Strategies
- 3c. Alcohol Pricing Strategies



## GOAL 4: Promote Active Living and Connectedness

- 4a. Complete Streets



## GOAL 5: Ensure Safe, Healthy, and Affordable Housing for All

- 5a. Housing Rehabilitation Loan and Grant Programs
- 5b. Rapid Re-Housing Programs/Housing First



## GOAL 6: Create Opportunities for Economic Well-Being

- 6a. Earned Income Tax Credit
- 6b. Earned Sick Leave
- 6c. Paid Family Leave
- 6d. Fair Hiring Protections

# Introduction

## MARY JOHNSON'S STORY

Mary Johnson sat in her doctor's office at the end of her physical exam. She listened patiently as her doctor carefully reviewed her current health status, which included the fact that she was 20 pounds overweight, prediabetic, and asthmatic. The doctor reviewed the importance of a healthful diet and physical activity as well as avoiding the environmental triggers for her asthma. Mary liked her doctor and appreciated the doctor's concerns. But she knew it would be difficult to make the necessary changes to her behavior. There were few local stores that sold fresh fruits or vegetables in her community. And besides, she was on a tight budget and the most affordable foods weren't the ones her

doctor recommended. What's more, she didn't feel safe exercising in her neighborhood. The YWCA was a few miles away, but there wasn't an easy way to get there by mass transit. And she already knew the main trigger for her asthma: her apartment building had a leaky roof, which resulted in mold and mildew. The landlord, however, wasn't inclined to fix the problem, and Mary couldn't afford to move.

She ended the appointment with her doctor by smiling and saying she'd try to adopt all the recommended behaviors. She did want to be healthier. But she also knew those changes were not realistic. There were just too many obstacles in her way.

This story will sound familiar to many Americans. No matter how good their medical care or how motivated they are to get healthier, the conditions present in many Americans' lives prevent them from reaching optimal health.

The ability to promote the health and well-being of the Mary Johnsons of the world rests more and more with local and state policymakers than it does with the medical community. While the healthcare sector plays an important role in providing necessary health services to individuals, most of the factors that keep people healthy are outside of healthcare providers' areas of expertise and control. But state policymakers are in a position to ensure that everyone living in their state has the opportunity to remain healthy, to prosper, and to reach their full potential. To make these opportunities a reality, state leaders must change how they think about health and advocate for

policies that improve education, housing, transportation, and more.

As illustrated by Mary Johnson's case, the social and economic factors related to where people live, learn, play, and work are interconnected and significantly impact health. Unfortunately, for too many Americans, a lack of basic resources like nutritious foods or quality housing have resulted in poor health. Certain populations, including racial and ethnic minorities, sexual and gender minorities, people living in poverty and in rural communities, and formerly incarcerated individuals often have worse health outcomes than other groups. These inequities in health can often be attributed to differences in living conditions, exposure to traumatic events, and access to needed resources in their community, which in many cases are a result of discriminatory policies and practices. Fortunately, there are

several evidence-based policies that can be implemented to address these hurdles and reduce health disparities.<sup>1</sup>

The United States is spending more and more on healthcare services to treat disease. Yet spending on the drivers of good health—quality housing, healthy foods, and education—is stagnant. Residents of other countries that have higher ratios of spending on social services to spending on healthcare services have better health and live longer despite the U.S. spending more money per capita on medical services than any other country.<sup>2,3</sup> Healthcare spending is the second largest component of states' general fund spending, tends to grow at rates greater than inflation, and focuses on treating illness rather than prevention. In 2018, Medicaid made up an estimated 20.2 percent of all states' general fund spending and grew at a rate of 7.3 percent.<sup>4</sup> Increasing investments in prevention to complement the significant investments already being made in disease treatment can promote health, lower healthcare costs, and increase productivity. Changing conditions to ensure that everyone has the opportunity to make healthy choices requires collaboration across fields and specialties. That's how the nation will weave together a culture of health.

Though state policymakers are in the best position to drive meaningful policy change, it is difficult to sift through reams of studies and ascertain which policies work and which don't. To provide state leaders with timely and relevant information, TFAH identified the strongest evidence-based policies from around the country. We scoured several nationally recognized databases and reviewed hundreds of initiatives to develop an easy-to-use single report and resource hub for state policymakers.

## What's in This Report?

*Promoting Health and Cost Control in States: How States Can Improve Community Health & Well-being Through Policy Change* strengthens officials' capabilities by highlighting evidence-based and -informed policies that can improve health and well-being in their states. PHACCS also focuses on state-level policies that can control healthcare costs. We look beyond the healthcare system, since policies in other sectors can also improve health and states' budgets over time. This report looks beyond medical procedures and clinical services and focuses instead on opportunities to improve how people live, learn, work, and play. The report identifies policies that:

- leverage the connection between health and learning,
- promote healthy living and connectedness through the built environment,
- foster healthy behaviors,
- support healthy and affordable housing, and
- create economic opportunities.

This report provides detailed information on its recommended policies, including descriptions of the policies, summaries of the health and economic evidence, case examples of policy implementation, and considerations for implementation. Additionally, This report highlights a set of complementary policies for state officials to consider in recognition that the recommended policies alone may not be able to achieve state and national goals for health promotion. These evidence-based initiatives have the potential to improve population health and can be used as either a complementary approach or as an alternative option to the recommended policies.

## How to Use This Report

The policies highlighted in this report provide a menu of options for state leaders to explore as they consider how to best use their state's resources to improve the health and well-being of their population. The PHACCS initiative recognizes that each state has its own priorities and political dynamics to consider. This report was crafted specifically to cater to the needs of all state policymakers and it is our hope that all states can consider at least one of the policies included in this report. This report is intended to guide state officials toward the best evidence-based policies that promote health and well-being.

Case examples in this report highlight how some states have adopted a recommended policy; this provides decision makers with added insight into how a policy was designed and implemented. Each recommended policy is also accompanied by a list of considerations for effective design and implementation to provide additional guidance and suggestions for officials. Together, the policy recommendations, case examples, and considerations in this report can be used to inform policy proposals that can be enacted and implemented by individual states to promote health.

This report is just the start. TFAH looks forward to identifying more opportunities to support states interested in making these policy changes. We will continue to provide states with additional resources to guide implementation, support recommendations, and find new strategies for better health.

Assessing what issues are affecting the state's population is an important first step for policymakers seeking to implement policy changes. In the following section, we highlight

important national trends related to demographic shifts, health challenges, and the wide range of factors that influence an individual's health. This can help decision makers better understand why the recommended policies in this report are so valuable.

### National Trends

#### Life Expectancy

Overall, Americans are growing older and becoming more diverse. In the last decade, the life expectancy at birth in the United States rose from 77.8 to 78.6 years.<sup>5</sup> However, disparities in life expectancy by race and ethnicity still exist. In 2016, the life expectancy of Black Americans was 74.8 years, significantly lower than the expectancy for Latinos (81.8 years) and Whites (78.5 years). While this gap closed over the past few decades, Black life expectancy continues to significantly lag behind all other races and ethnicities.<sup>6</sup>

Disparities in life expectancy are also widening between high- and low-income earners. Men in the top 1 percent of household income live 14.6 years longer than men in the bottom 1 percent. While the gap for these two income groups is smaller for women (10.1 years), this persistent disparity shows that significant barriers remain for low-income individuals to live healthier, longer, and more productive lives.<sup>7</sup>

#### Emerging and Continuing Health Issues

In recent years, life expectancy has decreased, which can be partly attributed to an increase in unintentional injuries, including drug overdoses, alcohol poisoning, and suicide among young people.<sup>8</sup> Current trends show obesity rates have

not decreased in many parts of the country, and tobacco use remains the leading cause of preventable death.<sup>9</sup> Despite spending \$3 trillion on health annually, too many Americans are still dying of preventable diseases, and for some marginalized populations, poor health outcomes and health disparities persist.<sup>10</sup>

### **An Aging Population**

The number of Americans aged 65 and older is expected to grow from 15 percent to 17 percent by 2020. By 2030, this population is likely to comprise 20 percent of the total population.<sup>11</sup> With age comes increased risks of dementia, injuries from falls, and chronic diseases such as diabetes and heart disease, which account for 95 percent of healthcare costs in the United States.<sup>12,13,14</sup> The racial and ethnic disparities noted above are also reflected in this population, with an elevated risk of death from chronic diseases and a shortened life span among Black and Native American older adults.

### **A More Diverse Nation**

The United States is becoming more culturally, racially, and ethnically diverse than ever before. By 2020 the U.S. Census projects there will not be a single racial or ethnic group that makes up the majority of children, and by 2045, this will be the case for the general U.S. population.<sup>15,16</sup>

States will need to address the needs associated with these demographic shifts. State decision makers will need to consider new and adapted policies in order to improve the health and well-being of all populations, regardless of race, ethnicity, cultural background or age.

### **Focusing on Determinants of Health**

State policymakers often focus on improving health outcomes by expanding and ensuring access to quality health services. However, to address the shifting socioeconomic needs of an increasingly diverse population, to improve health, and to uncover the root causes of poor health, we must place a greater emphasis on the importance of multisector solutions beyond healthcare. This means looking past traditional public health strategies and instead supporting healthy learning, promoting healthy living through the built environment, advocating for healthy behavior, and endorsing fair economic opportunities for all.

### **Importance of State and Local Collaboration**

States and municipalities are uniquely positioned to enact policies that address their residents' most pressing issues. Along with states, local municipalities are important innovators of public health approaches in areas like tobacco use, obesity, and access to clean needles for intravenous drug users. In numerous instances, states adopted laws and regulations only after the approaches had proved successful in local communities. State and local collaboration is thus a critical element to ensuring that local, state, and federal policy is effectively implemented.

Recognizing the importance of synergy between local and state efforts, PHACCS is collaborating with the de Beaumont Foundation and Kaiser Permanente on their CityHealth initiative, which provides local leaders with a package of evidence-based policy solutions.<sup>17</sup> PHACCS is also aligning with the Centers for Disease Control and Prevention on the Health Impact

in 5 Years initiative, which recommends nonclinical, community-wide approaches that make a positive health impact, show results within five years, and are cost effective or cost saving.<sup>18</sup> With an overlap in recommended policies, each of these organizations is closely communicating and supporting each other's work—just as local and state leaders should—to promote policy changes that result in improved health outcomes for cities and states alike.

While state and local collaboration around policy has resulted in health improvements across the country, there are instances when those with a vested interest have advocated for state preemption laws that limit local authority on matters related to public health.

Recent examples have involved the rights of local communities to enact paid sick leave policies as a strategy to encourage the appropriate use of healthcare services and to reduce spreading illness in the workplace. A March 2016 study, for example, showed that 68 percent of all workers have access to earned sick leave. However, only 41 percent of workers in the bottom quartile of wages have access to this benefit.<sup>19</sup> As of July 2017, 20 states have preempted local municipalities from enacting earned or paid sick leave laws. Even for states that have enacted paid sick leave laws, such as Maryland or Oregon, the legislation contains preemption clauses that prohibit local governments from requiring employers to provide more generous earned or paid sick leave benefits.<sup>20</sup> In this and other instances, preemption laws have inhibited potential public health progress in cities and other local municipalities. This report provides more details on the impacts of and potential strategies for preemption in the “Related Policies and Other Issues” section (see page 62).

## Health Is More Than Healthcare

As was the case in the example of Mary Johnson that begin this chapter, the social determinants of health are 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>21</sup> The social determinants of health can be organized into the following domains: Economic Stability, Education, Health and Healthcare, Neighborhood and Built Environment, and Social and Community Context.

**Economic Stability:** Economic stability is related to issues of employment, income, food security, and housing stability—all of which affect health outcomes. Economic stability is often tied to employment, which determines a person's financial access to resources like food, housing, and healthcare. Lack of economic stability or job insecurity can lead to poverty, to an inability to secure necessities, and to increases in chronic stress—all of which can elevate a person's risk for poor health. Alternatively, economic stability from steady employment with a livable wage can provide a person with the income and benefits necessary to access quality resources, like nutritious foods, safe housing, and medical care.

**Education:** Educational opportunities can have lasting effects on a person's health throughout one's life and is one of the strongest predictors of health.<sup>22</sup> Quality education from the earliest years through adulthood can shape cognitive development, problem-solving skills, and literacy—skills that influence healthy behaviors. Educational attainment is also tied to future earnings and access to social networks. People with higher educational attainment are less likely to experience unemployment or financial hardship.<sup>23</sup>

**Neighborhood and Built Environment:** A person's neighborhood encompasses the natural and man-made physical environments in which people live, including the air they breathe and the water they consume. Neighborhoods overall, and physical environments specifically, affect the options an individual or family has for housing, employment, food, transportation, health and social services and being physically active. All these factors, as well as trauma, crime and other environmental conditions like climate, contribute to health outcomes. For example, children and adolescents who are exposed to violence, either as a victim, direct witness, or just hearing about a crime, are at risk for poor long-term behavioral health outcomes.<sup>24</sup>

**Social and Community Context:** The nature of our social interactions and relationships with other people and our community affect our health and well-being. A sense of community and social cohesion helps form a person's social



Source: Centers for Disease Control and Prevention

network as well as access to different types of support, such as information sharing, emotional support, or instrumental support, like a ride to work.<sup>25</sup> Social isolation, on the other hand, is harmful to health, even more so than obesity or smoking 15 cigarettes a day.<sup>26</sup> Incarceration, can negatively impact the health of individuals and communities. While incarcerated, individuals may not receive the healthcare they need, and once they are released, they often face barriers while reintegrating into society. Additionally, more than half of fathers in state prison report being the primary income generator in their families, which can lead to economic hardship.<sup>27</sup>

### Historical and Ongoing Structural Racism and Other

**Discrimination:** Discrimination can also significantly impact individuals' and communities' health.<sup>28</sup> Individual and structural discrimination, which are mutually reinforcing, can cause intentional and unintentional harm, whether or not it is perceived by the individual.<sup>29</sup> Discrimination can be understood as a social stressor that has a physiological effect on individuals, and it can be compounded over time and lead to long-term negative health outcomes, including higher blood pressure, lower-birthweight infants, cognitive impairment, and mortality.<sup>30,31</sup> Inequities resulting from discrimination are a result of policies, often established without conscious or malicious intent, that disadvantage communities of color.<sup>32</sup>

There are other determinants of health, such as access to health insurance and healthcare services. These social determinants of health are all connected, which is why improving health requires working across different sectors to prevent the onset of disease.

## Improving Health for All: State Opportunities to Advance Health Equity

It is critical that states explore how to advance health equity by first identifying where differences in health outcomes exist and then developing policies to address these inequities.

### What Is “Health Equity”?

We define “health equity” as “the state in which everyone has the chance to attain their full health potential and no one is disadvantaged from achieving this potential because of social position or any other defined circumstance.”<sup>33</sup> Achieving health equity requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and a lack of access to good jobs with fair pay, quality education and housing, safe environments, and healthcare.<sup>34</sup> Health disparities are differences in health or the factors that influence health that are closely linked with social, economic or environmental disadvantage. Policymakers can measure disparities in health and its determinants and use the data to assess progress toward achieving health equity.<sup>35</sup>

The graphic above depicts the difference between equality and equity. Equality provides the same opportunities for all, while equity recognizes that individuals require more—not equal—effort and resources to level the field of opportunities due to historical and ongoing discrimination and marginalization.<sup>36</sup>

A person’s health, including their ability to make healthy choices, is impacted by where they live, how much income they earn, their educational attainment, and differential access to and quality of care based on their racial and ethnic status. Unfortunately, as long as there are differences in access



Source: Robert Wood Johnson Foundation<sup>37</sup>

to opportunities, there will continue to be differences in health. Groups of people who are marginalized or disadvantaged often have worse health. And though individual behaviors play a role in health, many of the choices people make depend on the opportunities available to them.

With a strong understanding of the needs of their residents, state leaders are in a good position to ensure that all individuals, of all backgrounds, have the opportunity to be as healthy as possible. Every level of government has a set of responsibilities dedicated to protecting, preserving, and promoting the health and safety of their residents. State policymakers can work to improve the health and safety of their population by enacting laws, policies, and regulations, and they can distribute resources. Moreover, protecting the public’s health and preventing the onset of disease can translate into cost savings and increased productivity statewide. To address issues of health equity, states can develop policy solutions that increase opportunities and remove obstacles to health like poverty and discrimination.<sup>38</sup>

## How Can Policy Advance Health Equity?

Addressing health inequities means implementing policies and institutional practices that increase opportunities for people to be healthy and make healthy choices. It also means implementing strategies that remove barriers to achieving better health.

Discrimination is not always intentional, but it is often built into institutional policies and practices. This is referred to as “structural” or “institutional” discrimination.<sup>39</sup> Policies can give rise to unfair differences in the social conditions that affect health and result in health inequities. For example, deliberate discriminatory policies that were enacted decades ago resulted in residential segregation by race. Despite the fact that housing discrimination is no longer legal, many racial and ethnic minorities continue to live in neighborhoods with poor-quality schools, housing, and services, all of which affect their opportunity to be healthy.<sup>40</sup> Another example is how diversion policies are administered for nonviolent, first-time criminal offenses. If an offender qualifies for diversion, they will not go to jail and will have the offense expunged from their record, but only if they are able to pay certain fees. As a result, people with lower incomes are more likely to serve time in jail and have a criminal record compared with people with higher incomes who have committed the same or worse offenses, putting them at risk for unemployment in the future.

## The Business Case for Improving Equity and Reducing Disparities

The high economic cost of health inequities places a large burden on states. Equity enables everyone to live to their full potential, and all of society

benefits when each person can thrive. The Joint Center for Economic and Political Studies estimates that between 2003 and 2006, 30.6 percent of direct medical care expenditures for racial and ethnic minorities were excess costs stemming from health inequalities. The Center estimated that eliminating health disparities for minorities would have reduced direct medical care expenditures by nearly \$230 billion over the four-year period examined. Additionally, closing existing disparities and creating additional opportunities to advance racial equity can increase economic output and consumer spending.<sup>41</sup> Raising the average earnings of people of color to the level of Whites by closing disparities in health, education, and opportunity would generate an additional \$1 trillion in earnings and an additional \$800 billion in spending.<sup>42,43</sup> This research is just the tip of the iceberg, as reducing disparities can not only focus on improving equity among racial and ethnic groups; it can also address other populations who may be marginalized or who may not receive essential services, such as rural residents who lack access to many of the services individuals in urban areas receive.<sup>44</sup> A separate analysis estimates that the United States could realize an \$8 trillion gain in gross domestic product by 2050 as a result of closing the racial equity gap.<sup>45</sup>

## How Will This Report Address Health Equity?

Throughout this report, we identify opportunities for state-level policymakers to advance health equity and reduce disparities in their states through the development and implementation of evidence-based policies. While some of these policies may be more directly targeted to vulnerable populations, all of the policies in this report can facilitate health improvement for all individuals and communities.

# Methodology

## APPROACH

To inform this initiative, TFAH identified and reviewed 1,500 evidence-based or evidence-informed policies, programs, and strategies by using several national databases, including CityHealth, the Win-Win Project, the Centers for Disease Control and Prevention’s (CDC) Health Impact in 5 Years (HI-5), County Health Rankings and Roadmaps: Strategies that Work, the Pew-MacArthur Results First Initiative, and the Community Guide Task Force Recommendations.<sup>46,47,48,49,50,51</sup> We removed clinical-based strategies from the list. Throughout the review process, TFAH assessed each potential policy for evidence of its impact on the reduction of health disparities and the promotion of health equity. We then applied a set of criteria to the policies, programs, and strategies to identify upstream, state-level legislative policies that improve health and well-being and control costs. Those criteria are:

### 1. Strong Health Impact and Economic Evidence

We reviewed the health and economic results for each policy and strategy to ensure there was sufficient evidence to promote positive health outcomes and control costs. Taking a broad view of economic evidence, TFAH considered economic analyses such as cost avoidance, cost benefit, return on investment, cost effectiveness, and cost utility. Policies recommended in this report have demonstrated that they are either cost beneficial

(that is, have a positive return on investment) or produced positive economic impacts over time. We excluded policies that did not have supporting health or economic evidence available.

PHACCS employed an approach that blended the rating systems and evidence criteria from different databases to initially filter policies that had positive health and economic evidence.

**TABLE 1: Databases Reviewed and Evidence Categorization Required to be Considered for Initial Inclusion in PHACCS**

Initiative	Types of Policies Included in PHACCS Review Are Those Designated:
Community Guide	Recommended
County Health Rankings & Roadmaps: Strategies that Work	Under the heading “government as the decision maker”: <ul style="list-style-type: none"> <li>• Scientifically supported</li> <li>• Expert opinion</li> <li>• Some evidence</li> </ul>
HI-5 Interventions	N/A: All 14 policies considered for inclusion
Win-Win Project	N/A: All 17 policies considered for inclusion
Results First Clearinghouse	<ul style="list-style-type: none"> <li>• Highest rated</li> <li>• Second-highest rated</li> </ul>
CityHealth	N/A: All nine policies considered for inclusion

## 2. Population-Based Prevention Efforts

PHACCS used the “Three Buckets of Prevention” framework,<sup>52</sup> which categorizes disease prevention and health promotion interventions and policies into three domains, or “buckets”. Buckets one and two focus on traditional and innovative clinical prevention efforts, whereas bucket three focuses on population-oriented interventions. PHACCS defines a “population-based intervention” as an intervention or policy that reaches whole populations. It includes interventions that are not intended for a single individual or all the individuals within a practice or even all beneficiaries covered by a certain insurer. Rather, the target is an entire population or subpopulation, usually identified by a geographic area. Interventions are based not in a healthcare settings but in neighborhoods, cities, counties, or states. Using this framework, we excluded policies and strategies that were not population-based prevention efforts, (such as those related to clinical practice or to Medicaid care delivery or reimbursement).

## 3. Primary and Secondary Prevention

PHACCS is focused on upstream prevention efforts that effectively address communities’ and populations’ underlying health needs. PHACCS uses the CDC’s definitions of primary and secondary disease prevention.<sup>53</sup> Policies were excluded that we did not consider a form of primary or secondary prevention.

*Primary Prevention:* intervening before health effects occur, through measures such as vaccinations, reducing risky behaviors (poor eating habits, tobacco use), and banning substances known to be associated with a disease or health condition.

*Secondary Prevention:* screening to identify diseases in the earliest stages, before the onset of signs and symptoms.

## 4. Role for State Legislative Action

We reviewed evidence to ensure that the state legislature was responsible for enacting and implementing each policy. We excluded policies that were implemented by administrative or

regulatory rulemaking—rather than legislative action—as well as program-level interventions and time-limited pilots. However, the importance of well-crafted regulations to guide effective implementation of the policies recommended in this report should not be understated.

## Legal Analysis

The Policy Surveillance Program of the Center for Public Health Law Research at Temple University conducted a review of secondary legal resources for the policies that met the four inclusion criteria. The analysis assessed the existence and complexity of each state law, the extent to which the policy of interest was found in legal form, and the availability of existing data or expertise on the law. Each policy was analyzed to determine how widespread the policy implementation was in the state, the degree of variation, and the feasibility of tracking the policy over time. In 2019, TFAH and the Center for Public Health Law will release comprehensive datasets, based on publicly available data, for the recommended policies to assist state officials and other in better understanding the key aspects of the laws and the extent to which they have been adopted, and differ, in all 50 states.

## Role of the Advisory Group

We consulted an esteemed group of subject-matter experts from education, public health, health economics, healthcare, philanthropy, fiscal policy, health equity, housing, and public health law to provide guidance on the selection of the recommended policies in this report. The Advisory Group considered the following criteria for each potential policy as decisions were made about those policies included in this report: current policy landscape, strength and availability of health and economic evidence, feasibility for enactment, and potential implementation barriers. A key area of consideration proposed by the Advisory Group addressed how each of the recommended policies advance health equity. Through the application of the four criteria and with input from the advisory group, TFAH selected a set of recommended policies and several secondary or complementary policies for inclusion in this report.

# Support the Connections Between Health and Learning

There is increasing evidence that the presence of healthy environments for learning lead to positive health and economic outcomes throughout a child's entire life. Despite significant progress, many families and children continue to face enormous challenges in accessing developmentally appropriate quality early care and education in safe and healthy settings. A range of options are available for families, from center-based to home-based care, pre-K programs in public schools and Head Start programs.

## Education and Child Development

While brain science demonstrates the importance of early childhood education, significant investments and supports for pre-kindergarten (pre-K) learning environments have lagged.<sup>54</sup> Investments in high-quality early childhood education, including pre-K programs, can reduce the risk for: chronic illnesses, shorter and less healthy lives, obesity and eating disorders, difficulty in maintaining healthy relationships, lower academic performance, behavioral problems in school, high school drop out, the need for special education and child-welfare services, mental and behavioral health problems like depression and anxiety, exposure to harmful

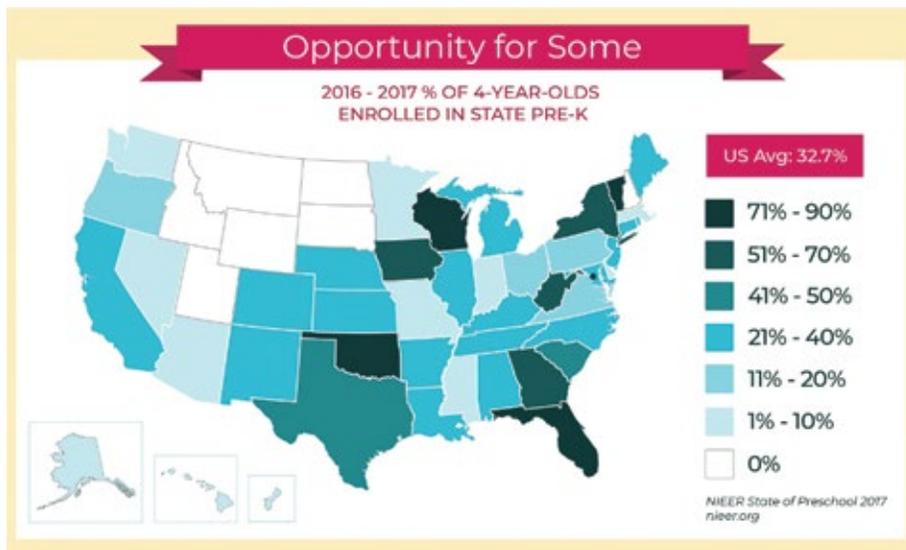
environmental hazards, suicidal thoughts and attempts, teen pregnancy, alcohol and drug misuse, sexually transmitted diseases, aggression and violence, domestic violence and rape, not acquiring key parenting skills or child-care support, and difficulty securing and maintaining a job.<sup>55,56,57</sup> Despite the evidence, families lack access to quality, affordable early care and education programs. While federal resources for some early care and education programs have increased in recent years and federal, state, and local support for state-funded preschool programs, specifically, has not grown significantly in recent years nationwide.

### LEARNING CURVE

#### Key Statistics on state funded pre-K Access and Resources

- Nationally, only 33 percent of 4-year-olds and 5 percent of 3-year-olds were enrolled in state-funded preschool.<sup>58</sup>
- Only 29 states served 3-year-olds in some form of state-funded pre-K programming in 2017.
- State funding for preschool rose 2 percent to about \$7.6 billion since 2015–2016.
- State funding per child was \$5,008, a slight decline from 2015–2016 when adjusted for inflation.
- Most states' programs have not kept pace with inflation. Five states decreased their spending per child when considering unadjusted dollars.
- Spending per child is directly related to program quality, as it determines what resources are available, including the likelihood of retaining qualified teachers.<sup>59</sup>

Source: *The State of Preschool 2017*<sup>60</sup>



Source: *The State of Preschool 2017*<sup>60</sup>

Even for children who have access to early education programs, it is also important to ensure programs are high quality. Research shows the positive benefits for all children in high-quality, intensive pre-K programs and the harmful effects of inferior-quality care. These effects—both positive and negative—are magnified for children from disadvantaged situations or with

special needs. High-quality, intensive pre-K programs for low-income children have led to lasting positive effects, such as greater school success, higher graduation rates, lower rates of crime among youth, decreased need for special education later, and lower adolescent pregnancy rates. Inferior-quality care, however, can have harmful effects on language, social development,

and school performance that are difficult to ameliorate.<sup>61</sup> Children who received high-quality care in the first few years of life scored higher in measures of academic and cognitive achievement when they were 15 years old, and they were less likely to exhibit challenging behavior than those who were enrolled in lower-quality child care.<sup>62</sup>

The quality of preschool programs depends on a variety of inputs, including the workforce, the environment, and the programming. Research shows that better education and training for teachers can improve the interaction between children and teachers, which in turn affects children's learning. Class size and staff-child ratios are also a factor, because smaller classes and fewer students per teacher gives children more opportunities for interaction with adults and more individualized attention. In addition, quality programs include evidence-based early learning standards and comprehensive services.<sup>63</sup>

## **POLICY** **RECOMMENDATION 1a:** **High Quality Universal** **Pre-Kindergarten**

Universal pre-K is publicly funded preschool offered to all 4-year-old children regardless of family income, the child's abilities, or any other eligibility factor, although definitions of what is truly universal may vary.<sup>64</sup> Research indicates that high-quality pre-K programs not only better prepare students for the transition to kindergarten but can also have positive impacts later in life, such as academic success and lower poverty rates.<sup>65</sup> It is critical that states ensure effective transitions from pre-K to primary school, including through curricula alignment. An inadequate transition from pre-K to primary school can impact a student's academic performance and their emotional and social adjustment.<sup>66</sup> While universal pre-K can be a benefit

to all children, it has a larger impact on low-income families of color and English-learner students.<sup>67</sup> Universal pre-K can also alleviate the financial burden on families with young children.<sup>68</sup> These findings show how important it is for policymakers to understand and consider the difference between equity and equality when making determinations on how to allocate resources to support universal pre-K programs.

State legislatures can provide state-funded, high-quality pre-K programs to children throughout the state. Furthermore, state law governs many of the requirements related to the provision of pre-K, such as funding, eligibility, hours, and health and learning standards.

## Health and Educational Evidence

There is strong evidence that universal pre-K programs improve cognitive outcomes/academic knowledge for disadvantaged children.<sup>69</sup> But such programs aren't only beneficial for low-income children. Universal high-quality pre-K programs benefit children across all income levels. Children who attend state-sponsored pre-K, universal or not, show improved language, math, and reading skills.<sup>70</sup> The longer-term benefits of universal pre-K include reductions in teen birth and interactions with the criminal justice system throughout a participant's lifetime.<sup>71,72</sup> In Oklahoma, state-funded universal pre-K demonstrated stronger effects for Latino, Black, and poor children.<sup>73</sup> Georgia's universal pre-K program expanded access to care and benefited disadvantaged rural children the most, including through improved test scores in math and reading which helped close achievement gaps in children's education later in life.<sup>74</sup>

## Economic Evidence

In Oklahoma, research showed that based on the academic performances

of pre-K participants, the children's future earnings could exceed the cost of the pre-K program. A benefit-cost analysis conducted by the Washington State Institute for Public Policy found that state and district funded pre-K education programs have a social benefit-to-cost ratio of \$4.63:1. That includes benefits for program participants, taxpayers, and others in society.<sup>75</sup> The analysis took into account the cost of the program compared with the benefits of reducing crime and increasing high school graduation rates, academic test scores, special-education placement, and grade retention. A more detailed analysis of the monetary benefits of preschool programs in Los Angeles conducted by the Win-Win Project found that approximately half of the cost of such a program would be directly recouped through reduced public spending on Medicaid and other social programs as a result of health improvements associated with preschool expansion.<sup>76</sup>

While the strongest effects are projected for children of lower-income backgrounds, research also demonstrates

that access to universal pre-K programs can benefit children across socioeconomic backgrounds.<sup>77,78,79,80</sup>

## Policy Landscape

The levels of funding and sources of revenue streams for pre-K programs vary greatly from state to state.<sup>81</sup> Nine states include pre-K funding in their K-12 funding formulas, thus tying it to the budgetary process for K-12 education.<sup>82</sup> Other states fund pre-K through general block grants or local programs, which are less secure revenue streams.<sup>83</sup> Nine states and the District of Columbia provided state-funded pre-K to nearly 50 percent or more of their state's 4-year-olds; four of those states and the District of Columbia served more than 70 percent.<sup>84</sup> Federal funding can also play a role in funding pre-K, such as through the Head Start program, Pre-School Development Grants, and other competitive grants. Across all state and federally funded programs, about 44 percent of 4-year-olds are enrolled in some form of preschool education.<sup>85</sup> Six states, as of 2017, provide no funding for pre-K programs.<sup>86</sup>

## CASE EXAMPLE

### West Virginia's Universal Pre-Kindergarten Program<sup>87,88,89</sup>

West Virginia passed legislation in 2002 requiring the state to make prekindergarten available to all 4-year-olds in the state by the 2012-2013 school year. West Virginia Code §18-5-44 mandates that the West Virginia Board of Education, in collaboration with the Secretary of the West Virginia Department of Health and Human Resources, ensure that every eligible child has access to high quality pre-K. West Virginia requires that a minimum of half of the programs operate in collaborative settings with private prekindergarten, child care centers, or Head Start programs in order to facilitate expansion of the program. To date, the West Virginia Universal Pre-K program is available in all 55 counties of the state. West Virginia is home to one of three state-funded pre-K programs that met all of the National Institute for Early Education Research's new quality benchmarks in 2017 (see insert on page 16).

#### Key outcomes:

- During the 2016- 2017 school year, approximately 65% of the state's 4-year-olds and approximately 11% of 3-year-olds were enrolled in West Virginia's Universal Pre-K program.
- In 2013, West Virginia aimed to improve program quality by requiring all new lead teachers in nonpublic settings to have at least a BA degree in Early Childhood or a related field.
- Beginning in the 2016-2017 school year, each pre-K classroom must provide at least 1,500 minutes of instruction per week and 48,000 minutes of instruction annually, and programs must operate no fewer than four days per week to meet annual and weekly operational requirements.

## Considerations for Effective Design and Implementation<sup>90,91</sup>

- Promote universal access to state-funded pre-K for all 3- and 4-year-olds. For states unable to fund pre-K for all 3- and 4-year-olds, emphasize serving those with higher needs, particularly students from low-income families, when resources are limited.
- Support full-day programs. Full-day programs maximize children's time to learn and play and minimize disruptions to parents'/caregivers' work schedules.
- Establish an adequate, stable funding stream, and ensure sufficient funding to provide high-quality services.
- Ensure instructional alignment with kindergarten curricula and instructional practices and curricula that are developmentally appropriate, address social and emotional learning, and are culturally and linguistically appropriate.
- Encourage the implementation of high-quality standards (see the National Institute for Early Education Research's standards in the box below).
- Permit and support bilingual instruction and other related policies to support dual-language learners, including conducting outreach and communicating to families in the language spoken at home.
- Ensure that local zoning and land-use regulations are consistent with the expansion of preschool capacity near where parents live and work.

### BEST IN CLASS

#### NIEER Preschool Policy Standards and Program Quality

The National Institute for Early Education Research (NIEER) developed a rating system for 10 preschool policy standards related to program quality to help state leaders enhance and support high-quality early education. To do this, they benchmark state programs against acknowledged leading programs. The benchmarks provide a coherent set of minimum policies to support meaningful, persistent gains in learning and development that can enhance later educational and adult achievement. Using these policies will make it more likely that pre-K programs will achieve their goals.

**1. Early Learning and Development Standards.** States should have comprehensive Early Learning and Development Standards that cover all areas identified as fundamental by the National Education Goals Panel: physical well-being and motor development, social-emotional development approaches to

learning, language development, and cognition and general knowledge.

**2. Curriculum Supports.** States should provide (a) guidance or an approval process for selecting curricula, and (b) training or ongoing technical assistance to facilitate adequate implementation of the curriculum.

**3. Teacher Degrees.** Lead teachers in every classroom should be required to have at least a bachelor's degree.

**4. Teacher Specialized Training.** State policy should require specialized training in early childhood education and/or child development.

**5. Assistant Teacher Degrees.** Assistant teachers should be required to hold a Child Development Associate certification or have equivalent preparation.

**6. Staff Professional Development.** Both teachers and assistant teachers should be required to have at least 15 hours of annual in-service training. Lead and assistant teachers should also be required to

have annual written, individualized professional-development plans. Finally, states should provide some professional development through coaching or similar ongoing classroom-embedded support.

**7. Maximum Class Size.** State policy should require class sizes to be limited to 20 children at most.

**8. Staff-Child Ratio.** State policy should require that classes be permitted to have no more than 10 children per teaching staff member.

**9. Screenings and Referrals.** State preschool programs should ensure children receive vision, hearing, and other health screenings and referrals.

**10. Continuous Quality Improvement System.** State policy should—at a minimum—require that (1) data on classroom quality are systematically collected at least annually, and (2) local programs and the state both use information from the Continuous Quality Improvement System to help improve policy or practice.

## Complementary Policies



**Full-Day Kindergarten.** Full-day kindergarten operates five days per week and lasts approximately five or more hours per day. While supporting access to high-quality pre-K aids in a child’s development, states can also support other policies to ensure the gains made in pre-K programs are not lost as a child progresses through the education system. Full-day kindergarten is more beneficial for near-term academic success than half-day kindergarten, and the impact is strongest in urban areas and for programs lasting at least six hours.<sup>92</sup> Studies show that children with disabilities and English-language learners particularly benefit from full-day kindergarten programs.<sup>93,94</sup> Children who participate in full-day kindergarten programs show higher gains in literacy and math scores compared with children in half-day kindergarten programs.<sup>95,96</sup> To sustain academic gains for children from low-income families beyond third grade, researchers suggest following full-day kindergarten with additional interventions as children continue through school.<sup>97</sup>

**High School Completion Programs.** High school completion programs, or dropout-prevention programs, are initiatives that increase the likelihood that students will receive a high school diploma or a general educational development (GED) diploma.<sup>98</sup> Rates of high school completion decline among low-income families and some racial/ethnic minority populations. In 2017, for example, the national graduation rate for White students was 88.3 percent, significantly higher than both Latino (79.3 percent) and Black (76.4 percent) students.<sup>99</sup> Students who met the state criteria classification of “economically disadvantaged” had a graduation rate of 78 percent.<sup>100</sup> Studies show that a failure to complete high school is associated with significantly lower economic earnings, while also leading to increases in costs related to healthcare and the criminal justice system.<sup>101</sup>

Therefore, one strategy to advance health equity and health outcomes is to focus on high school–completion programs, especially those that target high-risk, low-income, and racial/ethnic

minority populations. States should consider one or a combination of the following high school–completion programs and select programs that are evidence-based: school-based health centers, vocational training, alternative schooling, social-emotional skill building, college-oriented programming, dual enrollment, mentoring and counseling, school or class restructuring, supplemental academic services, attendance monitoring, community service, and case management. An analysis for Los Angeles County found that several of these programs have internal rates of return to the state of \$1 or more for every \$1 spent.<sup>102</sup>

**School-Based Violence Prevention Programs.** Youth violence is a substantial public health concern: youth commit violent acts at a higher rate than any other age group. Over the past two decades, youth ages 10 to 17, who make up less than 12 percent of the population, were offenders in approximately 25 percent of serious, violent victimizations.<sup>103</sup> Childhood experiences, positive and negative, have a tremendous impact on both future violence victimization and perpetration, as well as on lifelong health and opportunity. Initiating violence-prevention programs in schools is key; there’s no better place for near-universal access to children than through educational institutions.<sup>104</sup> To reduce or prevent violent behavior in youth attending school, states should enact legislation that provides violence-prevention efforts in schools. Approaches can include cognitive programs, behavioral programs, social-emotional skills training, and counseling or therapy.<sup>105</sup> Each approach attempts to address the social or emotional factors linked to aggressive behavior.

## Importance of Child Nutrition and Physical Activity

Like many adults, most children in the United States are not eating enough nutritious foods or getting enough physical activity.<sup>106,107,108</sup> Between 2015 and 2016, 18.5 percent of children ages 2 to 19 had obesity, which is the highest rate ever documented by National Health and Nutrition Examination Survey.<sup>109,110,111</sup> The rate varies among different age groups and rises as children get older.

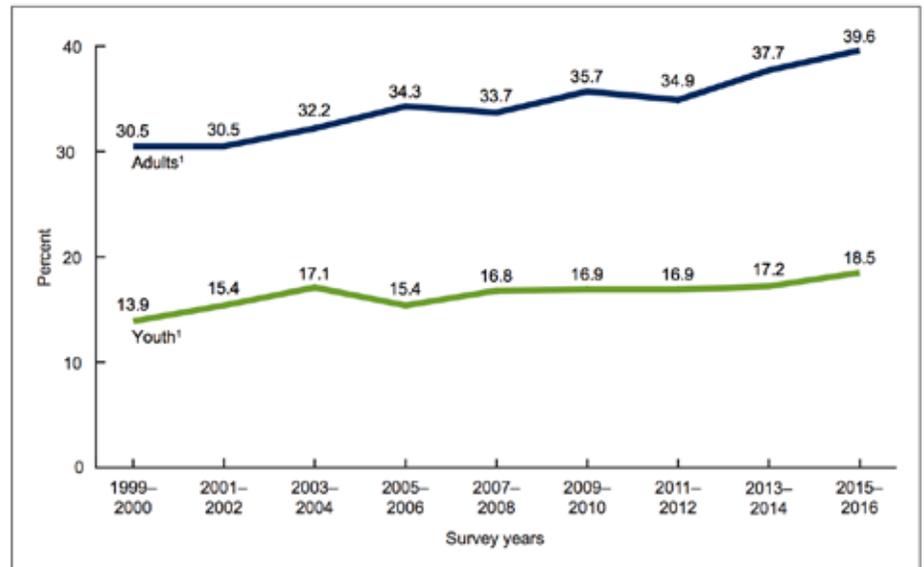
### Kids: Who Has Obesity?

- 13.9 percent of 2- to 5-year-olds.
- 18.4 percent of 6- to 11-year-olds.
- 20.6 percent of 12- to 19-year-olds

Data from the CDC also show substantial differences in obesity rates among children of different races and ethnicities. Obesity rates are higher among Latino children (25.8 percent) and Black children (22 percent) than among White children (14.1 percent) and Asian children (11 percent). Latino boys (28 percent) and Black girls (25.1 percent) are most likely to have obesity.<sup>113</sup>

Today's children are at greater risk of developing certain diseases like type 2 diabetes and high blood pressure. If current trends continue, more than half of today's children will have obesity by age 35.<sup>114</sup> Research also shows that children with obesity perform lower in school and have a higher risk of being bullied and depression.<sup>115</sup> Poor nutrition can result in both hunger or obesity—increasing a child's risk for physical, mental, behavioral, emotional, learning, and oral health problems—making it hard to perform basic tasks and to regulate social-emotional behavior.

## Trends in Obesity Prevalence among Adults aged 20 and over (age adjusted) and youth aged 2-19 years: United States, 1999-2000 through 2015-2016



Source: Centers for Disease Control and Prevention<sup>112</sup>

One in six, or 13 million, children in the United States lives in a food-insecure household and does not have consistent access to enough foods to live healthy lives.<sup>116</sup> Child hunger and food insecurity impact rural and urban areas: 85 percent of counties with high child food insecurity are rural, and approximately 800,000 food-insecure children live in Los Angeles and New York City. Research shows that as children reach school age, hunger, poor nutrition, and food insecurity can harm academic performance and lead to an increased need for mental health counseling and an increased risk of having behavioral problems.<sup>117</sup> Hungry children also get sick more often and are more likely to be hospitalized. Ensuring that children have access to regular and nutritious meals has significant economic implications: an average pediatric hospitalization costs \$12,000.<sup>118</sup>

The federal government, along with states, are playing an increasing role in

supporting access to high-quality meals for children. More than 30 million children nationwide participate in the National School Lunch and School Breakfast Programs. For children from low-income families, school meals are an especially critical source of affordable, healthy foods; 51 percent of American children now qualify for free and reduced-price school meals.<sup>119</sup>

Obesity costs the United States \$149 billion in medical expenses annually—with about half of those expenses paid by publicly financed Medicare and Medicaid programs.<sup>120,121,122</sup> Indirect costs from obesity also run into the billions of dollars due to missed time at school and work, lower productivity, premature mortality, and increased transportation costs.<sup>123</sup> Taking steps to ensure all children have the opportunity to grow up at a healthy weight—including by having access to nutritious foods and time for active play—can help more kids reach their full potential.

**POLICY**  
**RECOMMENDATION 1b:**  
**Increase Access to, Utilization of, and Nutritional Quality of School Meals**

While the federal government plays a strong role in the regulation of food quality and nutritional standards via the National School Lunch Program (NSLP) and School Breakfast Program (SBP), states can establish policies to strengthen or augment requirements related to the nutritional value of foods served in school settings, including school meal programs and competitive foods. Competitive foods include any foods sold to students outside of federally reimbursable meals, such as vending machines or à la carte food options. States can enact policies that support increased healthy food consumption and improve the school food environment.

The Healthy, Hunger-Free Kids Act of 2010 set minimum standards to increase access to healthy foods for low-income children. But state law can still be vital to the proliferation of the SBP and the NSLP. States have passed laws encouraging or requiring schools to participate in these programs. Through funding legislation, states are able to more fully support meal programs and eliminate reduced-price meals so

that all students can eat free.<sup>124</sup> States can also establish stronger, additional requirements for the nutritional content. Evidence shows that in most cases, implementing nutritional standards does not decrease school revenue and, in some cases, increases revenue.<sup>125,126</sup>

The label “competitive foods” stems from the fact that students may choose to eat these foods instead of the nutritionally balanced meals provided by the SBP and the NSLP.<sup>127</sup> But state law also regulates the nutritional content and availability of competitive foods. Even though they are sold outside of federally reimbursable meals (which must offer meals that meet strict federal nutritional standards in order to receive federal reimbursement),<sup>128</sup> state laws can require competitive foods and beverages to meet certain nutritional standards, too (such as banning anything that contains trans-fats).

States can take a broad approach to regulating nutrition by implementing “healthy school” initiatives. They are often a broad range of strategies, but at a state level, healthy school lunch initiatives often hold the NSLP foods to an even stricter standard than the federal mandate requires. For the truly innovative features of school lunch initiatives, look to the local level.<sup>129</sup> Some laws address the regulation of meal times (for example, California passed “Adequate Time to Eat” legislation<sup>130</sup>), food allergies, and farm-to-school programs, as well as reimbursements and funding incentives. Broad school food policies may also include limits on foods for celebrations and rewards, restrictions on food and beverage marketing in schools, and incentives for school gardens.<sup>131</sup>



## Health Evidence

Improving access to, and the nutritional content of, school meals and other foods reduces school meal disparities. These programs have increased the availability of more nutritious items and helped close the meal disparity gap associated with school size, location, and student race and ethnicity makeup.<sup>132</sup>

Access to school breakfast programs can improve academic achievement and cognition, especially among malnourished or food-insecure children.<sup>133,134</sup> School breakfast programs can also increase healthy food consumption and improve breakfast nutrition.<sup>135,136,137</sup> Student participation in school breakfast programs reduces students' body mass indexes and may reduce weight gain.<sup>138</sup>

There is some evidence that healthy school lunch initiatives increase the selection and consumption of healthy foods, and improve students' eating behaviors. These programs can also improve childhood nutrition.<sup>139</sup> Like healthy school breakfasts, healthier school lunches are linked to improved academic outcomes and reduced school absences due to illness.<sup>140</sup>

There is strong evidence that nutritional standards for both school meals and competitive foods increase fruit and vegetable consumption and improve school food environments.<sup>141,142,143</sup> Research shows that reducing unhealthy food options increases students' purchases of healthy and neutral foods and decreases unhealthy food consumption.<sup>144,145,146</sup> Comprehensive state laws that regulate the nutritional content of competitive foods may reduce increases to adolescent body mass index.<sup>147</sup>

## Economic Evidence

A majority of the economic evaluations examining the financial impact of implementing school nutritional standards shows that these policies do not decrease school revenue and, in some cases, increase revenue.

- An evaluation of California's nutritional standards for competitive foods found that 10 of the 11 schools reporting financial data had revenue increases of more than 5 percent from meal program participation, which offset the decreases in revenue from à la carte food options.<sup>148,149</sup>
- In West Virginia, after the state restricted the sale of foods with low nutritional value and soda, 80 percent of the principals surveyed reported little or no change in revenue after implementation.<sup>150</sup>
- Two other studies found that lowering the price of fruits, vegetables, and low-fat snacks resulted in a significant increase in the sales of these foods without a decrease in total revenue.<sup>151,152</sup>
- In a study of 20 secondary schools, researchers determined that promoting the sale of low-fat food options and increasing the availability of these options resulted an increase in sales for these foods with no impact on overall food-service revenue.<sup>153</sup>

## Policy Landscape

### School Meal Programs

Thirty states and the District of Columbia require all or some schools to offer School Breakfast Programs.<sup>154</sup> This tally does not include states with legislation that encourages schools to offer it or states that do not specify SBP. For example, California is not included

in the total, as they require schools to offer at least one meal (breakfast or lunch) per day.<sup>155</sup> There are seven states that fall within this gray category of potentially requiring breakfast.<sup>156</sup>

At least 20 states require all or some schools to offer the NSLP. This tally does not include states with legislation that encourages schools to offer it or states that do not specify NSLP. For example, Georgia is not included in the total as they require public schools to offer at least one meal (breakfast or lunch) per day.<sup>157</sup> Fourteen states do not explicitly regulate the NSLP.

### Competitive Foods

At least 28 states have passed legislation regulating competitive foods.<sup>158</sup>

### Nutritional Standards

In 2007, 17 states set nutritional standards that were stricter than existing U.S. Department of Agriculture (USDA) requirements.<sup>159</sup> Many states followed suit—passing their own regulations once the Healthy, Hunger-Free Kids Act of 2010 was implemented. In 2017 alone, 34 states introduced school nutrition legislation.<sup>160</sup>

Since the start of the 2018 state legislative sessions, there are trends emerging in school nutrition, such as legislation that addresses unpaid school meals and ensures that every child gets a meal; legislation that uses incentive funds to support schools that establish or expand programs to increase student participation in meal programs; and “Breakfast After the Bell” legislation, which expands opportunities to eat breakfast.<sup>161</sup> In the last year, six jurisdictions enacted Breakfast After the Bell legislation.<sup>162</sup>

## CASE EXAMPLE

### Colorado's Breakfast After the Bell Program<sup>163,164</sup>

In 2013, Colorado passed House Bill 13-1006, which required public schools that have 80 percent or more students who are eligible for free or reduced-price meals to offer breakfast at no charge. This threshold was later reduced to 70 percent or more of students who are

eligible for free or reduced-price meals to further expand the program's impact. The bill exempts public or charter schools that do not participate in the NSLP and school districts with fewer than 1,000 students. The law, which was implemented in the 2014–2015

school year, gives more than 80,000 additional children in the state access to a breakfast served after the first bell. As a result, in the first year the law was implemented, Colorado went from being ranked 20th in the country in school breakfast participation to 11th.

## Considerations for Effective Design and Implementation<sup>165,166,167,168, 169</sup>

- Expand flexible breakfast programs, such as second-chance breakfasts, breakfast on-the-go, and breakfasts in classrooms. Strategies that move breakfast out of the cafeteria and into the classroom are the most successful at overcoming barriers to participation.
- Support and implement local school-wellness policy rules, including the provision that all food and beverage advertisements on school campuses meet Smart Snacks nutritional guidelines.
- Offer breakfast and/or lunch at no charge to all children as a strategy to end stigma for participating children, to boost participation among hungry children, and to eliminate the burden of collecting fees.
- Conduct outreach, provide education, and support school districts' implementation of the Community Eligibility Provision, which allows qualifying high-poverty schools to offer breakfast and lunch at no charge to all students without having to collect and process individual meal applications.

## Complementary Policies

**Enhanced Physical Activity.** Most school physical-education (PE) classes do not meet the CDC's recommendation that students spend 30 to 60 minutes in PE class per day, according to a 2016 report.<sup>170</sup> States can adopt policies to support school-based PE enhancements, which include lengthening existing classes, adding new PE classes, increasing physical activity during class, training teachers, and updating PE curricula. Laws supporting school-based PE enhancements can increase physical activity and physical fitness among school-age children. Increases in physical activity have been shown to improve academic outcomes.<sup>171, 172</sup>

**Active Recess.** Active recess, previously referred to as "structured recess," is a break from the school day, typically

before lunch, that can involve varying types of supervised games or activities.<sup>173</sup> The primary goals of active recess include an increase in physical activity and structured inclusivity in order to improve health, academic success, social skills, and emotional well-being.<sup>174</sup> The U.S. Department of Health and Human Services' physical-activity guidelines for 2018 recommend that all children get 60 minutes of daily physical activity.<sup>175</sup> In order to meet this recommendation, the CDC, Shape America, and other organizations recommend that all elementary school students be provided with at least one daily session of recess for at least 20 minutes.<sup>176</sup> There is strong evidence that active recess is a direct solution and increases physical activity for schoolchildren.<sup>177,178</sup>



## Employ Harm-Reduction Strategies to Prevent Substance-Misuse Deaths and Related Diseases

In the past decade, more than one million Americans died from drug overdoses, alcohol poisoning, and suicides.<sup>179</sup> Addressing the current rise in drug and alcohol misuse is now a national priority. Additionally, the increased use of illicit drugs—like heroin and opioids and the more potent fentanyl and carfentanil—has made the situation even more dire and complicated.

The increased use of heroin and opioids, which are often injected, means more individuals and new populations are at higher risk of contracting infectious diseases, such as the hepatitis C virus (HCV), hepatitis B virus (HBV), and human immunodeficiency virus (HIV) through shared and unclean syringes.<sup>180</sup> Injection drug use is a risk factor for contracting blood-borne diseases like HIV and HCV, and sharing syringes provides a direct route of transmission.<sup>181</sup> The symptoms of HIV and HCV often do not appear for years, so individuals may continue to spread diseases to others without even knowing they are infected. People who inject drugs are the highest-risk group for acquiring HCV, and each individual who injects drugs with HCV is likely to infect 20 other people.<sup>182</sup> Having another blood-borne disease increases a person's risk of getting or transmitting HIV. For people living with HIV, getting HBV or HCV can increase their risk for life-threatening complications.<sup>183</sup>

The use of heroin and opioids in areas where laws and policies make it difficult to access sterile syringes has contributed to a dramatic rise in HIV and HCV infections:

- In 2016, 3,425 HIV diagnoses (9 percent) were attributed to injection drug use.<sup>184</sup>
- From 2010-2016, HCV diagnoses increased 3.5-fold nationwide—from 850 new cases in 2010 to 2,967 new cases in 2016—in tandem with the increases in heroin and fentanyl use and increases in overdoses.
- The highest rates of new HCV diagnoses were among 20- to 29-year-olds who inject drugs.

- The highest rates of new HCV diagnoses were highest in Appalachia, the Midwest, and New England.
- Most new cases of HCV are not diagnosed since symptoms often develop as people age, likely representing an increase of tens of thousands of undiagnosed cases of HCV.<sup>185</sup>
- In 2017, Black Americans represented 13 percent of the population but accounted for 43 percent of HIV diagnoses (16,694). Latinos represented 18 percent of the population but accounted for 26 percent of HIV diagnoses (9,908). Black Americans have the highest rate of HIV diagnoses compared with other races and ethnicities.<sup>186</sup>
- In 2017, gay and bisexual men accounted for 66 percent of all HIV diagnoses (25,748).<sup>187</sup>
- In Kentucky, Tennessee, Virginia, and West Virginia, acute HCV infections increased by 364 percent from 2006 to 2012—a majority of those infected were White adolescents and adults under 30 who inject drugs.<sup>188</sup>

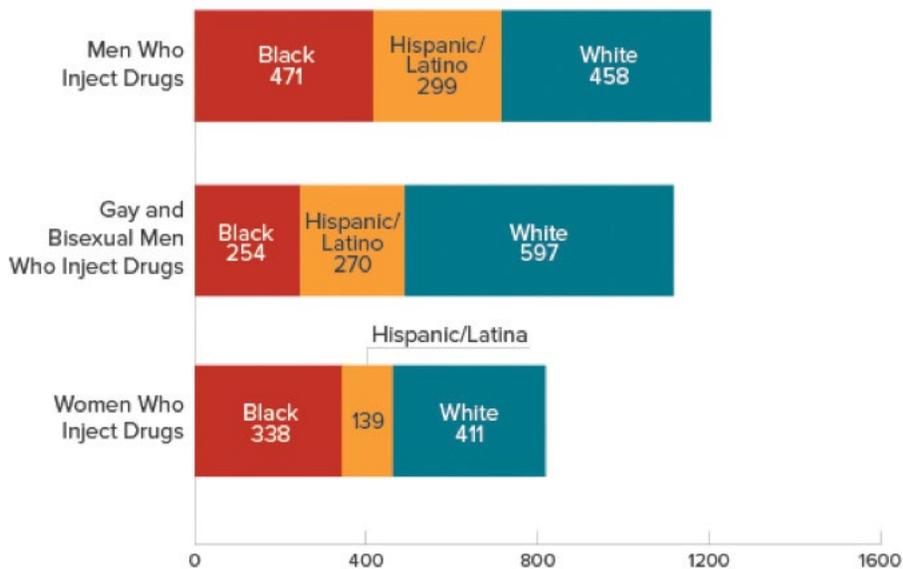
In addition, disparities in diagnoses and treatment of blood-borne diseases persist, where racial and ethnic minorities, sexual minorities, and low-income individuals bear a higher burden of disease. For individuals who inject drugs, these disparities are compounded by stigma, discrimination, and differences in socioeconomic status, which can affect access to quality healthcare, like screenings and treatment. In a study of cities with high levels of HIV, more than half of HIV-positive people (56 percent) who inject drugs reported being

homeless, 25 percent reported being incarcerated, and 16 percent did not have health insurance in the last year.<sup>189</sup> In 2016, among people who inject drugs and received an HIV diagnosis, 43 percent (1,466) were

White, 31 percent (1,063) were Black, and 21 percent (708) were Latino.<sup>190</sup>

These alarming rates have pushed policymakers to reexamine syringe-exchange policies as an effective strategy to reduce rates of infectious disease.

### HIV Diagnoses Among People Who Inject Drugs, by Transmission Category, Race/Ethnicity, and Sex, 2016 – United States



Source: Centers for Disease Control and Prevention<sup>191</sup>

## STATE OF EMERGENCY

### Indiana’s Response to an HIV Outbreak

In March 2015, then-Indiana Governor Mike Pence declared a Public Health Emergency in Scott County in response to an HIV outbreak. By May 2015, investigators had identified 135 HIV-infected people in a community of 4,200 people. By June 2015, public health officials identified more than 480 people who were named as sharing needles with or having sexual contact with HIV-infected people. The majority of those with HIV were linked to syringe sharing. Additionally, more than 90 percent of those individuals were also co-infected with HCV. To curb the spread of HIV and HCV in the area and to prevent it from

spreading into nearby communities, officials established a needle-exchange program, facilitated in part by the governor’s State of Emergency and the comprehensive public health response.<sup>192</sup>

Following the implementation of the needle-exchange program, researchers interviewed 200 people who injected drugs both before and after the establishment of the program and found that as a result of the exchange, needle sharing fell by 85 percent and the frequency of reusing the same syringe also declined significantly.<sup>193</sup>

## POLICY

### RECOMMENDATION 2a: Syringe Access Programs

State policies that support access to clean needles and syringes prevent disease and save lives by removing barriers and facilitating access to sterile syringes. The legality of distributing or possessing a syringe for illegal drug use is governed by regulations that address drug paraphernalia, syringe prescriptions, controlled substances, and pharmacy practices.<sup>194</sup> Policies that authorize the legal sale and exchange of sterile syringes aim to reduce the rate of infectious diseases—like HCV, HBV, and HIV—among intravenous drug users.

Many law enforcement officials support these policies as an effective harm-reduction strategy to limit the adverse effects associated with drug use to individuals and communities and to limit the exposure of police, emergency workers, healthcare providers, and others in the community to contaminated needles.<sup>195</sup>

#### Health Evidence

Syringe access programs are one of the most effective and scientifically based methods for reducing the spread of HIV and hepatitis—and do not contribute to increased drug use.<sup>196,197,198</sup> While establishing programs to increase access to clean syringes can be a politically contentious issue, the evidence supporting the effectiveness of these programs is overwhelming. States should make additional efforts to overcome these long-held misperceptions so they can further reduce the number of

infectious disease transmissions among individuals who inject drugs.

- In New York City, following the legalization of syringe-exchange programs, between 1990 and 2002, the HIV prevalence among studied intravenous drug users decreased from 50 percent to 17 percent.<sup>199</sup>
- Another study of New York City's syringe-exchange program between 1990 and 2001 found the prevalence of HCV among people who inject drugs fell from 80 percent to 59 percent.
- Following the District of Columbia's lift of the congressional ban on syringe-exchange programs, which allowed the D.C. Department of Health to initiate an exchange program, there was a 70 percent decrease in new HIV cases among injection drug users and a total of 120 HIV cases averted in two years.<sup>200</sup>

#### Economic Evidence

Expanding syringe-exchange programs can yield cost savings within a single year. Treatment of HIV, HCV, and other blood-borne diseases can be costly. In 2010, the lifetime cost of one person's HIV treatment was estimated to be \$379,000.<sup>201</sup> In 2014, the cost of HCV treatment ranged from \$84,000 to \$96,000.<sup>202</sup> People who inject drugs can reduce their risk of acquiring and transmitting blood-borne infections by using sterile syringes for every injection. What's more, advancing policies to increase access to sterile syringes can be cost saving.<sup>203</sup> In New York City, for example, the needle-exchange program resulted in a baseline one-year savings to the government of \$1,300 to \$3,000 per client, reduced HIV treatment costs by \$325,000 per case of HIV averted, and averted four to seven HIV infections per 1,000 clients, producing a net cost savings.<sup>204</sup>

#### The Prevention Payoff

It is estimated that an annual increase of \$10 million to expand access to sterile syringes would have the following results on a national level in a single year:

- 194 HIV infections would be averted.

- \$75.8 million in lifetime HIV treatment costs would be avoided.
- There would be a return on investment of \$7.58 for every \$1 spent.

## Policy Landscape

In December 2015, Congress partially lifted restrictions on the use of federal funds to support syringe-exchanges, allowing states and communities to use federal funds to pay for operational costs of syringe-exchange programs.<sup>205</sup> As of July 1, 2017, all 50 states and the District of Columbia have laws regulating syringe access.<sup>206</sup> At least 26 states and the District of Columbia have laws supporting syringe-exchange programs.<sup>207</sup> This includes a number of states that have changed their

laws in recent years as a result of the opioid epidemic, including: in 2015, Colorado, Illinois, Indiana, and Kentucky; in 2016, Florida, North Carolina, and Utah; and in 2017, Montana, New Hampshire, and Virginia.<sup>208,209,210,211,212,213</sup> This does not reflect other states that may have removed legal barriers to syringe programs but do not directly authorize them.

Even without legislative authorization, many states and localities operate

syringe-exchange programs. As of 2018, there are 320 syringe-exchange programs in 40 states, the District of Columbia, and Puerto Rico.<sup>214</sup>

States laws about syringes and distribution vary: some states regulate the retail sale of syringes; sometimes a prescription is required; sellers may have to get certain information from a syringe buyer; and, of course, some states vary on whether syringe-exchange programs are even allowed and under what circumstances.<sup>215</sup>

## CASE EXAMPLE

### North Carolina's Safer Syringe Initiative

In 2016, North Carolina legalized syringe exchanges. Years of collaborative efforts that focused on harm reduction broke down the historical resistance to syringe exchanges and resulted in the decriminalization of needles. Advocates performed demonstration projects and worked with law enforcement early

on to identify legislation that the law enforcement community would find helpful and would ultimately support. In addition, advocates made the case that needle exchanges could save the state money by reducing the number of HCV cases in the future. The North Carolina Department of Health and Human

Services (NC DHHS) noted that Medicaid charges for HCV treatment increased from \$3.8 million in 2011 to \$85 million in 2016. Following the legalization of the syringe exchanges, NC DHHS developed the Safer Syringe Initiative and registered 22 syringe programs in the first year of the law, reaching 19 counties.

## Considerations for Effective Design and Implementation

- Authorize syringe programs that explicitly allow access to needle-exchange programs statewide to prevent and control the spread of infections. States should consider what type of organizations will be authorized to run these programs, such as local health departments, nonprofits, community-based organizations, pharmacies, or others.
  - Exempt syringes and needles from drug-paraphernalia laws to allow participants or administrators of syringe access programs to access and possess clean syringes
  - Offer resources for technical assistance, capacity building, or support from experienced harm-reduction staff to help execute and sustain syringe-access programs long term.
  - Make educational materials and other services, including access to treatment, available to people who inject drugs.
- Programs should consider providing or connecting participants to medical, social, mental health and substance use disorder services, and treatment.
- Ensure data-collection procedures do not cause an undue burden on the program or participants. Programs should also ensure anonymous participation and confidentiality of involvement in program activities to increase participation.

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## Complementary Policies

As Americans struggle with addiction, many policy strategies focus on drug overdoses and decreasing the supply of illicit and prescription drugs that can be misused.<sup>216</sup> There are numerous factors that contribute to substance misuse and it is important to implement evidence-based policies and programs that promote mental health and well-being.

The legal and social policies set in place to address substance misuse have major consequences for the individuals and communities affected. Successful public health approaches to substance misuse are multifaceted:

- Address the underlying social determinants (such as poverty and trauma).
- Promote resiliency and skill building and bolstering protective factors to help individuals cope with difficulties in a healthy manner.
- Provide individuals with support and connections to treatment and recovery.
- Reduce the supply of drugs and support appropriate uses of prescription medicines.
- Treat addiction as a public health issue and not a criminal justice issue and avoid compounding the negative impact for families.
- Promote community-based programs rather than high-cost and ineffective approaches within the criminal justice system.

**Drug Disposal Programs:** Drug disposal programs allow people to drop off expired, unwanted, or unused medicines for proper disposal. These

programs can be in the form of one-day Take Back events, in-person drop-offs, mail-in programs, or permanent collection receptacles. Drug disposal laws vary across states, namely whether the state authorizes drug disposal, disposal locations, disposal methods, and provide funding.

**Good Samaritan Laws:** Good Samaritan laws reduce legal penalties for an individual seeking help for themselves or others experiencing an overdose.<sup>217</sup> In 30 states and the District of Columbia, Good Samaritan laws prevent an individual who seeks medical assistance for someone, including themselves, experiencing a drug-related overdose from being prosecuted for possession of a controlled substance. However, 21 states, including Alaska, North Carolina, and Virginia, do not protect such individuals from being charged.

**Provider Education and Informed Practices:** Education for practitioners is a critical component to reducing prescription drug misuse—including support for continuing education, particularly as the field and guidance may change over time.<sup>218</sup> Recommended subject matters include: treating pain in a holistic manner, prescribing appropriately, using critical-thinking skills, using state prescription drug monitoring programs, identifying addiction, and referring to treatment. Many medical, dental, nursing, pharmacy and other professional schools provide only limited training on substance misuse and pain treatment.

## Promote Healthy Behavior

In 2016, the CDC reported that the top five leading causes of death in the United States were (1) heart disease, (2) cancer, (3) accidents (unintentional injuries), (4) chronic lower-respiratory diseases, and (5) stroke (cerebrovascular diseases).<sup>219</sup> Many Americans are dying prematurely and some of these deaths can be prevented.<sup>220</sup> For the five leading causes of death, some of the major risk factors include tobacco use, secondhand smoke exposure, poor diet, drug and alcohol use (including prescription drug misuse), and lack of physical activity, among other factors.<sup>221,222,223,224,225</sup>

While these risk factors impact all Americans, there are significant racial and ethnic disparities. For example, American Indians and Alaska Natives have the highest smoking rate of any racial or ethnic group (31.8 percent)—compared with Blacks (16.5 percent), Latinos (10.7 percent), and Whites (16.6 percent).<sup>226</sup> While Black smokers have comparable smoking rates to Whites, more than 77 percent smoke menthol cigarettes, which make it easier to start smoking and more difficult to quit, compared with 23 percent of White smokers.<sup>227,228,229</sup> Additionally, individuals below the federal poverty level have a smoking rate of 25.3 percent compared with 14.3 percent of individuals at or above the federal poverty level.<sup>230</sup> Through policy change, states can help reduce these risk factors for populations that are disproportionately impacted and promote health equity.

These risk factors are influenced by the social, demographic, environmental, economic, and geographic characteristics of the places in which people live and work.<sup>231</sup> Modifying environments to make it easier for people to make healthier choices can lead to better health outcomes however, many individuals do not have the means or know-how to improve health on their own.<sup>232</sup> Policymakers can modify the conditions in their states to support opportunities for residents to make healthy choices. States can use financial incentives and disincentives to encourage or discourage behaviors, some of which might be harmful and costly to taxpayers. Additionally,

certain individual behaviors, like smoking, can be harmful to people who do not engage in those behaviors themselves, such as by exposing them to secondhand smoke. Increasing the price of tobacco products can help discourage individuals from consuming tobacco, while implementing smoke-free laws can protect nonsmokers from exposure to secondhand smoke.

### Tobacco

Tobacco use continues to be a leading cause of preventable death in the United States, known to cause cancer and other harmful health conditions.<sup>233</sup> Every year, smoking costs the United States approximately \$170 billion in healthcare expenditures.<sup>234,235</sup> Tobacco use is established primarily during adolescence: an estimated nine in 10 smokers first tried cigarettes before the age of 18.<sup>236</sup>

Every year, smoking-related illnesses cost the United States more than \$300 billion. This includes approximately \$170 billion in medical care, more than 60 percent of which is paid for by public programs like Medicare and Medicaid.<sup>237</sup> Additionally, the United States loses \$156 billion in lost productivity, including \$5.6 billion in lost productivity due to secondhand smoke exposure.<sup>238,239</sup>

Two sets of policies—smoke-free regulations and increased tobacco prices—can promote health while also generating a substantial savings for government and the private sector.

## **POLICY**

### **RECOMMENDATION 3a:**

#### **Smoke-Free Policies**

States should enact legislation to prohibit smoking in designated spaces. Policies can apply to indoor areas, outdoor areas, and multiunit housing.<sup>240</sup> Smoke-free policies are designed to improve public health by reducing secondhand smoke, reducing tobacco use, encouraging smokers to quit, reducing the initiation of tobacco use, and reducing tobacco-related morbidity.<sup>241</sup> Smoking in federally-assisted housing is prohibited by federal law.<sup>242</sup> States have recently expanded smoke-free policies to include electronic cigarettes (e-cigarettes) and prohibit their use in certain establishments.<sup>243</sup>

Smoke-free policies for indoor areas are the most common and tend to cover smoking in workplaces, restaurants, and bars. They can also include partial bans that limit smoking to designated areas. Although most states have enacted smoke-free indoor-air laws, not every jurisdiction has comprehensive laws.<sup>244</sup> The CDC considers a smoke-free law to be comprehensive if it prohibits smoking in all indoor areas of private workplaces, restaurants, and bars, with no exceptions.

Smoke-free policies for outdoor areas cover smoking outside, including on worksite property and outdoor public areas, such as parks and beaches.<sup>245</sup> Smoke-free policies for multiunit housing cover smoking in apartments, duplexes, and similar residences. They can apply to common areas, individual units, and adjacent outdoor areas. These policies tend to focus on public and subsidized housing.<sup>246</sup> However, these policies must be enforced in a way that does not jeopardize stable housing for low-income people. Residents must be provided with resources and multiple chances to quit smoking. Overly punitive enforcement risks exacerbating homelessness and health inequities.

## **Health Evidence**

Implementing smoke-free policies decreases smoking behavior, reduces exposure to secondhand smoke, and improves health outcomes.<sup>247</sup> There is no safe level of secondhand smoke exposure.<sup>248</sup> Secondhand smoke is associated with adverse health outcomes such as respiratory infections and asthma attacks.<sup>249</sup> Secondhand smoke exposure from e-cigarettes can also have negative health impacts. A recent report from the National Academies of Sciences, Engineering, and Medicine found conclusive evidence that e-cigarette use increases airborne concentrations of particulate matter and nicotine in indoor environments.<sup>250</sup>

Smoke-free policies reduce asthma attacks and related hospitalizations, as well as to reduce total hospitalizations and mortality associated with other cardiovascular and respiratory diseases.<sup>251,252</sup> Indoor-smoking policies can lower smoking rates and encourage current smokers to quit.<sup>253</sup> Following the implementation of smoke-free policies in indoor areas, smoking rates among younger populations appear to be decreasing faster compared with older adults.<sup>254</sup>

Implementing outdoor smoke-free policies can help reduce smoking in designated areas. Smoke-free indoor-air policies reduce cigarette consumption, prevent secondhand smoke exposure, promote smoking cessation, and improve health outcomes.<sup>255</sup> However, smoking in designated outdoor smoking areas located next to indoor smoke-free settings can increase secondhand smoke concentrations in both settings.<sup>256</sup> Restricting smoking in outdoor public spaces, such as parks and beaches, appears to reduce smoking in those settings.<sup>257</sup> Additional

evidence is needed to confirm these effects and their impact on health outcomes.

Prohibiting smoking in public places is an evidence-based, recommended strategy to prevent tobacco use among youth.<sup>258</sup> Implementing comprehensive campus smoking bans that include outdoor areas appears to reduce smoking among college students within one to three years.<sup>259</sup>

Applying smoke-free multiunit housing policies can reduce exposure to secondhand smoke and thirdhand smoke. A Portland, Oregon study found that smoking bans in multiunit housing were associated with positive changes in smoking cessation and reduced exposure to secondhand smoke.<sup>260</sup> After implementing a smoke-free housing policy in Canada, respondents reported an increase in outdoor smoking and overall reductions in smoking.<sup>261</sup>

## Economic Evidence

### Indoor

Smoke-free policies can be cost effective by reducing secondhand smoke exposure and related medical expenditures. An economic analysis estimated that implementing smoke-free policies will save between \$0.15 million and \$4.8 million per 100,000 people in healthcare costs.<sup>262</sup> A year after Florida implemented a smoke-free indoor-air policy, the state saved \$6.8 million in averted medical costs. It is estimated that in the long term, Florida will save \$220 million annually—\$196 million in savings from former smokers and at least \$24 million from reduced exposure to secondhand smoke.<sup>263</sup>



### Outdoor

In a cost analysis of implementing and enforcing a smoke-free outdoor-space ordinance, a Canada-based study found that no additional enforcement staff were hired and that promoting a smoke-free outdoor-air policy did not create significant burdens on staff or budgets.<sup>264</sup>

### Multiunit Housing Units

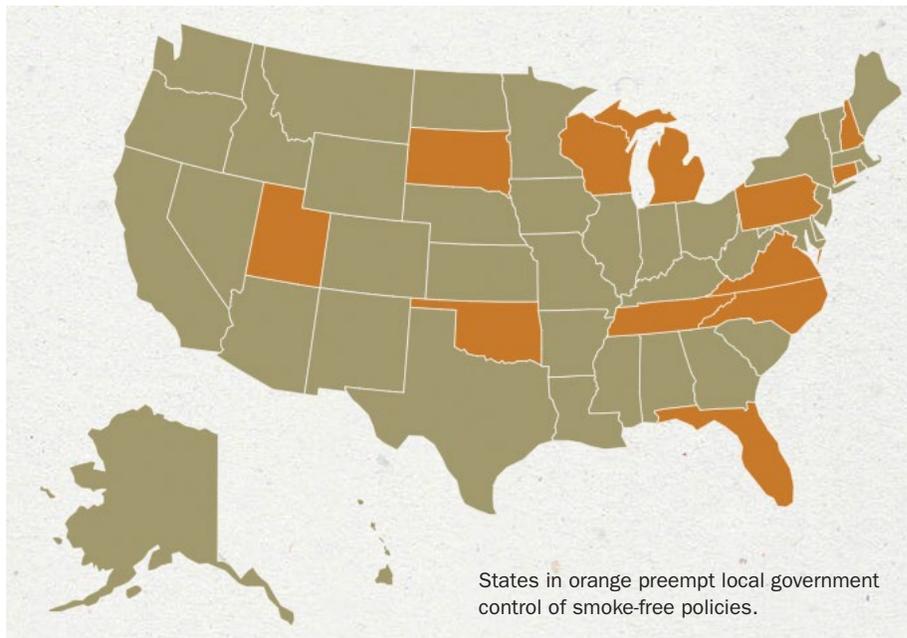
It is estimated that implementing smoke-free policies in public housing could save \$496.82 million per year, including \$310 million in averted health costs, \$133.77 million in renovation expenses, and \$52.57 million in smoking-attributable fire losses. The same analysis found that cost savings by state ranged from \$0.58 million to \$124.68 million.<sup>265</sup> Other research shows that implementing national smoke-free policies in public housing would save an estimated \$183 million to \$267 million from reduced medical expenditures and averted losses in productivity.<sup>266</sup>

## Policy Landscape

According to the American Lung Association, 28 states and the District of Columbia have passed comprehensive smoke-free laws. Nine states and the District of Columbia have added e-cigarettes to their smoke-free laws.<sup>267</sup> As of June 30, 2018, 37 states and the District of Columbia are 100 percent smoke-free in at least one of three locations (bars, restaurants, and private worksites).<sup>268</sup> The remaining states either do not have smoking laws, allow smoking in designated areas, or require separate ventilation for areas that allow smoking. There is variation on whether the smoking ban covers bars, restaurants, private worksites, or a combination of the three. Despite states' progress enacting and implementing smoke-free laws, there are instances where states are preempting localities from protecting individuals from secondhand smoke exposure. State legislation preempts local government control of smoke-free policies in 12 states.<sup>269</sup> Smoking in federally-assisted housing is prohibited by federal law.<sup>270</sup>

Outdoor smoke-free policies are typically also enacted at a local level,

## States that Preempt Local Smoke-Free Laws



Source: *Grassroots Change*<sup>271</sup>

often as extensions of indoor smoke-free policies. One issue surrounding these laws is how outdoor spaces should be defined. There are currently no states that have enacted outdoor smoke-free policies.<sup>272</sup>

As of 2015, 15 states prohibit or restrict smoking in common areas of multiunit housing facilities that are government

owned or funded, and 12 states prohibit or restrict smoking in common areas of privately owned housing facilities. Hawaii and Oklahoma restrict smoking in the individual living areas of government-operated buildings, and some communities in California prohibit smoking in individual units of some or all multiunit housing.<sup>273</sup>

## CASE EXAMPLE

### Wisconsin's Smoke-Free Law

In July 2010, Wisconsin enacted a statewide smoke-free law that applies to enclosed places of employment and to enclosed public spaces, such as restaurants, hotels, theaters, and other facilities.<sup>274</sup> The statewide law does not apply to outdoor areas. However, local authorities can choose to restrict smoking in outdoor public properties but not private property, such as restaurants or bar patios.<sup>275</sup> An estimated 6,966 people die annually from illnesses directly related to smoking, which is nearly 15 percent

of all deaths in Wisconsin.<sup>276</sup> After implementing a comprehensive smoke-free law, researchers found the following effects on residents' health and local economies:

- Three to six months after the implementation of the statewide smoke-free law, nonsmoking bar workers experienced a significant decline in respiratory symptoms caused by secondhand smoke.<sup>277</sup>
- Local smoke-free laws were found not to harm the local economies. In fact,

the economic impacts were either neutral or positive.<sup>278</sup>

- Studies found that there was no difference in the number of liquor licenses for establishments to serve alcoholic beverages before and after the local laws took effect.<sup>279</sup>
- The Wisconsin Restaurant Association supported the enactment of the statewide smoke-free law to protect all restaurant and bar workers from the dangers of secondhand smoke.<sup>280</sup>

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## Considerations for Effective Design and Implementation<sup>281,282</sup>

- Ensure that smoke-free air laws do not preempt local law.
- Mandate 100 percent smoke-free environments to maximize health benefits, minimize confusion, and facilitate compliance. This should include bars, restaurants, workplaces, casinos, and common areas of multiunit housing facilities.
- Expand current or enact new smoke-free air laws to include the use of electronic nicotine delivery systems and marijuana.
- Use clearly defined terms—especially the definitions of “restaurant” and “bar”—to support unambiguous interpretation by those responsible for implementing and enforcing the policy.
- Provide no, or minimal, exemptions that may result in legal challenges.
- Specify procedures, penalties, and funding mechanisms for enforcement.
- Use the latest scientific information documenting the health risks associated with tobacco use and exposure to secondhand smoke.
- Prohibit smoking in outdoor places, including parks and other recreational areas, restaurant patios, bus stops, public-event sites, and common areas of multiunit housing.
- Require “No Smoking” signs to be posted.
- Couple enforcement with robust resources to help people quit smoking.

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## POLICY RECOMMENDATION 3b: Tobacco Pricing Strategies

Increasing tobacco pricing is a sound strategy to deter youth from using tobacco products, to promote quitting tobacco, and to reduce tobacco use. Research shows that higher prices decrease tobacco consumption and increase rates of tobacco cessation. That’s particularly important in low-income neighborhoods, which have a higher concentration of tobacco retailers and are more likely to have a store that sells tobacco near schools.<sup>283</sup> Additionally, higher tobacco prices can generate cost savings and avoid lost productivity due to poor tobacco-related health outcomes.

All states have a tax on some tobacco products, but the products and their associated tax rates vary. The revenue generated from taxing tobacco products may be used to fund tobacco interventions or other public health programs. To promote health equity, this spending can be directed to those communities most affected by the tax.

### Health Evidence

Increasing tobacco prices decreases tobacco consumption, increases quit

rates, and reduces disparities.<sup>284,285</sup> Generally, the effects on tobacco consumption are proportional to the increase in the price of the tobacco product. Research suggests that a 20 percent increase in the unit price of tobacco reduces tobacco consumption by 10 percent.<sup>286</sup> Government tobacco-control policies decreased smoking prevalence and increased smoking cessation rates among youth after the price of tobacco products was raised. Higher tobacco prices have a greater effect on adolescents, young adults, and lower-income populations.<sup>287</sup>

It should be noted that implementing tobacco pricing strategies that apply to only a limited set of products may encourage users to substitute one tobacco product with a lower-priced one. For example, if the price increases are narrow in scope and only apply to one type of tobacco product (for example, cigarettes but not smokeless tobacco), users may use price-minimization strategies, such as buying lower-priced tobacco or discounted products, to avoid the price increase.<sup>288</sup>

## Economic Evidence

Because increased tobacco prices deter people from initiating tobacco use and promote tobacco cessation, states can generate cost savings in the form of lower healthcare expenditures. The revenue from increasing tobacco taxes can also be used to fund tobacco-control programs in the state. Research shows that increasing tobacco prices by 20 percent results in healthcare cost savings ranging from -\$0.14 to \$90.02 per smoker per year in addition to averted productivity losses.<sup>289</sup>

## Policy Landscape

All 50 states and the District of Columbia, have enacted a tobacco pricing policy. There is a high degree of variation across states when it comes to these policies. While all jurisdictions have an excise tax on cigarettes, the

approaches and rates of taxation differ greatly throughout the country.<sup>290</sup> As of December 2018, just eight states and the District of Columbia have cigarette tax rates per pack greater than \$3.00. Further, the rates differ by state for different types of tobacco products, with some states including, and some excluding, e-cigarettes. There is also differentiation in tobacco taxation beyond retail, with some states taxing tobacco with inventory or floor-stock taxes, and some states taxing tobacco on a wholesale level.<sup>291</sup> There is variation in the allowance of local taxation on tobacco, as well as in the penalties for tax evasion and contraband trafficking. As of 2016, 21 states prohibit local governments from imposing taxes on tobacco products and seven states allow localities to adopt such a tax.<sup>292</sup>

### CASE EXAMPLE

#### New York's Tobacco Tax

Between 2000 and 2010, New York state raised the cigarette excise tax three times to decrease tobacco consumption among adults and youth. In 2000, the state first implemented a \$0.55 cigarette excise tax increase, raising the tax rate of cigarettes to \$1.11 per pack.<sup>293</sup> Currently, New York has one of the highest cigarette excise taxes in the country, charging \$4.35 in excise taxes per package of 20 cigarettes, compared with the national average of \$1.78 in excise taxes per pack.<sup>294</sup> To put this into perspective, New York annually collects more than \$1.2 billion in tobacco taxes.<sup>295</sup> As New York increased taxes on cigarettes, the state's smoking rate fell below the national average. In 2016, 14.2 percent of adults in New York smoked compared with the national average of

17.1 percent.<sup>296</sup> In 2017, 5.5 percent of New York high school students smoked at least one day in the past month compared with the national average of 8.8 percent.<sup>297</sup>

However, as with many other states across the country, only a modest fraction of New York's tobacco tax revenue is dedicated to tobacco-cessation programs or even to public health in general. According to the CDC, states cumulatively appropriated only 2.4 percent of their tobacco revenue for tobacco-control efforts, including tobacco cessation.<sup>298</sup> Because the tobacco tax is inherently regressive, only more robust spending on the needs of the low-income population can prevent the tobacco tax from having negative consequences for health equity.

STATE CIGARETTE TAX RATE	
State	Cigarette Tax Rate
Alabama	\$0.68
Alaska	\$2.00
Arizona	\$2.00
Arkansas	\$1.15
California	\$2.87
Colorado	\$0.84
Connecticut	\$4.35
Delaware	\$2.10
D.C.	\$4.50
Florida	\$1.34
Georgia	\$0.37
Hawaii	\$3.20
Idaho	\$0.57
Illinois	\$1.98
Indiana	\$1.00
Iowa	\$1.36
Kansas	\$1.29
Kentucky	\$1.10
Louisiana	\$1.08
Maine	\$2.00
Maryland	\$2.00
Massachusetts	\$3.51
Michigan	\$2.00
Minnesota	\$3.04
Mississippi	\$0.68
Missouri	\$0.17
Montana	\$1.70
Nebraska	\$0.64
Nevada	\$1.80
New Hampshire	\$1.78
New Jersey	\$2.70
New Mexico	\$1.66
New York	\$4.35
North Carolina	\$0.45
North Dakota	\$0.44
Ohio	\$1.60
Oklahoma	\$2.03
Oregon	\$1.33
Pennsylvania	\$2.60
Rhode Island	\$4.25
South Carolina	\$0.57
South Dakota	\$1.53
Tennessee	\$0.62
Texas	\$1.41
Utah	\$1.70
Vermont	\$3.08
Virginia	\$0.30
Washington	\$3.03
West Virginia	\$1.20
Wisconsin	\$2.52
Wyoming	\$0.60
<b>≤ \$0.999</b>	<b>14 states</b>
<b>\$1.00 – \$2.99</b>	<b>28 states</b>
<b>≥ \$3.00</b>	<b>8 states &amp; D.C.</b>

## Considerations for Effective Design and Implementation<sup>299</sup>

- Modernize tobacco-related definitions to recognize new tobacco products, including e-cigarettes.
- Tax non-cigarette tobacco products at a tax rate that is equivalent to that of cigarettes.
- Periodically review tobacco tax rates and adjust for inflation.
- Dedicate a portion, or a greater proportion, of tax revenue for state tobacco-control and prevention programs, and specifically target these programs to low-income individuals and other vulnerable populations. Any remaining revenue should be dedicated to other policies that improve health, such as supporting the expansion of the state earned income tax credits.
- Increase state support for cessation services through the expansion of “quit-lines,” nicotine-replacement therapy, texting programs, and other services.
- Provide flexibility to municipalities to tax tobacco products, and remove any existing preemption policies.
- If tobacco taxes are below the national average, raise them.
- Increase penalties for tobacco tax evasion and contraband trafficking, and strengthen enforcement.

## Complementary Policies

**Minimum Age for Tobacco:** Often called “Tobacco 21” policies, enacting legislation to increase the purchase age for tobacco to 21 is another strategy to promote better health and curb healthcare costs associated with tobacco use. About nine in 10 cigarette smokers first tried smoking before the age of 18.<sup>300</sup> Studies suggest that 95 percent of adult smokers began smoking before age 21.<sup>301</sup> Some states have raised the minimum age from 18 to 19, and others have raised it to 21.

## POLICY RECOMMENDATION 3c: Alcohol Pricing Strategies

States can impose higher taxes on alcoholic beverages to reduce excessive drinking, underage drinking, and alcohol-related deaths. Increasing alcohol taxes reduces both excessive alcohol consumption and alcohol-related harms. Some states already have taxes targeting alcoholic beverages, but the effects of the tax can erode over time if the tax does not keep up with inflation.

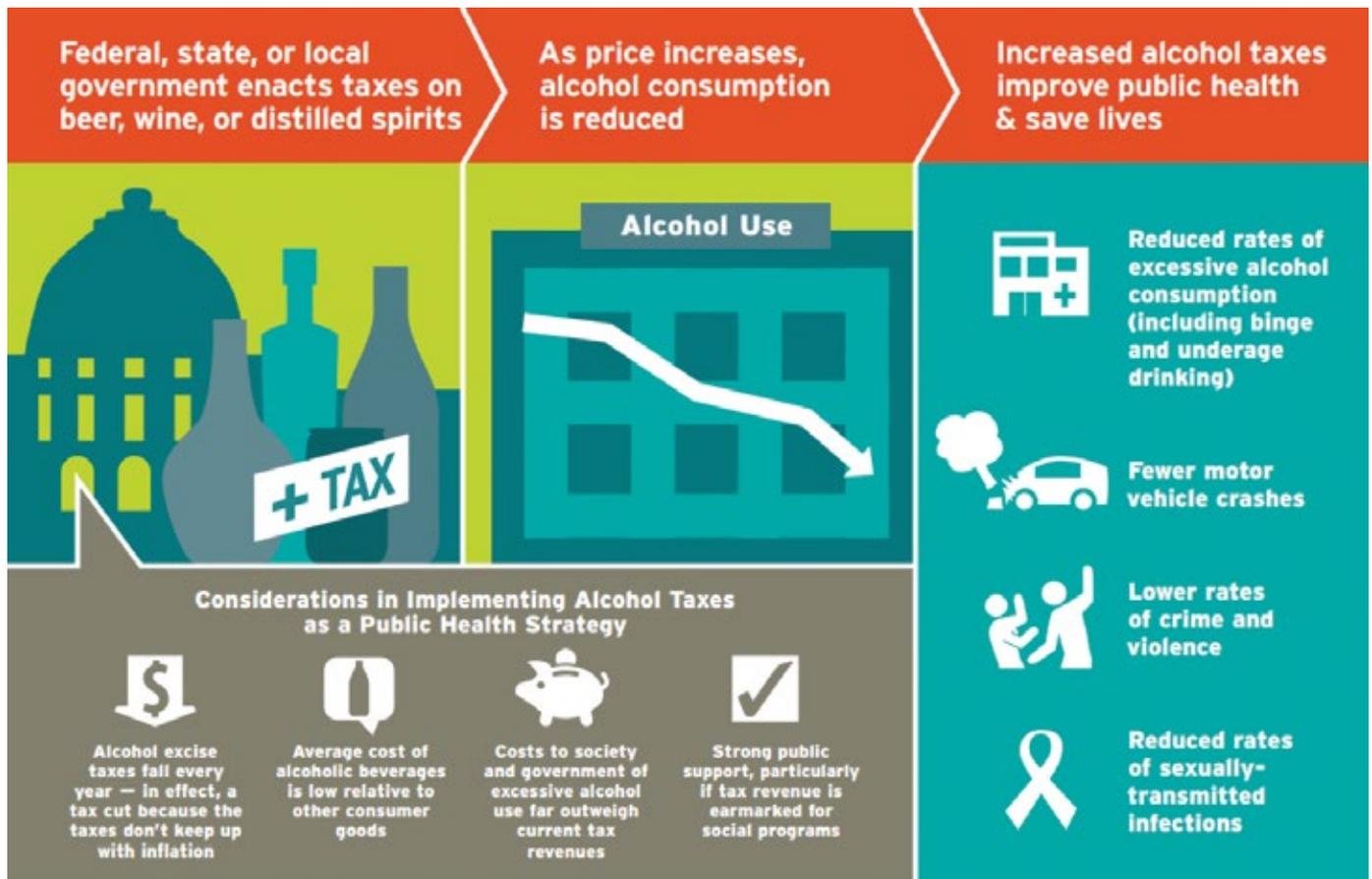
About 88,000 people die of alcohol-related causes per year, making excessive alcohol consumption the third leading cause of preventable death in the United States.<sup>302</sup> About one in six American adults binge-drinks about four times a month.<sup>303</sup> Binge-drinking behavior is most common among young adults ages 18 to 34, but adults ages 35 and older consume more than half of the total number of binged drinks.<sup>304</sup> Underage drinking is also a significant issue. In 2015, about 7.7 million people ages 12 to 20 reported drinking alcohol in the past month.<sup>305</sup> In 2010, excessive drinking cost the nation \$249 billion in healthcare expenditures, workplace productivity, and other expenses.<sup>306</sup> Implementing mechanisms to reduce alcohol misuse can save states billions of dollars.

Because states have the flexibility to apply tax policies that best suit their budget and needs, state legislatures can take action to reduce excessive drinking, underage drinking, and alcohol-related deaths and save costs associated with alcohol misuse.



Sorbis / Shutterstock.com

## The Impact of Federal, State and Local Alcohol Taxes



Source: ChangeLab Solutions.<sup>307</sup>

### Health Evidence

An analysis of more than 100 studies found that as the price of alcohol increases, alcohol consumption decreases.<sup>308</sup> Imposing higher alcohol taxes leads to reduced overall alcohol consumption, reduced consumption and binge-drinking among youth, reduced alcohol-related motor-vehicle crashes, reduced mortality from liver cirrhosis, and reduced alcohol-related violence.<sup>309</sup> State alcohol tax increases are also likely to reduce disparities.<sup>310</sup>

### Economic Evidence

In 2010, excessive alcohol use cost the United States an estimated \$249 billion in medical care (or \$2.05 per drink), and

the government paid \$100.7 billion (40.4 percent) of those costs.<sup>311</sup> The median cost per state was \$3.5 billion, and more than 70 percent of the costs were related to binge-drinking. States have varying excise tax rates per type of alcohol, and many states also apply sales taxes on alcoholic beverages.<sup>312</sup> Higher alcohol prices have a positive effect on the alcohol consumption of low-income individuals, youth, and heavy drinkers.<sup>313,314</sup>

While evidence supports the effectiveness of taxing alcohol as a way to curb alcohol misuse, inflation-adjusted alcohol taxes have declined since the 1950s.<sup>315</sup> This means that although many states already tax alcoholic beverages,

the effects of the tax have been eroding over time because they have not kept up with inflation rates.

### Policy Landscape

As of January 1, 2017, all 50 states and the District of Columbia have some type of tax on alcohol. States have a high degree of variation among relatively few variables, namely excise (volume-based) versus ad valorem (value-based) taxes, type of alcohol, and tax amounts. For example, Colorado has a \$0.08 excise tax on beer compared with Georgia's \$1.01 excise tax.<sup>316</sup> As of January 1, 2015, 31 states preempt local authorities from imposing any alcohol taxes.

STATE ALCOHOL TAX RATE			
State	Beer	Wine	Spirits
Alabama	\$1.05	**	**
Alaska	\$1.07	\$2.50	\$12.80
Arizona	\$0.16	\$0.84	\$3.00
Arkansas	\$0.24	\$0.75	\$2.50
California	\$0.20	\$0.20	\$3.30
Colorado	\$0.08	\$0.32	\$2.28
Connecticut	\$0.24	\$0.72	\$5.40
Delaware	\$0.16	\$0.97	\$3.75
D.C.	\$0.09	\$0.30	\$1.50
Florida	\$0.48	\$2.25	\$6.50
Georgia	\$1.01	\$0.42	\$1.89
Hawaii	\$0.93	\$1.38	\$5.98
Idaho	\$0.15	**	**
Illinois	\$0.23	\$1.39	\$8.55
Indiana	\$0.12	\$0.47	\$2.68
Iowa	\$0.19	\$1.75	**
Kansas	\$0.18	\$0.30	\$2.50
Kentucky	\$0.08	\$0.50	\$1.92
Louisiana	\$0.40	\$0.76	\$3.03
Maine	\$0.35	**	**
Maryland	\$0.09	\$0.40	\$1.50
Massachusetts	\$0.11	\$0.55	\$4.05
Michigan	\$0.20	\$0.51	**
Minnesota	\$0.15	\$0.30	\$5.03
Mississippi	\$0.43	**	**
Missouri	\$0.06	\$0.42	\$2.00
Montana	\$0.14	**	**
Nebraska	\$0.31	\$0.95	\$3.75
Nevada	\$0.16	\$0.70	\$3.60
New Hampshire	\$0.30	**	**
New Jersey	\$0.12	\$0.88	\$5.50
New Mexico	\$0.41	\$1.70	\$6.06
New York	\$0.14	\$0.30	\$6.44
North Carolina	\$0.62	\$1.00	**
North Dakota	\$0.16	\$0.50	\$2.50
Ohio	\$0.18	\$0.32	**
Oklahoma	\$0.40	\$0.72	\$5.56
Oregon	\$0.08	**	**
Pennsylvania	\$0.08	**	**
Rhode Island	\$0.11	\$1.40	\$5.40
South Carolina	\$0.77	\$1.08	\$2.96
South Dakota	\$0.27	\$0.93	\$3.93
Tennessee	\$1.29	\$1.21	\$4.40
Texas	\$0.19	\$0.20	\$2.40
Utah	**	**	**
Vermont	\$0.27	\$0.55	**
Virginia	\$0.28	**	**
Washington	\$0.76	\$0.87	\$14.25
West Virginia	\$0.18	**	**
Wisconsin	\$0.06	\$0.25	\$3.36
Wyoming	\$0.02	**	**
Beer	≤ \$0.15	\$0.16– \$0.75	≥ \$0.76
	16 states + D.C.	16 states	17 states
Wine	≤ \$0.42	\$0.43– \$0.87	≥ \$0.88
	12 states + D.C.	13 states	13 states
Spirits	≤ \$2.50	\$2.51– \$5.49	≥ \$5.50
	9 states + D.C.	13 states	11 states

## CASE EXAMPLE

### Maryland's Alcohol Tax

In January 2011, Maryland increased the excise tax for alcoholic beverages, which had not changed in 40 years.<sup>317</sup> In 1956, the last time the liquor tax was raised, the tax on distilled spirits earned Maryland an estimated \$51.3 million in revenue.<sup>318</sup> Years later in 1973, when Maryland increased the tax on beer and wine, the state earned \$52 million.<sup>319</sup> However, the value of the taxes did not keep up with inflation, and in 2009, the state earned just \$29.2 million in revenue. (The taxes were pegged per gallon rather than as a percentage tied to inflation.)<sup>320</sup>

On July 1, 2011, Maryland raised the sales tax on alcohol by three percentage points, from 6 percent to 9 percent.<sup>321</sup> Despite claims by the Distilled Spirits Council of the United States (DISCUS), the tax increase did not cause a substantial drop in consumption: 18 months after implementation, Maryland saw a 3.8 percent decrease in sales of total alcohol compared with the expected sales had the tax not been in effect.<sup>322</sup> The net increase in tax revenue, even with the minor drop in consumption resulting from the tax increase, is estimated at \$38 million annually.

## Considerations for Effective Design and Implementation<sup>323</sup>

- Groups with less disposable income, such as underage drinkers, may be more sensitive to changes in alcohol prices than those with more disposable income.
- While raising alcohol taxes may provide an important source of revenue for governments, industry groups and consumers may resist such tax increases.
- Public support for higher alcohol taxes increases substantially when tax revenues are specifically directed to fund prevention and treatment programs instead of being used as an unrestricted source of general revenue. This is also viewed as a more fiscally responsible option since alcohol tax revenue grows more slowly over time and may decrease due to reduced alcohol sales.

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## Complementary Policies

**Alcohol Outlet Density Restrictions:** Alcoholic-beverage “outlets” include any bars, restaurants, clubs, grocery stores, discount stores, and convenience stores that have alcohol licenses. Alcohol outlet density restrictions reduce the concentration—or at least limit increases to the concentration—of retail alcohol establishments in a given geographic area. These policies are often implemented through a licensing or zoning process and vary by state depending on the alcohol-control system in place.<sup>324</sup> Density restrictions reduce excessive alcohol consumption and related harms.<sup>325</sup>

**Dram Shop Liability Laws:** Dram shop liability laws are designed to promote responsible beverage service by reducing sales to intoxicated or underage persons. These policies hold licensed establishments legally responsible if a person drinks too much and then causes harm as a result of their intoxication—even if the intoxicated person has left the licensed establishment. Harm, for example, could include death, injury, or other damages from an alcohol-related car accident. Drinking in bars and restaurants is strongly associated with binge-drinking and alcohol-impaired driving.<sup>326</sup> About one in six American adults binge-drinks about four times a month.<sup>327</sup>



# Promote Active Living and Connectedness

Physical inactivity and obesity are two of the most significant health problems in the United States. As states continue to explore cost-effective policies to address these underlying causes of chronic diseases, such as diabetes and cardiovascular diseases, some solutions can be found in how cities, municipalities, and neighborhoods are designed.

Both physical activity and obesity are linked with the physical makeup—the built environment—of neighborhoods and communities. As state and local governments are primarily responsible for most of the country’s public capital, owning more than 90 percent of non-defense public-infrastructure assets, there are many opportunities for state officials to promote health and reduce medical expenditures by implementing policies that improve safety conditions, improve air and water quality, and encourage physical activity where individuals live, work, learn and play.<sup>328</sup>

People who are physically active tend to live longer and have a lower risk for heart disease, stroke, type 2 diabetes, and some cancers.<sup>329</sup> Yet, according to the CDC, only about one in five adults meet the recommended guidelines for weekly physical activity, and fewer than three in 10 high school students get at least 60 minutes of physical activity per day.<sup>330</sup> Physical activity trends are also linked to individuals’ education level and socioeconomic status. Adults with more education are more likely to meet the recommended guidelines for aerobic activity than adults with less education, and adults whose family income is above the poverty level are more likely to meet the physical activity guidelines for aerobic activity than adults whose family income is at or near the poverty level.<sup>331</sup> These differences are not surprising: low-income people often need to work long hours or multiple jobs, limiting their ability to engage in leisure-time physical activity.

Recognizing that many individuals may not have the time or resources to engage in physical activity during their leisure time, altering the built environment provides a solution that increases physical activity by making places more walkable, more accessible to bikes, and more connected to parks and public transportation. However, improving the walkability and bike-ability of communities comes with a set of safety challenges. In 2017, the Governors Highway Safety Association estimated that 5,984 people were killed while walking.<sup>332</sup> The National Complete Streets Coalition, a leading organization that promotes a smart-growth approach to development, found that that people of color and older adults are more than 50 percent more likely to be struck and killed while walking in the United States.<sup>333</sup> Additionally, death rates for Latino and Black bicyclists are 23 to 30 percent higher than for White bicyclists.<sup>334</sup> Most U.S. streets and roads are designed for vehicle speed in free-flowing conditions, using a standard called Level of Service that prioritizes maximum vehicle throughput. This standard leads to roads that are not only unsafe for walkers and cyclists, but also challenging for small businesses sited along roadways, due to a lack of pedestrian traffic. Replacing the speed-related Level of Service standard with design principles that recognize the multiple uses of streets would promote public health, local economic activity, and the expressed needs of the community.<sup>335</sup>

**POLICY  
RECOMMENDATION 4a:  
Complete Streets**

Complete Streets is an approach to transportation that addresses the needs of all road users, including pedestrians, bicyclists, motorists, and transit riders, regardless of their age or ability. It emphasizes regular consideration for different transportation modes into everyday transportation planning, design, and operation decisions. Complete Streets policies support a transportation system that protects vulnerable road users, provides mobility options, and creates livable communities.

States can pass legislation to codify Complete Streets to strengthen transportation systems, promote physical activity, improve outcomes, and reduce costs associated with chronic diseases. Making the built environment more pedestrian-friendly and improving connectivity can decrease barriers to physical activity, can improve pedestrian safety, and can help people lead more active lives. Research also suggests that including one or more of the components from the table below can help increase physical activity.

TRANSPORTATION SYSTEM AND LAND USE/ENVIRONMENTAL DESIGN INTERVENTIONS	
Transportation System Intervention	Example
Street connectivity	Designs to increase street connections, create multiple route options, and shorter block lengths
Pedestrian infrastructure	Sidewalk, trails, street lighting, and landscaping
Bicycle infrastructure	Bicycle systems, protected bike lanes, trails, lighting, landscaping
Public-transit infrastructure	Expanded transit services, times, locations, and connections
Land Use and Environmental Design Intervention	Example
Mixed land use	Land use that is physically and functionally integrated to provide a mix of restaurants, office buildings, housing, and shops
Increased residential density	Communities with affordable housing, relaxed planning restrictions, and strategies to reduce urban sprawl
Proximity to community or neighborhood destination	Stores, health facilities, banks, and social clubs close to each other and more accessible to the public
Park and recreational facility access	Public parks, public recreational facilities, and private fitness facilities

**Health Evidence**

The Community Preventive Services Task Force found that Complete Streets strategies and policies increase physical activity and make being active easier.<sup>336</sup> Improved bicycle and pedestrian infrastructure and connectivity increases physical activity and active transportation.<sup>337</sup> Residing in a neighborhood with greater walkability, more streetlights and bike paths, and other related streetscape design elements is associated with higher levels of walking, increased physical activity,

and lower rates of residents who are overweight or have obesity. Improved bicycle infrastructure alone can increase cycling by modest amounts,<sup>338</sup> and improved bicycling and pedestrian infrastructure—like bike lanes, bicycle paths, and walking trails—can promote physical activity among both experienced and unexperienced cyclists.<sup>339</sup> These same design elements also can increase a neighborhood’s sense of community, reduce crime and stress, and improve green space.<sup>340</sup>

## Economic Evidence

Enacting Complete Streets and other complementary streetscape design policies can not only improve the physical well-being of individuals but also help avoid costs for public (Medicaid and Medicare) and private payers. The annual healthcare costs associated with inadequate physical activity is an estimated \$117 billion.<sup>341</sup> Incorporating strategies to alter built surroundings through transportation policy and environmental design can increase physical activity and reduce these costs.

Additionally, this policy improves safety and reduces vehicle collisions. “Traffic calming,” an outcome of Complete Streets policies that use physical design and other measures to improve safety for motorists, pedestrians, and cyclists, can reduce the number of collisions, injuries, deaths, and property losses. (Collisions include vehicle-on-vehicle,

vehicle-on-cyclist, vehicle-on-pedestrian, and cyclist-on-pedestrian incidents.)<sup>342</sup>

Complete Streets policies also have the potential to benefit a community economically. By increasing accessibility, improving safety, and improving the aesthetic appeal of an area, a community can promote business growth, increase access to already existing businesses, and draw visitors.<sup>343</sup> Complete Streets policies are often developed as part of already existing budgets and are not additive costs. Integrating Complete Streets approaches requires a shift in planning and development rather a budget line item.

## Policy Landscape

Across the country, 29 states and the District of Columbia, have adopted Complete Streets policies with mandatory requirements; 16 of those states and the

District of Columbia, have policies that include mandatory requirements with clear action and intent.<sup>344</sup>

There is a moderate degree of variation among state policies, including: (1) the type of policy (for example, state law, executive order, or agency policy); (2) the purpose outlined in the policy; (3) who is tasked with implementing the policy; (4) reporting requirements; and (5) funding.<sup>345</sup>

Much of the variation involves which state agency is tasked with developing or implementing the Complete Streets policy. For example, Louisiana’s law directs the Department of Transportation to adopt and maintain a “Complete Streets Policy,”<sup>346</sup> whereas Nevada’s law allows boards of county highway commissioners to adopt a policy for Complete Streets.<sup>347</sup>

## CASE EXAMPLE

### Washington’s Complete Streets

The Washington State Department of Transportation determined that a Complete Streets process would save an average of \$9 million per project, or about 30 percent, when rehabilitating roadways that serve as small-town main streets. The pilot project incorporated sidewalks, safe crossings, on-street parking, and other features important to small towns, resulting in savings accrued through reduced schedules, scope, and budget changes.<sup>348</sup>

## Considerations for Effective Design and Implementation<sup>349</sup>

- Specify the Complete Streets users and modes, and include people of all ages and abilities who are walking, riding bicycles, driving cars and trucks, and riding public transportation.
- Ensure Complete Streets policies apply to all possible projects, including new roadway construction; capital projects, such as reconstruction work or road-widening projects; and rehabilitation and maintenance efforts that involve changes to the right-of-way or signal operations.
- Clearly define exceptions to the policy with a requirement for approval from a high-level transportation official and with a transparent process. Limit these exceptions to cases in which safety will genuinely be served.
- States should consider a wide variety of options when considering how to pay for infrastructure improvements, including: borrowing, taxes and fees, federal grants, and public-private partnerships.<sup>350</sup> Each of these options has its own merits, and state governments should consider a blended approach that addresses their needs while supporting fiscal responsibility.

## STREET SMARTS

### The National Complete Streets Coalition's 10 Ideal Policy Elements<sup>351</sup>

- 1. Vision and Intent:** Includes an equitable vision for how and why the community wants to complete its streets. Specifies the need to create complete, connected, networks, and specifies at least four transportation modes, two of which must be biking or walking.
- 2. Diverse Users:** Benefits all users equitably, particularly vulnerable users and the most underinvested and underserved communities.
- 3. Commitment in All Projects and Phases:** Applies to new construction, retrofitted or reconstruction projects, maintenance, and ongoing projects.
- 4. Clear, Accountable Expectations:** Makes any exceptions specific and sets a clear procedure that requires high-level approval and public notice prior to exceptions being granted.
- 5. Jurisdiction:** Requires interagency coordination between government departments and Complete Streets partner agencies.
- 6. Design:** Directs the use of the latest and best design criteria and guidelines and sets a time frame for their implementation.
- 7. Land Use and Context Sensitivity:** Considers the surrounding community's current and expected land use and transportation needs.
- 8. Performance Measures:** Establishes performance standards that are specific, equitable, and available to the public.
- 9. Project Selection Criteria:** Provides specific criteria to encourage funding prioritization for Complete Streets implementation.
- 10. Implementation Steps:** Includes specific next steps for implementation of the policy.

## Complementary Policies



**Safe Routes to Schools:** Often considered when implementing a Complete Streets policy, Safe Routes to Schools promotes walking and biking to school through education and incentives. The program supports

city planning and legislative efforts to make walking and biking safer, and it provides resources and activities to help communities build sidewalks, bicycle paths, and other pedestrian-friendly infrastructure.<sup>352</sup> Nationally,

Safe Routes to Schools programs with public investments in walking and bicycling infrastructure can reduce transportation expenditures for school districts and families.<sup>353</sup>

**Shared-Use Agreements:** States can enact legislation to promote or enable shared-use agreements, which promote physical activity by allowing communities to access existing recreational facilities like fields, gymnasiums, and playgrounds. A shared-use agreement is a formal contract between two or more entities outlining the terms and conditions for how the property will be shared, including costs and liability. By using existing facilities, shared-use agreements are a cost-effective way to expand neighborhood access to play and exercise spaces.

# Ensure Safe, Stable, Healthy, and Affordable Housing for All

The connection between housing and health is well established.<sup>354</sup> Over the past century, officials at the national, state, and local level have implemented numerous housing policies to improve the access to and safety of people's homes. Many of these strategies have resulted in better health through reductions of injury and death, but there is still a growing need to ensure that all individuals have access to and are able to maintain a safe and affordable home regardless of race, ethnicity, income, or any other factors, such as sexual orientation or religion.<sup>355,356</sup>

## DANGER ZONE

### Housing-Related Health Hazards: Costs to the U.S. in Billions Annually

- Asthma: **\$56 billion**
- Lead Poisoning: **\$50 billion**
- Fatalities from Carbon-Monoxide Poisoning: **\$500 million**
- Radon-Induced Lung Cancer: **\$2.9 billion**
- Unintentional Injuries: **\$200 billion**

## Home Safety

As of 2017, 40 percent of U.S. houses have at least one health or safety hazard.<sup>357</sup> Many households in the United States are currently experiencing a dual crisis: affordability of residential housing and quality of residential housing. Many housing conditions—from poor insulation to the presence of lead paint or mold and other safety hazards—can impact health.<sup>358,359</sup> Lower-income families are especially vulnerable to unhealthy housing conditions.<sup>360,361,362</sup>

## Residential Segregation

Not only is there an inadequate supply of quality and affordable homes, but there are lingering issues related to structural and institutional

racism that have resulted in decades of residential segregation. This segregation remains prevalent in many areas of the country and impacts the well-being of individuals and communities. Research shows that a fundamental cause of health disparities in the United States is the residential segregation of different races and ethnicities.<sup>363,364</sup> Residential segregation is linked to poor outcomes for a variety of health conditions like a lack of economic opportunity and upward mobility.<sup>365</sup> Additionally, living in poor-quality housing and disadvantaged neighborhoods is associated with lower kindergarten readiness and lower developmental-assessment scores.<sup>366</sup> States can address this pressing issue with policies that improve access to and the quality of housing.

## Energy Efficiency

Low-income households spend a greater percentage of their income on utility costs compared with higher-income households. This is partly driven by low-income households having less income overall; higher energy consumption, as a result of structural deficiencies that cause air leakage; older and malfunctioning heating and cooling systems; and less efficient appliances. Rural families face the highest energy burdens of any household group in the United States, and they spend a larger percentage of their income on electric and gas bills than the average American family.<sup>367</sup>

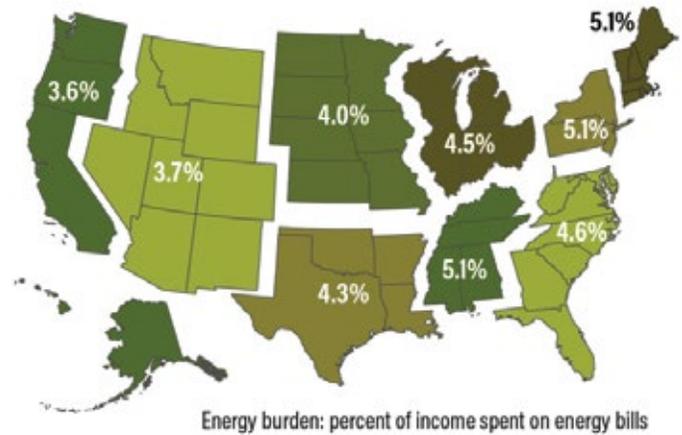
## Homelessness

While those who can afford their rent or mortgage may struggle with maintaining a safe and healthy home, there is a portion of society who does not have access to a home at all. The most recent national estimate of homelessness in the United States, identified 553,742 people as experiencing homelessness.<sup>369</sup> This is a drastic uptick in the number of homeless Americans, with an overall increase of 0.7 percent between 2016 and 2017.<sup>370</sup>

Research shows that being without a stable home is detrimental to an individual's health. People who chronically experience homelessness have higher physical and mental health morbidity and increased mortality rates.<sup>371</sup> Poor health outcomes are not exclusive to individuals experiencing homelessness; those who face housing instability also have poorer health outcomes. Housing instability is associated with health problems among youth, including increased risks of early drug use, depression, and teen pregnancy.<sup>372</sup>

With an aging population, states need to develop additional strategies to adjust to evolving demographics. Based on demographic trends, homelessness among people ages 65 and older is expected to more than double by 2050, from 44,000 in 2010 to nearly 93,000 in 2050.<sup>374</sup> Reflecting the graying of the general population, the age of those

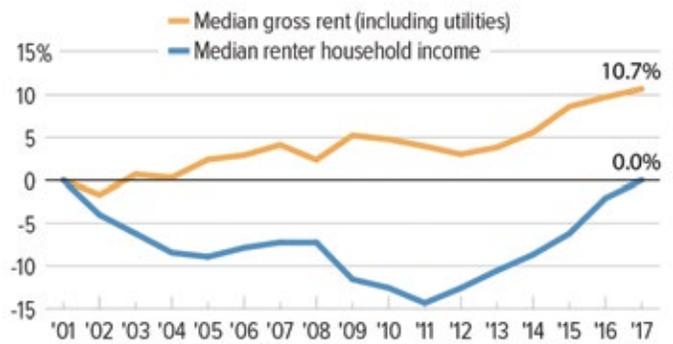
## Rural Energy Burden By Region



Source: "The High Cost of Energy in Rural America"<sup>368</sup>

## Renters' Incomes Haven't Caught Up With Housing Costs

Percent change since 2001, adjusted for inflation



Source: CBPP tabulations of the Census Bureau's American Community Survey

Source: Center on Budget and Policy Priorities<sup>373</sup>

households utilizing federal rental assistance has steadily risen. According to the Bipartisan Policy Center Health and Housing Task Force, the share of federally assisted households headed by someone 50 years of age or older has increased from 45 percent in 2004 to 55 percent in 2014 and is expected to continue to rise.<sup>375,376</sup>

## CLOSE TO HOME

### Two Major Characteristics of At-Risk Populations

#### 1. Renter households that pay more than 50 percent of their income toward housing.

The number of households facing this burden totaled more than 6.9 million in 2016. This is 3.1 percent lower than 2015 but still 20.8 percent greater than 2007.

#### 2. Individuals in poor households who are doubled up with family and friends.

In 2016 (the latest American Community Survey estimates), more than 4.6 million people in poor households were doubled up with family and friends, one of the most common prior living situations for people who end up experiencing homelessness. This is 5.7 percent lower than 2015, but still 30 percent greater than 2007.

## **POLICY**

### **RECOMMENDATION 5a:**

### **Housing Rehabilitation**

### **Loan and Grant Programs**

States can enact legislation and allocate budgetary resources to provide funding to repair and/or improve homes, or to remove health or safety hazards from homes. Housing rehabilitation loan and grant programs mainly serve low- and median-income families, and sometimes give priority to households with young children or older adults.

Housing rehabilitation programs may focus on individual aspects of the home, such as heating, plumbing, lead, or mold. Alternatively, they can take a comprehensive housing improvement approach. Evidence shows that housing improvements result in positive health outcomes. In addition, housing rehabilitation efforts in declining neighborhoods may have positive effects on neighborhood quality and stability.<sup>377</sup>

#### **Health Evidence**

There is strong evidence that housing rehabilitation loan and grant programs, especially those focused on taking energy-efficient measures, yield health benefits.<sup>378,379</sup> Housing improvements that increase warmth in particular, like new or better insulation, show positive effects on overall physical and mental health, respiratory outcomes, and other measures of well-being.<sup>380</sup> These improvements also reduce hospitalizations, doctor's visits, and absences from school and work. Housing rehabilitation and loan grant programs designated for low-income families and individuals can decrease disparities in access to quality housing and associated health outcomes.<sup>381</sup>

#### **Economic Evidence**

Research shows that the benefits derived from improvements to health and energy efficiency are one and a half to two

times more than the costs of installing the insulation.<sup>382</sup> A separate study found that fitting insulation significantly reduced days off school or work, visits to physicians, and hospital admissions for respiratory conditions; and heating costs.<sup>383</sup> Home loan and grant policies have the potential to not only be cost effective and reduce state government outlays for healthcare costs but also to provide low-income individuals with more income for other necessities, as a result of lowered energy bills.

#### **Policy Landscape**

States authorize, allocate funds for, and administer housing rehabilitation loan and grant programs in coordination with municipalities and local housing and community-development offices. These programs also exist at the federal level through the U.S. Department of Housing and Urban Development (HUD) 203(k) program, the USDA Section 504 Home Repair Program, and the USDA Housing Preservation Grants Program.<sup>384</sup> Original research indicates that thirty-nine states and the District of Columbia have laws related to housing rehabilitation loans and grants. At least six of these states have laws that provide some details regarding one or more of the following: eligibility; interest rates; and terms of the loans and/or grants. However, most of the laws appear to simply allow or require state agencies or municipalities to use funds for housing rehabilitation, without providing much detail about program regulation. Further, nine states have laws that allow a state agency or local municipality to use funds for housing rehabilitation (among other purposes), but do not specifically mention a program or fund to be used for rehabilitation.

## CASE EXAMPLE

### Maryland's Housing Rehabilitation Program<sup>385</sup>

The Maryland Housing Rehabilitation Program's purpose is to preserve and improve single-family properties and one- to four-unit rental properties. It is a program designed to bring properties up to applicable building codes and standards.

**Eligible Types of Housing.** Program funds may be used to assist in the rehabilitation of owner-occupied single-family homes and rental housing with one to four units.

**Eligible Applicants.** Household income of owner-occupants of single-family homes and all residents of financed rental housing cannot exceed 80 percent of the statewide or district Metropolitan Statistical Area median income. Interest rates range from 0 percent to 6 percent and are based on the applicant's ability to pay. Deferred loans are available to some borrowers who require health, safety, or accessibility improvements. For rental units, income determines requirements for loan deferment or repayment.

## Considerations for Effective Design and Implementation

- Focus programs on specific population groups, such as older adults, veterans, families with children (including those with asthma), or low-income individuals.
- Specific health and safety hazards, such as poor ventilation or a lack of proper insulation, should be addressed by the program.
- Partner with nonprofits to develop community-development initiatives at the local, county, and state levels.
- Generate funding for these and similar programs through the creation of, or additional investment in, a state housing trust fund.

## Complementary Policies

**Lead-Paint Abatement:** Lead-paint abatement programs eliminate lead-based paint and contaminated dust. States can enact legislation to create and bolster lead-paint abatement programs that can improve health outcomes. Examples of state laws include: requiring screening and reporting of elevated blood lead levels; authorizing fees, loans, or grants to cover abatement costs; and requiring the disclosure of lead-based paint hazards in certain homes.

**Integrated Pest Management:** Integrated pest management (IMP) programs use a range of methods to minimize potential hazards to people, property, and the environment. State policies that support IMP can reduce exposure to certain allergens and reduce asthma exacerbations, especially among children. IMP involves the following four steps: (1) setting action thresholds, (2) monitoring and identifying pests, (3) prevention, and (4) pest control. Generally, IMP starts with methods that involve fewer health risks, such as trapping, then moves to the use of pesticides if other approaches are unsuccessful.

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**POLICY**  
**RECOMMENDATION 5b:**  
**Rapid Re-Housing**  
**Programs/Housing First**

Rapid re-housing programs provide temporary support services that help people experiencing homelessness move quickly into permanent housing. The core components of such programs usually include housing identification, rent and moving assistance, and case-management services.<sup>386</sup> The Housing First approach is a method that quickly and successfully connects people experiencing chronic homelessness with permanent housing—without preconditions such as sobriety, treatment, or service participation—along with ongoing supports and treatment.<sup>387,388</sup>

Housing First programs recognize that individuals experiencing homelessness can more easily find and maintain employment and achieve health goals when they have a permanent place to live. Removing barriers to housing allows people to address their health and lifestyle issues in a more effective manner. To that end, participants have access to a range of community-based services, including medical and mental healthcare, substance use treatment, case management, vocational training, and life-skills training. However, participants are not required to avail themselves of these services, and their participation does not impact their ability to enter or stay in the program.

The U.S. Department of Veterans Affairs adopted the Housing First approach as a national policy for its homelessness programs.<sup>389</sup> In addition, in 2016, HUD issued a notice encouraging all recipients of its Continuum of Care Program, which provides funding for permanent supportive housing, to follow a Housing First approach when possible.<sup>390</sup>

### **Health Evidence**

There is strong evidence that Housing First policies reduce homelessness and hospital use for populations with behavioral health issues, including persistent mental illness, substance misuse, and addiction.<sup>391,392,393,394,395</sup>

Housing First policies reduce disparities, improve housing stability, advance mental health and well-being, and facilitate access to treatment for substance misuse and addiction.<sup>396</sup> When paired with strong case management, Housing First policies can improve participants' ability to function within their communities.<sup>397</sup>

Rapid re-housing programs decrease rates of homelessness, decrease the length of time families and individuals remain homeless, and increase access to social services.<sup>398</sup> Participation in a rapid re-housing program may also lead to increased food security, improved physical and mental health, and increased income.<sup>399</sup> Evaluations of rapid re-housing programs targeted to military veterans and their families show that more than 80 percent of participants have permanent housing without assistance after exiting the program.<sup>400</sup>

### **Economic Evidence**

Housing First policies decrease costs to shelters and reduce emergency room use and costs.<sup>401,402</sup> A pilot evaluation showed that the rapid re-housing component of Housing First policies can reduce costs associated with acute care services for individuals with persistent mental illness and substance misuse problems, including reduced hospital admissions and jail bookings.<sup>403</sup> The same study estimated that the difference in costs for participants and comparison group members was \$36,579, which far outweighs the program costs of \$18,600 per person per year.<sup>404</sup>

## Policy Landscape

In addition to administering rapid re-housing programs in coordination with municipalities and nonprofit organizations, states can specifically authorize and allocate funds. States also often use state rental-assistance programs to provide rent supports to those in rapid re-housing or in permanent supportive housing.<sup>405</sup> The federal government supports these programs by providing funding, initially through HUD's Homelessness Prevention and Rapid Re-Housing Program and currently through the Emergency Solutions Grants program.<sup>406,407</sup> States, counties, and

municipalities have all implemented rapid re-housing programs.<sup>408,409,410,411,412</sup> Many of these programs are also administered by local nonprofit organizations. Original research indicates that nine states have enacted laws that specifically address rapid re-housing. This number does not include states that have directed funds to rapid re-housing initiatives via larger pieces of legislation. The laws included in this policy domain either allow, encourage, or require the use of a rapid re-housing approach to help people experiencing homelessness obtain housing.

## CASE EXAMPLE

### Connecticut's Rapid Rehousing Program<sup>409</sup>

The Connecticut Rapid Rehousing Program is a statewide initiative that helps residents with housing relocation, stabilization services and financial assistance, and help homeless individuals and families quickly transition to permanent housing. After the success of the 2010 Homelessness Prevention and Rapid Re-housing Program (HPRP), the Connecticut Department of Housing (DOH) established the Connecticut Rapid Re-Housing program to administer assistance funds to rapid re-housing providers.

An evaluation found the Connecticut Rapid Re-Housing Program to be successful in approaching or meeting the benchmarks set by the National Alliance to End Homelessness for quickly moving homeless clients into housing and permanent housing. Clients assisted through Rapid Re-Housing were also significantly less likely to return to a shelter.

#### Key outcomes:

- Clients in both the survey sample and the total Connecticut Rapid Re-Housing population were on average placed in housing in less than two months and close to half (50% and 56%) of each group was placed in housing within one month.
- At the time of program exit, eighty-four percent (84%) of the Connecticut Rapid Re-Housing population clients exited to permanent housing with only five percent (5%) returning to literal homelessness.
- For the Connecticut Rapid Re-Housing population, it was found that at twelve months post-program exit, ninety-two percent (92%) had not returned to a shelter and at twenty-four months out, eighty-nine percent (89%) had still not returned to a shelter.

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## Considerations for Effective Design and Implementation<sup>413,414,415</sup>

- Leverage Medicaid dollars to enhance tenant screenings and housing assessments, to assist with housing applications, to provide education and training on tenants' and landlords' roles, and to develop agreements with local housing and community-development agencies to support access to housing resources.
- Applicants should be allowed to enter the program without income.
- Programs should accept participants regardless of their sobriety.
- Previous involvement with the criminal justice system should not impede participation.
- Treatment plans and related services should be voluntary.
- Case management should be provided to help individuals secure and maintain housing.
- Programs should recruit landlords continuously, regardless of their current housing needs, to ensure future availability.
- Rent and move-in assistance should be provided to help individuals secure a place to live.

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## Complementary Policies: Promoting State and Local Efforts to Improve and Maintain Affordable Housing

Because many cities and states across the country are dealing with a lack of affordable housing, it's important for policymakers to consider state-level recommendations.

States should support, and not preempt, efforts by cities and municipalities to address affordable housing issues. Local governments are often in the best position to enact policy solutions that meet the needs of their populations. While states can develop complementary or separate policy proposals to address affordable housing statewide, state policymakers should not preempt cities and municipalities from developing innovation solutions. Specifically, states should:

- **Refrain from preempting local governments.** States should not preempt local planning ordinances

that require developers to set aside a portion of housing units for low- and moderate-income residents. Known as "inclusionary zoning," these policies increase access to quality, promote affordable housing, and boost neighborhood socioeconomic diversity.<sup>416</sup> Currently, seven states preempt localities from implementing inclusionary zoning policies. States can support local governments by explicitly not preempting any policies aimed at increasing affordable housing stock.<sup>417</sup>

- **Support city and municipality rent-control policies.** States should preserve affordable housing units through rent controls. Currently, 25 states prohibit local governments from enacting laws that limit or control rental prices.<sup>418</sup>

- **Provide legal assistance to tenants facing eviction.** Unlike criminal courts, there are no requirements for cities or states to provide legal counsel to individuals in civil proceedings. With the share of rented households at its highest percentage (36.6 percent) since the 1960s and an increasing percentage of households spending a majority of their income on housing and transportation costs, states should provide funding, or allow for cities to provide funding, to support legal-assistance funds for tenants facing eviction proceedings.<sup>419</sup> These policies can promote economic stability for individuals and also help alleviate homelessness.
- **Promote right-of-first-refusal laws.** States should allow tenants or nonprofits to have a right of first refusal to purchase properties subject to foreclosure or short sale at fair-market value. Right-of-first-refusal policies help alleviate the lack of affordable housing units by supporting the purchase of residential properties by non-commercial stakeholders. These laws can also be incorporated into the criteria related to low-income housing tax credits (LIHTC) as a way to incentivize affordable housing development.
- **Incorporate health and social criteria into LIHTC.** Although LIHTC guidelines are established by the Internal Revenue Service (IRS), the credits are administered by each state's housing finance agency, which provides states with the flexibility to include requirements for developers to address specific housing needs. Known as a "qualified allocation plan," states can address the social determinants of health by requiring development near transportation or high-performing schools.<sup>420</sup> State housing finance agencies administering the LIHTC can create incentives for developers to build units targeted to the highest-need populations and can work with developers to avoid concentrating units in high-poverty neighborhoods.
- **Support state and local housing trust funds.** States should identify revenue sources to support a state housing trust fund and should also encourage or enable local governments to dedicate public funds to local housing trust funds. These trust funds support affordable, quality housing production by creating or maintaining low-income housing, subsidizing rental housing, and supporting nonprofit housing developers. Evidence to date shows that housing trust funds increase affordable housing in both rural and urban areas.<sup>421</sup>
- **Adopt tax incentives and laws prohibiting discrimination against housing voucher holders.** States should implement strategies to improve the availability and location of housing stock for use in voucher programs. Expanding participation of landlords in high-opportunity areas via tax incentives can improve educational outcomes and future earnings for children whose families participate in housing voucher programs.<sup>422</sup>

# Create Opportunities for Economic Well-being

The factors that influence health are multifaceted. However, the relationship between health and income is well documented. Income and socioeconomic status often lead to differences in access to resources and opportunities for individuals and families. Generally, people with higher incomes have better health outcomes than those with lower incomes. Americans in the top 1 percent of households by income live 10 to 15 years longer than those in the bottom 1 percent.<sup>423</sup> These differences are concerning—there are about 39.7 million people living in poverty in the United States—and they have important implications for public health and healthcare expenditures.<sup>424</sup>

The health impact of living in poverty can span multiple generations. Low-income households can have pronounced effects on infant and child development that can last into adulthood. For instance, children who live in poverty or in low-income families are more likely to face difficulty securing stable employment and more likely to have poor overall health as adults.<sup>425</sup> The strain associated with living in poverty can increase the risk for toxic stress, which can disrupt healthy physical, psychological, and behavioral development.<sup>426</sup>

Economic security and health are uniquely related in that they can each impact the other. An individual's economic well-being can be a driver of health, while an individual's health can also impact their economic well-being. For example, an individual's economic situation can impact

what foods and housing options they can afford, which ultimately affect their health. Low-income neighborhoods, for example, are less likely to have places where children can be physically active and less likely to have access to fully stocked supermarkets with healthy, affordable foods—contributing to higher rates of obesity and poor nutrition.<sup>427,428,429</sup> Similarly, a person's health may impact their ability to work or to access a job that provides economic security. Creating opportunities for Americans to move out of poverty and achieve economic security reduces barriers for people to lead productive, healthy lives. Furthermore, increasing economic opportunities by supplementing low wages and expanding programs that bolster family income can help parents provide for their families and lift them out of poverty.



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## POLICY

### RECOMMENDATION 6a: Earned Income Tax Credit

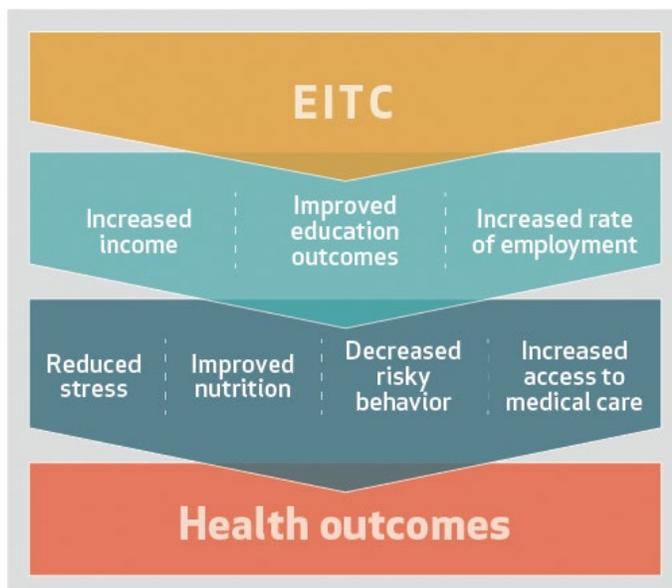
States can offer an earned income tax credit (EITC) to support the financial stability of low-income workers, particularly families with children.<sup>430</sup> The EITC assists families and in some states, adults without dependent children, by reducing qualifying taxpayers' tax liability based on income level, marital status, and the number of dependent children.<sup>431</sup> A state EITC can supplement the federal EITC, a federal tax credit for low- and moderate-income workers and their families. A state EITC applies the same principles as the federal program but provides a state-level tax credit. EITC tax credits can be refundable, meaning individuals can receive the full value of their credits, regardless of the taxes they owe.<sup>432</sup> Without the refundable feature, state EITCs may fail to offset the other substantial state and local taxes low-income workers pay. Workers generally receive a credit equal to a percentage of their earnings up to a maximum, dependent on family size—with larger credits for families with more children.<sup>433</sup>

## Health Evidence

To date, research on the benefits of an EITC has focused mainly on the effects on children and families. The benefits are more pronounced for mothers and especially their young children, as these benefits follow children into adulthood. Among children in families who receive EITC, there is evidence of better home environments, more educational attainment, and higher lifetime earnings in adulthood. Expanding the EITC is associated with decreased low-birthweight births, increased breastfeeding rates, and improved maternal and child health.<sup>434,435,436,437</sup> Each time the EITC increased by 10 percent, infant mortality dropped by 23.2 per 100,000.<sup>438</sup> Infants whose mothers were eligible for the largest federal tax credit increases, or who lived in a state with a state EITC, tended to experience the greatest improvements in birthweight, a strong predictor of children's long-term health outcomes, educational attainment, and economic success.<sup>439,440,441</sup> Additionally, mothers living in a state that recently enacted or increased a state EITC reported having less mental stress and lower smoking rates during pregnancy, both of which also contribute to improvements in birthweight.<sup>442,443,444,445</sup> Federal and state EITCs are also linked to declines in child maltreatment among single mothers, including fewer cases of physical neglect and failure to provide a child's basic material needs.<sup>446</sup>

- A child in a family eligible for the largest EITC expansion in the early 1990s had a 7.2 percentage-point increase in high school completion.
- Eligible children also had a 4.8 percentage-point higher chance of completing one or more years of

### The Impact of EITC



Source: Health Affairs<sup>449</sup>

college by age 19, an improvement comparable to other educational interventions such as reductions in classroom size.<sup>447</sup>

- EITC reduces disparities, and the benefits of larger EITC benefits extend to children of all racial and ethnic groups, especially children of color, boys, and younger children.<sup>448</sup>

## Economic Evidence

By supplementing the earnings of low-wage workers, the EITC helps lift millions of families out of poverty each year. In 2017, 27 million working families and individuals across the country received the EITC.<sup>451</sup> The IRS estimates that the EITC helped lift 9.4 million of them out of poverty, including more than five million children.<sup>452</sup> Additionally, the credit reduced the severity of poverty for an additional 18.7 million families, including 6.9 million children.<sup>453</sup> Implementing an EITC increases employment and income for participating families.<sup>454,455,456,457,458</sup> The EITC also encourages single mothers to enter the labor force (some older studies show a smaller effect on married women staying home to care for their children).<sup>459</sup> And the EITC contributes to the financial stability of less-educated women by increasing their likelihood of qualifying for retirement benefits. The Congressional Budget Office estimated that the EITC increased the lifetime average earnings for less-educated women by 17 percent, which in turn increased their likelihood of qualifying for Social Security retirement benefits.<sup>460</sup>

In addition to higher academic achievement, the children of EITC-eligible families are also likely to have higher lifetime earnings. For these children, it is projected that for every

## Refundable Tax Credits Boost Children's School Achievement and Healthy Development

The Earned Income Tax Credit (EITC) and Child Tax Credit (CTC) not only reward work and reduce poverty for low- and moderate-income working families with children, but a growing body of research shows that they help families at multiple stages of life:



**Better school performance:** Elementary and middle-school students whose families receive larger refundable credits (such as the EITC and CTC) tend to have higher test scores in the year of receipt.



**Greater college enrollment:** Young children in low-income families that benefit from expanded state or federal EITCs are more likely to go to college, research finds. Researchers attribute this to lasting academic gains from higher EITCs in middle school and earlier. Increased tax refunds also boost college attendance by making college more affordable for families with high-school seniors, research finds.



**Improved infant and maternal health:** Researchers have found links between increased EITCs and improvements in infant health indicators such as birth weight and premature birth. Research also suggests receiving an expanded EITC may improve maternal health.

Source: Center on Budget and Policy Priorities <sup>450</sup>

dollar of income received through the tax credit, the real value of the child's future earnings increases by more than one dollar.<sup>461</sup> The study suggests the cost of expanding the tax credit may be offset by children's future earnings. Additionally, the children of EITC-eligible families are more likely to attend college—not only because they have increased academic readiness, but also by making college more affordable. High school seniors whose families received an EITC were more likely to enroll in college, further impacting future employment and earnings.<sup>462</sup>

The EITC is also associated with generating economic activity at the local and state level.<sup>463,464</sup> An evaluation of the economic impact of the federal EITC in California found that EITC payments to state residents contributed to more than \$5 billion in business sales and added approximately 30,000 jobs.<sup>465</sup> Recipients tend to use their

EITC refunds to meet basic needs, repay debts, repair vehicles, or obtain additional education or training.<sup>466,467</sup>

There is some evidence that a supplementary state EITC is cost-effective and less expensive compared with other tax credits.<sup>468</sup> State EITCs have almost no cost when it comes to determining eligibility, because in many cases the same tax filers who qualify for the federal EITC also qualify for the state credit. Currently, refundable EITCs in states with income taxes cost less than 1 percent of state tax revenue annually. Since the state EITC is directed toward low- and moderate-income working families, the cost is lower compared with other tax credits states might consider. While a state may have a sizable number of low-income households, they make up a smaller share of tax revenue. However, a refund of a few hundred dollars for each family can have a major impact without being a huge cost for the state.<sup>469</sup>

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## Policy Landscape

As of April 2018, 29 states and the District of Columbia, have an EITC law.<sup>470</sup> The federal EITC has been in place since 1975, and Rhode Island enacted the first statewide EITC in 1986.<sup>471</sup>

There are a number of ways in which state EITC policies vary across states. All states except for Minnesota set their credits based on the federal credit; however, the percentages used vary greatly from state to state.<sup>472</sup> There is also variation as to whether the EITC operates as a refund or as a reduction. In 23 states and the District of Columbia, credits are

fully refundable if the amount is greater than the taxes owed.<sup>473</sup> In six states, the EITC can only reduce a person's tax liability, not provide a refund.<sup>474</sup>

Three states (California, Maryland and Minnesota) and the District of Columbia offer state EITC to workers without dependent children. New York and the District of Columbia also offer their state EITC to non-custodial parents. Similarly, the variables can differ based on family size, particularly the number of children, and the marriage status of the taxpayer, adding greater variation to the policies.

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### CASE EXAMPLE

#### Vermont's Earned Income Tax Credit

The state of Vermont offers a fully refundable state EITC that is 36 percent of the federal credit.<sup>475</sup> All Vermont taxpayers who qualify for the federal EITC are eligible to receive the state credit. Vermont first enacted a state EITC in 1988. In June 2018, Vermont enacted a state budget for Fiscal Year (FY) 2019 that increased the state's EITC from 32 percent to 36 percent of the federal credit for

eligible taxpayers. The increase was largely aimed at reducing the financial burden for low-wage working families.<sup>476</sup> In FY 2015, prior to the state credit increase, more than 44,000 Vermont taxpayers received \$27.1 million in state EITC payments in addition to their federal EITCs.<sup>477</sup> In 2014, the average recipient received \$600 from the state of Vermont and \$1,900 from the IRS, raising their family income by \$2,500.<sup>478</sup>

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## Considerations for Effective Design and Implementation<sup>479</sup>

- Make the state EITC refundable like the federal EITC. This allows working households to keep the full value of their credit that even if it exceeds their income tax liability. This means the credit can help offset taxes they owe and the rest is refunded to them.
- Increase the value of the state EITC. As of 2017, 13 states have a credit that is 10 percent or less of the federal EITC.<sup>480</sup>
- Conduct outreach to increase awareness of the state EITC credit.
- Expand EITC eligibility for childless workers. States should consider expanding the EITC for low-income workers without children as it will help lift more workers out of poverty, increase employment rates, and narrow the income gap for low-income workers.

## Complementary Policies

**Child Tax Credit:** The Child Tax Credit (CTC) in combination with a state EITC has the potential to lift even more families with children out of poverty. The federal CTC offsets the cost of raising children by offering up to \$2,000 in tax credits from the total amount of federal income taxes they would owe for each eligible child.<sup>481</sup> The CTC also operates as a refund, up to \$1,400, so many working families benefit from the credit even if their incomes are so low that they owe little or no federal income tax in a given year.<sup>482</sup> A number of states have followed suit and enacted CTC programs of their own.<sup>483</sup> Increasing the amount of tax credits for poor families is linked to improved test scores among those families' children. Improved test scores, of course, are associated with other positive outcomes, such as higher earnings, an increased probability of attending college, reduced teenage birth rates, and improvements to the quality of the neighborhoods where these students live in adulthood.<sup>484</sup> The federal child tax credit lifted approximately 2.7 million people, including 1.5 million children, out of poverty in 2016. It also reduced poverty for another 12.3 million individuals.<sup>485</sup>

**Full Child-Support Pass-Through and Disregard:** Under federal law, families receiving Temporary Assistance for Needy Families (TANF) must cooperate with child-support regulations and enforcement efforts.<sup>486</sup> Families receiving TANF funds must assign their rights to child-support payments to the state. The child support collected on behalf of TANF



can be used by the state to reimburse itself and used by the federal government to help pay for the TANF program. However, states are given the option of allowing some of the child-support payments to be passed through to the parent and child and afterward be disregarded when calculating the parent's TANF assistance. This means that the amount of child-support assistance would not be considered income in order to determine TANF eligibility under these "pass-through" and "disregard" policies.<sup>487</sup> What's disregarded is the amount of child support that the family can keep without lowering their TANF benefits.<sup>488</sup> In many states, the amount is \$50 per month, but other states have made their amounts higher. Pass-through and disregard policies can also aid in lifting children out of poverty. In 2013, child-support payments represented 40 percent of income for the poor custodial families who receive them, and these payments kept 740,000 children out of poverty.<sup>489,490</sup>

## **POLICY**

### **RECOMMENDATION 6b:**

#### **Earned Sick Leave**

State policies that support earned sick leave allow employees to take time off from work to recover when they are ill or need to visit a healthcare provider, without fear of lost wages. According to the U.S. Bureau of Labor Statistics, about 38 percent of workers do not have access to earned sick leave.<sup>491</sup> This means that workers without earned sick leave may go into work while they are ill and risk exposing their workplace to infectious diseases for fear of losing wages or their jobs.

Despite their participation in the workforce, some populations are less likely to have access to earned sick leave than others. Offering earned sick leave can help decrease health disparities by expanding benefits to vulnerable and low-income populations. People who lack access to earned sick leave tend to be low-wage workers, working women, some racial and ethnic minorities, and employees with lower educational attainment.<sup>492</sup> Research shows that even when family and medical leave is available, low-wage workers are less likely to take leave if it is unpaid.<sup>493</sup> An estimated 54 percent of Latino workers are unable to earn paid sick leave through their jobs.<sup>494</sup> About 38 percent of Black workers,

an estimated seven million people, including 41 percent of Black men and 36 percent of Black women do not have access to earned sick leave.<sup>495</sup> Earned sick leave mandates at the city level increased access to paid sick leave among economically marginalized workers. Following implementation of San Francisco's paid sick leave ordinance, Latino workers and low-wage workers were among those who benefited most from the law, and the majority of workers who used paid sick days did so for their own health needs, such as visiting a doctor or dentist.<sup>496</sup>

States can protect workers and save costs for employers by enacting earned sick leave policies. Offering earned sick leave can help prevent the spread of diseases, increase job stability, and increase use of preventive health services. While employers may express concerns over costs, it can be costlier for employers to have sick employees at work than to offer paid sick leave. Aside from protecting workers, employers benefit from earned sick leave policies by increasing worker productivity and reducing turnover. Overall, earned sick leave laws help employers ensure they have a healthy, productive workforce, resulting in cost savings.



## Health Evidence

States that pass earned sick leave laws expand access to sick leave for workers who otherwise might not be offered paid sick leave, such as low-wage and part-time workers, decreasing disparities.<sup>497</sup> Workers without earned sick leave are less likely to use preventive healthcare services, like a cancer screening or flu shot.<sup>498</sup> When employees who previously did not have access are granted paid or unpaid sick leave, rates of flu infections decrease by 10 percent.<sup>499</sup> Employees without earned sick leave were three times more likely to forgo their own medical care and 1.6 times more likely to forgo medical care for their family compared with workers with paid sick leave.<sup>500</sup> When workers go to work instead of accessing medical care when they are sick, minor illnesses can worsen and become more costly.

Lack of access to earned sick leave can increase employees' risk of illness and the spread of infectious diseases.<sup>501</sup> This can be especially concerning for employees who work in close quarters with one another or with the public, such as restaurant workers. An estimated 87.7 percent of restaurant workers reported not having earned sick days, and more than 63 percent of all restaurant workers reported cooking and serving food while sick.<sup>502</sup> This puts the workers, businesses, and customers at risk of becoming ill. By offering earned sick leave, employees can recover from an illness or seek medical care instead of delaying care or exposing other employees to infectious diseases.

## Economic Evidence

There are minimal costs to employers who offer earned sick leave to workers. It actually costs employers more to have sick employees at work instead of letting them recover at home.<sup>503</sup> Having sick employees in the workplace can spread disease, lower productivity, and increase emergency room visits.<sup>504</sup> Offering earned sick leave to employees can help employers save money by reducing turnover. Granting employees earned sick leave and retaining workers is less costly than hiring and training their replacements. Employers can spend an estimated 20 percent of an employee's annual salary to replace them; this includes advertising the position, interviewing, and training new workers.<sup>505</sup> A cost-benefit analysis of an earned sick leave ordinance in Austin, Texas, found city businesses would save \$4.5 million per year from reduced turnover, and an additional \$3.7 million from reduced flu infections, fewer emergency room visits, and other public health benefits.<sup>506</sup>

An analysis of National Health Interview Survey data found that workers who had access to earned sick leave made fewer emergency room visits. An estimated 1.3 million hospital visits could be prevented each year if workers across the country had access to earned sick leave, saving

the United States \$1.1 billion annually in medical costs, including \$500 million in public insurance programs.<sup>507</sup> When workers show up to work sick, they are less productive and can spread disease. It is estimated that presenteeism, which is defined as productivity loss resulting from health issues, costs the national economy more than \$160 billion annually, or about \$218 billion when adjusted for inflation.<sup>508</sup>

## Policy Landscape

Currently, 10 states and the District of Columbia have an earned sick leave law. Michigan also has a paid sick leave law that will go into effect in April 2019.<sup>509</sup> There is a high degree of variation among the states in their earned sick leave laws. Policies differ in the maximum length of paid sick leave, generally ranging between 40 and 50 hours per year, and in the eligibility requirements for the program.<sup>510</sup> There is also variation in how fast workers can earn paid sick days; who is covered by the policy among full-time, part-time, public, private, and temporary employees; and what types of companies, organizations, and employees are exempt from the law.<sup>511</sup>

Currently, 23 states have laws in place that explicitly prohibit local governments from requiring earned sick days to workers.<sup>512</sup>

Variation in State Earned Sick Leave Laws	
<b>Exemptions for Job Types and Sectors</b>	<ul style="list-style-type: none"><li>• Some states have exemptions for providing earned sick leave for certain job sectors.</li><li>• Some state earned sick leave laws do not apply to certain types of employees, such as independent contractors or temporary workers.</li></ul>
<b>Accrual Rates vs. Maximum Accrual</b>	<ul style="list-style-type: none"><li>• Accrual of earned sick leave can differ by business size or job sector.</li><li>• State paid sick leave laws vary in the maximum number of hours of sick leave an employee can accrue.</li></ul>
<b>Family Members Covered</b>	<ul style="list-style-type: none"><li>• Some states allow employees to take earned sick leave to care for a sick child or loved one.</li><li>• States vary in which family members are covered under their earned sick leave laws.</li></ul>

## CASE EXAMPLE

### Arizona's Earned Sick Leave Law<sup>513, 514</sup>

In November 2016, voters in Arizona approved the Fair Wages and Healthy Families Act, a ballot initiative that requires all Arizona employers to provide earned sick leave, effective July 2017. The law guarantees 40 hours of annual earned sick leave to employees of companies with 15 or more workers, and 24 hours of leave to employees of companies with fewer than 15 workers. Employers are required to provide one hour of sick leave to each employee for every 30 hours worked, regardless

of the employee's status as a full-time, part-time, or seasonal worker.

Employees can use earned sick leave for:

- An employee's or family member's health condition, injury, or illness.
- Care, treatment or diagnosis for the employee or a family member
- Addressing domestic or sexual violence, abuse or stalking.
- A closure of a child's school or place of care or other public health emergency.

## Considerations for Effective Design and Implementation<sup>515,516,517</sup>

- Consult with stakeholders to write an effective interpretation of the law to increase employees' and employers' understanding of the law's key components.
- Dedicate funding to support employer and employee outreach through multiple channels, including business associations and chambers of commerce, to raise awareness of the relevant fair-practice hiring laws and how the earned sick leave law applies to them.
- Ensure effective enforcement mechanisms and provide a range of relief options, including civil penalties, fines, back pay, and reinstatement.
- Allow any individual or organization to submit a complaint to the appropriate enforcement agency.
- Support legislative and administration coordination to ensure that the law can be implemented effectively once it goes into effect.
- Provide flexibility to employers to use existing policies as long as they meet the minimum requirements as required by law.
- Consider allowing employees working for exempt businesses (for example, those below the minimum number-of-workers threshold) to earn job-protected, unpaid sick time, unless their employers choose to offer paid sick days.
- Permit employers to require certification if an employee uses more than three paid sick days in a row to minimize employer impact while enabling employees to use consecutive days of earned sick leave.

## **POLICY**

### **RECOMMENDATION 6c:**

#### **Paid Family Leave**

State policies that support paid family leave allow employees to take paid time off for events like a recent birth or adoption of a child, taking care of a parent or spouse with a serious medical condition, or caring for a sick child. The United States currently does not guarantee paid leave to new parents.<sup>518</sup> However, the Family Medical Leave Act (FMLA) is a federal law that provides up to 12 weeks of unpaid leave during a one-year period to care for a newborn, adopted, or foster child.<sup>519</sup> The FMLA allows states to set their own standards as long as they are more expansive than the federal law. States may pass statutes or regulations that protect employees by extending FMLA coverage to ensure paid family leave is available to employees. A small number of states have taken this opportunity to enact their own paid family leave and paid sick leave policies; however, only 13 percent of private-industry employees have access to paid family leave through their employers.<sup>520,521</sup>

Approximately two-thirds of women are employed during their first pregnancy and those without access to paid family leave must either take unpaid leave, quit their jobs, or return to work shortly after childbirth.<sup>522</sup> Some states and employers have expanded access to paid family leave for new parents and caretakers, but only about half of working women received paid leave, including only three in 10 working women with less than a high school diploma.<sup>523</sup> Paid family leave allows new parents to bond with their child, improves maternal and child health, and reduces the risk of falling into poverty.<sup>524</sup>

#### **Health Evidence**

Paid family leave policies decrease disparities and improve maternal and child health by reducing the risk of birth-related health issues for mothers

and their babies. Paid family leave policies reduce the likelihood of having low-birthweight babies and pre-term births.<sup>525</sup> In other developed nations, where access to paid, job-protected parental leave is available, there is reduced infant and child mortality, with longer durations of leave linked to greater reductions in death among infants and young children.<sup>526,527,528</sup>

Paid maternity and parental leave can also increase breastfeeding initiation and duration, as well as increase the time parents spend with their infants following birth.<sup>529,530,531</sup> Mothers who have a longer delay returning to work after giving birth may experience fewer depressive symptoms and better mental health compared with mothers who return to work earlier.<sup>532,533</sup> Additionally, access to paid family leave can improve economic security for the family and contribute to better mental health for caregivers.<sup>534,535</sup>

#### **Economic Evidence**

Offering employees paid family leave can increase employee retention and save employers the cost of training new hires.<sup>536</sup> It costs employers approximately 20 percent of an employee's salary to hire and train their replacement.<sup>537</sup> Paid family leave policies increase the likelihood that mothers remain in the labor force after childbirth, particularly mothers without bachelor's degrees.<sup>538,539,540</sup> Access to paid family leave can offer economic security to caregivers while they take leave from work. Women who took paid family leave after giving birth were more likely to work nine to 12 months later and 40 percent less likely to receive public assistance compared with women who did not take leave.<sup>541,542</sup>

Paid family leave policies in California and New Jersey show no negative impacts on employers but do show

increased hiring and mobility among young women.<sup>543,544,545</sup> However, it should be noted that other studies highlight the potential for minor decreases in employment and hiring and increased unemployment among young women.<sup>546,547</sup>

## Policy Landscape

Six states (California, New Jersey, Rhode Island, New York, Washington, and Massachusetts) and the District of Columbia have a paid family leave law. As of August 2018, three (the

District of Columbia, Washington state, and Massachusetts) of these seven jurisdictions have paid family laws that are enacted, but some sections of the law, such as premiums and benefits, are not operative until a future date.<sup>548</sup>

There is a high degree of variation among the states in their regulation of paid family leave. Policies differ in the maximum length of paid leave, generally ranging from four weeks to 12 weeks, and in the eligibility requirements for qualifying for the

program.<sup>549</sup> The funding methods for the program also differ among states, as do details on the size of the employer covered by the policy: some states exempt small businesses, and others include a larger percentage of businesses in the state.<sup>550</sup> There is a large variation in the benefit amount employees receive for paid family leave, as well as in the maximum weekly benefit amount.<sup>551</sup> Additionally, some states protect a worker's job during their paid family leave, while other states do no more than the FMLA requires.<sup>552</sup>

## CASE EXAMPLE

### Rhode Island's Family Leave Policy

In 2014, Rhode Island became the third state to enact a statewide paid family leave policy. Under federal law, the FMLA allows employees to take 12 weeks of unpaid leave to care for a new child. Rhode Island implemented the Temporary Caregiver Insurance (TCI) program, which extends beyond FMLA coverage to offer eligible employees four weeks of paid family leave.<sup>553</sup> The TCI program is an extension of Rhode Island's Temporary Disability Insurance

(TDI) program: it is fully employee-funded and allows eligible employees to take up to four weeks of caregiver leave with a 60 percent wage-replacement rate.<sup>554</sup> All private-sector employees who pay into Rhode Island's TDI program are eligible to take leave under the TCI program, which covers about 80 percent of the state's workforce.<sup>555</sup> Rhode Island's program differs from other states in that it includes job protections for the caregiver while they are on leave.<sup>556</sup>

Approximately 34,000 claims were filed for Rhode Island's paid family leave program from 2014 to 2017, more than three-quarters of which were approved to bond with a new child.<sup>557</sup> A survey of employees who took leave through the TCI program reported more wage increases after leave and fewer absences from work compared with other leave takers; they also reported lower levels of stress, better physical health, and longer breastfeeding times.<sup>558</sup>

## Considerations for Effective Design and Implementation<sup>559,560,561</sup>

- Determine how workers will become eligible to take part in the statewide paid family leave program and consider financial eligibility requirements, wages earned, and hours worked.
- Allocate funding for and conduct outreach and awareness activities focused on low-income workers.
- Support a high-wage replacement rate, taking into consideration the employee's income compared with the state's average weekly wage and adjust rates as needed to provide greater supports to low-income workers.
- Offer 12 weeks of paid leave to care for a new child, to care for a family member with a serious health condition, or to care for their own health condition or disability.
- Broaden the definition of "family members" to include siblings, grandparents, grandchildren, or parent-in-laws to reflect shifting caregiving responsibilities.
- Include nondiscrimination provisions in paid family leave and job protection laws to ensure employees do not face retaliation or job loss while they are on leave.

## **POLICY**

### **RECOMMENDATION 6c:**

#### **Fair Hiring Protections**

States should adopt fair hiring protections, such as Ban the Box (BTB) laws, which give applicants with criminal records an opportunity to be considered for jobs based on their qualifications not their conviction history. BTB policies remove conviction-history questions on job applications and delay criminal background checks until later in the hiring process. States can adopt BTB laws to reduce biases against people involved with the criminal justice system and to help individuals reenter the workforce and contribute to the economy.

Currently, about one in three American adults have a criminal record, creating barriers to employment, housing, and public programs.<sup>562</sup> Even a minor criminal history can be an obstacle for successful reentry to the workforce and can therefore hinder economic mobility for justice-involved individuals and their families. Approximately 60 percent of individuals who were formerly incarcerated remain unemployed one year after their release.<sup>563</sup> Notably, men of color are most negatively affected. Black men are six times as likely to be incarcerated as White men, and Latino men are more than twice as likely to be incarcerated as non-Latino White men.<sup>564</sup> While federal law does not prohibit employers from asking about criminal history, employers can have a negative bias toward justice-involved individuals and be less likely to hire them.<sup>565</sup>

Implementing fair-chance hiring policies that allow people with a conviction history to reenter the workforce can help them increase their earnings, which is linked to better health, and contribute to the economy. Special attention should be given to equity to ensure such policies are implemented in a way that does not

exacerbate disparities. BTB policies do not prohibit employers from conducting background checks; instead they require employers to do so later in the hiring process. Additionally, implementing BTB policies has minimal impact on the cost of employers' hiring processes, can positively impact the economy, and can possibly reduce recidivism.

BTB policies can increase employer callback rates, but they do not fully address racial bias in hiring.<sup>566</sup> Research shows that applicants with a felony record are about half as likely to be called back for an interview compared with other applicants without a felony record.<sup>567,568</sup> When separated by race, a study found stark differences between the callback rates between White and Black men, with and without a criminal record. White men with a felony record were about half as likely as Whites without a record to receive an interview callback after applying for work, while Blacks with a felony record were about one-third as likely to receive a callback compared with Blacks without a record.<sup>569</sup> Additionally, the study noted that Blacks without a criminal record were still less likely to receive a callback compared with White applicants with a criminal record. Recent studies note that BTB policies might have unintended negative consequences for people of color by reducing callback rates for Black applicants and employment rates for young men of color.<sup>570,571</sup> While more research is needed to confirm the effects of BTB policies on marginalized populations, implementing BTB policies with other considerations, such as greater enforcement of equal-employment protections and employer-liability protections, can help improve the effectiveness of these policies while eliminating the unintended consequences.

## Health Evidence

Implementing BTB policies can lead to increased employment opportunities for justice-involved individuals.<sup>572</sup>

Following the implementation of BTB laws in the District of Columbia; Minneapolis, Minnesota; Atlanta, Georgia; and Durham County, North Carolina, there were increases in employment among formerly incarcerated individuals.<sup>573</sup> Accessing employment opportunities is a critical step in achieving economic well-being, which is a driver of health. Securing a good-paying job can help individuals access more nutritious foods, better housing, and healthcare, all of which impact a person's health. However, an evaluation of the Massachusetts law Criminal Offender Record Information Reform, which included a BTB provision, appears to have led to a reduction in employment for individuals with criminal records.<sup>574</sup>

Other research from New York and New Jersey found that while BTB policies may increase employer callbacks to applicants with criminal records, it may also have resulted in a significant decrease in callbacks to Black men without criminal records, thus potentially offsetting any gains to Black men with criminal records.<sup>575</sup>

There is also evidence suggesting that BTB policies can curb recidivism. A study found that criminal defendants prosecuted in Honolulu for a felony crime were 57 percent less likely to have a subsequent criminal conviction after implementation of Hawaii's BTB law.<sup>576</sup>

## Economic Evidence

Opponents of BTB policies argue that delaying criminal-history inquiries increases hiring costs because



applicants may still be rejected later in the hiring process, which could have been avoided if they had asked about criminal history earlier.<sup>577</sup> However, after the District of Columbia implemented BTB policies, most employers reported it had minimal impact on their hiring processes.<sup>578</sup>

BTB policies can benefit the economy as justice-involved individuals are more likely to reenter the labor market. This not only positively impacts their individual lifetime earnings, but their employment also increases state income tax contributions. A study found that adding 100 justice-involved individuals back into the workforce would increase their lifetime earnings by \$55 million, increase their income tax contributions by \$1.9 million, and increase sales tax revenues by \$770,000, while saving taxpayers more than \$2 million annually by keeping them out of the criminal justice system.<sup>579</sup>

## Policy Landscape

According to the National Employment Law Project report, 33 states and the District of Columbia, have BTB and fair-

chance laws or policies, with 11 of these states' laws applying to private-sector employers. Also, more than 150 cities and counties have adopted a BTB policy<sup>580</sup>—but five states preempt local governments from enacting BTB policies.<sup>581</sup>

BTB laws can vary according to (1) whether the law applies to public- or private-sector employers; (2) how long an employer must wait before asking about conviction history; (3) what positions the BTB law applies to; (4) what must be considered along with the conviction history (for example, mitigating factors); and (5) whether notice of the reason for rescinding a job offer is required.<sup>582</sup> For example, California law applies to all employers—public and private—who have more than five employees.<sup>583</sup> Further, California law prohibits employers from inquiring into conviction history until after a conditional offer of employment is made.<sup>584</sup> By contrast, Colorado law only applies to public-sector employers, and background checks may be performed once the agency determines that the applicant is a finalist for the position.<sup>585</sup>

## CASE EXAMPLE

### Nebraska's Ban the Box Law

In 2014, Nebraska enacted legislation that prohibited public employers from inquiring into a job applicant's criminal history until after they determined the applicant met the minimum job requirements. The legislation applies to the state of Nebraska, including all

counties and cities. Law enforcement positions and other roles that require a background check are exempted, as are school districts. The language was added to comprehensive prison-reform legislation aimed at reducing the inmate population.

## Considerations for Effective Design and Implementation<sup>586,587,588</sup>

- Do not preempt local governments from enacting and implementing their own BTB and other fair hiring protections.
- Enforce and improve civil rights and equal employment protections.
- Reduce liability from negligent hiring by providing protections to employers with concerns regarding liability.
- Provide training for employers, and provide outreach to people with criminal records.
- Improve the accuracy and reliability of background checks.
- Reduce occupational licensing barriers.
- Increase employment services for people with criminal records.
- Eliminate racially identifying information in applications.
- Provide expungement or sealing options for people convicted of their first offenses not related to serious crimes (examples of serious crimes include, sex crimes or other serious violence).

## Complementary Policies

**Transitional Jobs:** Transitional job programs provide short-term, wage-paying jobs, support services, and job-placement help to individuals who have difficulty getting and holding jobs in the regular labor market in rural and urban areas.<sup>589</sup> Transitional job programs can help people with limited or no job history and can help participants overcome barriers to employment and increase their job opportunities. Individuals enrolled in transitional job programs could be

welfare recipients who are unable to find work on their own, justice-involved individuals, noncustodial parents, or the recently unemployed, depending on the state's policy.<sup>590</sup> There is strong evidence that transitional and subsidized jobs programs increase employment and earnings for impacted populations, such as low-income adults, unemployed individuals, and formerly incarcerated individuals for the duration of their subsidized position.<sup>591,592,593</sup>

## Related Policies and Issues

As highlighted in the previous sections, health is determined by a multitude of factors, including where individual live, work, learn and play. While the PHACCS initiative focuses on highlighting nonclinical policies that can improve population health, we recognize that there are other contributing factors to an individual's well-being. This section highlights a few cross-cutting policies and areas that are critically important for states to consider as they develop strategies to support individual and community well-being throughout the country.

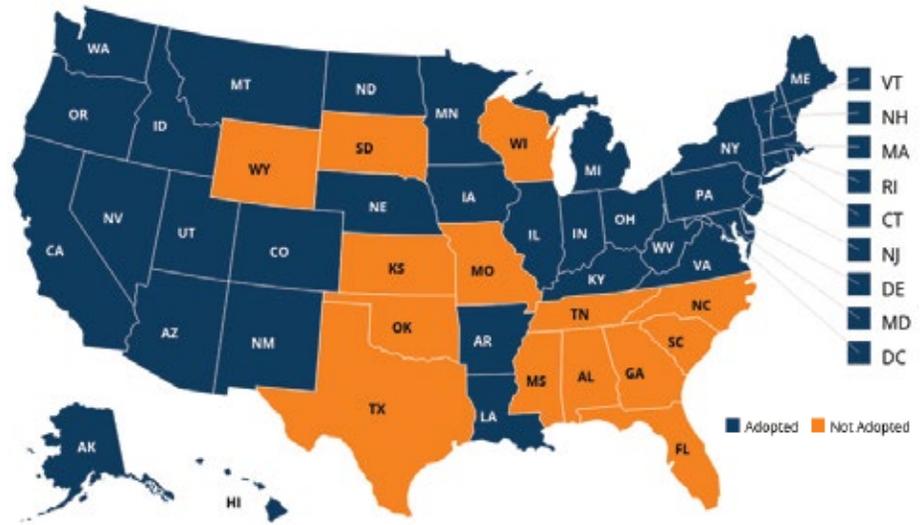
### Promoting Equitable Access to Health Services Through Coverage Expansion, Workforce Growth, and Adoption of New Technologies

#### Coverage Expansion

As of November 7, 2018, 36 states and the District of Columbia have expanded Medicaid under the Affordable Care Act. An additional three states (Nebraska, Utah, and Idaho) recently passed ballot initiatives to expand Medicaid. Numerous studies confirm that Medicaid expansion states have seen significant coverage gains and reductions in uninsured rates among minority, vulnerable, and low-income populations. Additionally, Medicaid expansion has also had a disproportionately positive impact in rural areas of expansion states.<sup>594</sup> Medicaid expansion can serve as a tool to reduce health disparities among major racial and ethnic groups and to help close the urban-rural divide. A study published in May 2018 shows that expanding Medicaid in the 19 non-expansion states (at that time) would have a substantial impact: 4.5 million more people gaining coverage in 2019, the uninsured rate dropping from 16.9 percent to 12.6 percent, and uncompensated care decreasing by \$8 billion.<sup>595</sup>

States have taken different approaches to Medicaid expansion, which can serve as a model to the remaining 14 states that have yet to expand coverage. One avenue for expanded Medicaid is through Section 1115 waivers, which provide flexibility to states to develop innovative solutions

#### Status of State Action on the Medicaid Expansion Decision



Source: Kaiser Family Foundation<sup>596</sup>

that meet the needs of their populations and make Medicaid expansion politically viable. These waivers give authority to the secretary of the U.S. Department of Health and Human Services and the administrator of the Centers for Medicare and Medicaid Services (CMS) to approve experimental, pilot, or demonstration programs that promote the objectives of the Medicaid program. Currently, seven states (Arizona, Arkansas, Indiana, Iowa, Michigan, Montana, and New Hampshire) have expanded Medicaid through their Section 1115 waivers.

While there is significant variation in terms of the coverage level, benefits provided, and participation requirements, the remaining non-expansion states should assess the following considerations when determining whether to expand Medicaid or address other healthcare access issues:

#### Work Requirements for Medicaid Beneficiaries

Studies of the theory behind Medicaid work requirements show that they do not improve long-term economic

well-being.<sup>597</sup> Research on the TANF program shows that imposing a work requirement on Medicaid would likely not yield the desired outcomes of increasing long-term employment or reducing poverty among Medicaid beneficiaries.<sup>598</sup> Recent research examining the expansion of work requirements for the Supplemental Nutrition Assistance Program and the introduction of work requirements for Medicaid beneficiaries found that a majority of individuals exposed to these requirements were already attached to the labor force and would be unable to meet the 20-hours-per-week threshold as a result of persistent health issues.<sup>599</sup>

Additionally, these policies may be unnecessary as a majority of the population of Medicaid expansion beneficiaries are already working or in school (62 percent) or looking for work (12 percent). Just 13 percent of adults covered by Medicaid's expansion are not working, looking for work, or in school.<sup>600</sup> However, states have and may continue to impose work requirements for certain Medicaid beneficiaries. If a state imposes Medicaid work requirements, it may want to consider the following approaches: (a) pair these requirements with employment and job-training services that will have to be paid for with other resources, as CMS prohibits Medicaid funds from being used for training or supportive services; (b) make processes for documenting exemptions and employment simple and easily accessible; (c) set reasonable penalties for noncompliance rather than total benefit loss; and (d) conduct rigorous evaluations focusing on intended and unintended consequences.

### Healthy Behavior Incentives

Many state Medicaid programs and Medicaid Managed Care Organizations



have implemented incentive programs for healthy behaviors. These programs use financial incentives or penalties to promote or discourage specific health behaviors. The evidence supporting these programs is limited, states should strongly consider the impact healthy behavior incentive programs may have on beneficiaries. While behavioral-economics theories may point to penalties being a stronger incentive to yield change among beneficiaries, penalties may cause great harm to individuals and prevent them from accessing needed health services; it may also disproportionately harm low-income people and members of racial and ethnic minority groups.<sup>601</sup>

### Close the Coverage Gap for Select Populations in States Not Expanding Medicaid

States that choose not to expand Medicaid should consider closing the coverage gap for parents who have incomes above Medicaid eligibility limits but below the lower limit for marketplace premium tax credits.<sup>602</sup> As of June 2018, more than two million uninsured adults fall into the coverage gap as a result of their state not expanding Medicaid. These individuals do not qualify for Medicaid benefits and are not eligible to receive premium support, thus making insurance coverage unaffordable and greatly restricting their access to health services. If a state does not expand

Medicaid under the Affordable Care Act, it should at a minimum consider expanding Medicaid eligibility to 100 percent of the Federal Poverty Level to ensure that parents are able to access public or private health insurance.

### Behavioral Health

Two new federal laws set important requirements for certain public and private behavioral health coverage that often had been missing. Specifically, the Affordable Care Act requires individual and small-group health insurance plans to cover behavioral health services starting as of 2014, and the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 requires behavioral health services to be covered on parity with physical, medical, and surgical care under individual, group, and Medicaid expansion plans.<sup>603</sup>

However, despite these requirements around coverage, legacy systems and practices continue to make access and availability of services challenging. Additionally, public and private insurance policies still vary significantly, and covered services may be insufficient to meet recommended standards of care. For instance, a 2015 Government Accountability Office report showed significant variation in the types of behavioral health services provided to Medicaid beneficiaries in different states.<sup>604</sup> In addition, the parity law only applies to employers that provide mental health coverage and have 50 or more employees. With enforcement falling largely on states, there is a need to improve consistency of oversight and enforcement of insurers' compliance with existing mental health parity laws. For example, states lack consistent definitions of what constitutes "mental health" and "substance use disorders" and what is required to be covered by health insurance.

There is also a significant movement toward more integrated approaches to physical and mental health, focused on evidence and practices showing strong interconnections and the effectiveness of a “whole person” approach for improved results, including for reducing depression and improving experience of care.<sup>605</sup> A range of experts and organizations, including the Office of the Surgeon General, Substance Abuse and Mental Health Services Administration, the

American College of Physicians, and the American Society of Addiction Medicine, recommend an integrated approach to physical and behavioral healthcare.<sup>606</sup> The U.S. Surgeon General noted the question is “no longer whether but how this much needed integration will occur,” and “net benefits of integrated treatment include improved healthcare outcomes and reduced healthcare costs, as well as reduced crime, improved child welfare, and greater employment productivity

... fewer interpersonal conflicts, greater workplace productivity, reduced infectious disease transmission and fewer drug-related accidents, including overdoses and deaths.”<sup>607</sup> Despite the fact that 68 percent of patients with a mental health disorder also have a medical issue, mental health and substance use disorders have traditionally been treated in separate systems from physical healthcare—often with separate coverage and payment policies.<sup>608</sup>

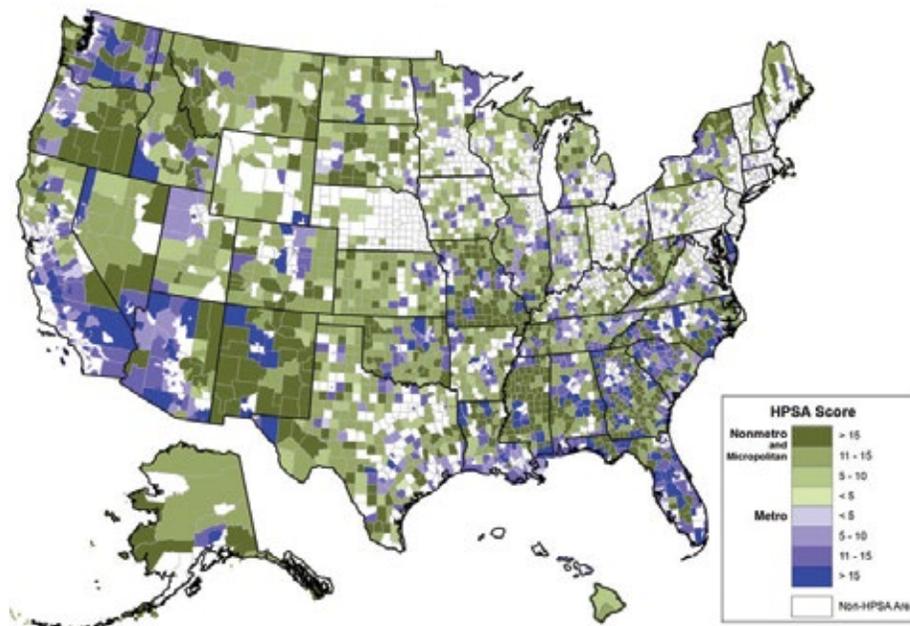
## Workforce

According to the Association of American Medical Colleges, the United States could see a shortage of up to 120,000 physicians by 2030. This includes a shortage of between 14,800 and 49,300 primary care physicians.<sup>609</sup> This shortage has resulted in a significant number of Americans lacking access to a provider of any type; this issue is especially prominent in rural areas. While there are many different strategies to address physician shortages, states have a unique role in granting practice authority for nurse practitioners (NPs) and other advanced practice professionals who can help improve patient access to much-needed health services.

As of 2018, 22 states and the District of Columbia grant NPs full practice authority, meaning that NPs can practice to the top of their licensure and training.<sup>611</sup> The National Academies of Medicine (formerly known as the Institute of Medicine) also recommends that advanced practice registered nurses should be able to practice to the full extent of their education and training.<sup>612</sup> For state legislatures, the National Academies of Medicine recommends:

- Reform scope-of-practice regulations to conform to the National Council of State Boards of Nursing Model

## Health Professional Shortage Areas – Primary Care

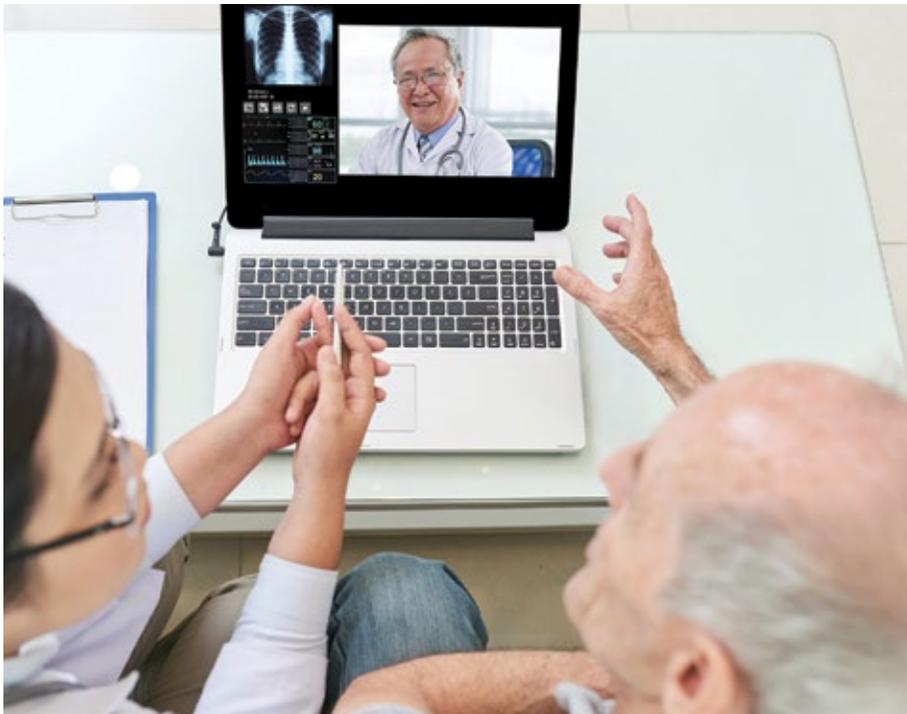


Source: Rural Health Information Hub<sup>610</sup>

Nursing Practice Act and Model Nursing Administrative Rules (Article XVIII, Chapter 18).

- Require third-party payers that participate in fee-for-service payment arrangements to provide direct reimbursement to advanced practice registered nurses who are practicing within their scope of practice under state law.

The behavioral health workforce must be expanded to support the needed availability of providers who can treat and provide services for substance use disorders—including supporting different service delivery models, such as expanding the use of community health workers, paramedics, and peer counselors and expanding or building on primary care. Some models for bolstering workforce areas include incentives and loan repayments for professionals.



## Telehealth

Another way for states to support access to health services for rural residents is through policies that facilitate telemedicine. There is growing evidence that telehealth can lower healthcare costs while improving

access and quality of care, especially for children, older individuals and those living in rural areas.<sup>613</sup> However, Medicaid telemedicine reimbursement varies from state to state.

## LINKED IN

Center for Connected Health Policy's State Telehealth Laws and Reimbursement Policies (fall 2018)<sup>614</sup>

- 49 states and the District of Columbia, provide reimbursement for some form of live video telehealth in Medicaid fee-for-service. Massachusetts remains the only state that does not offer live video reimbursement.
- 11 states provide reimbursement for store-and-forward, which supports the collection and electronic sending of clinical information to another site.
- 20 state Medicaid programs provide reimbursement for remote patient monitoring.
- 23 states limit the type of facility that can serve as an originating site.
- 15 states explicitly allow schools to be originating sites for telehealth delivered services (with some restrictions)
- 34 state Medicaid programs offer a transmission or facility fee when telehealth is used.
- 39 states and the District of Columbia currently have a law that governs private-payer telehealth reimbursement policy.

## Supporting City and Municipality Policies: Ensuring the Appropriate Use of State Preemption Policies to Promote Health and Well-Being

### ON THE LEVEL

#### Preemption 101<sup>615</sup>

##### What is Preemption?

- Preemption is a legal doctrine in which a higher level of government may limit, or even eliminate, the power of a lower level of government to regulate a certain issue.

##### Types of Preemption

- **Express Preemption:** A form of preemption that explicitly states it is meant to preempt a lower-level authority.
- **Implied Preemption:** A form of preemption that may invalidate lower-level laws without explicitly including preemptive language.

#### Degrees of Preemption

- **Floor:** State legislatures can pass a law to establish a uniform set of minimum requirements, and localities can choose to exceed or build on these set requirements. This allows the state legislature to create a base level for all local governments to follow and enforce, while also providing flexibility to localities to impose more stringent requirements.
- **Ceiling:** State legislatures can prohibit local governments from requiring anything more than the specified law, or any differences in the law. This type of preemption establishes standards that cannot be exceeded by

local governments and is of general concern to local governments as it restricts their ability to address pressing public health issues beyond the requirements set forth by the state legislature.

- **Null:** State legislatures can prohibit local governments from passing laws or regulations in a specific field without enacting state-level legislation on the topic. This can be a troublesome form of preemption as the state is not acting on an important issue and also not allowing local governments to act on the issue and develop innovative policy solutions.

Over the past few decades, preemption laws have been used to both promote and hinder public health efforts on the federal, state, and local level. For example, the school nutritional standards included in the Healthy, Hunger-Free Kids Act of 2010 set a floor of nutritional requirements that states and localities can build on. However, state legislatures have passed ceiling and null preemption policies, which hinder local governments' ability to effectively address public health and issues of social and economic well-being, including smoke-free environments, tobacco and alcohol taxation, paid leave, fair-chance hiring, and inclusionary zoning. Over the last several years, state preemption has more often been of the null variety, creating a regulatory vacuum, and it has increasingly included penalties for

jurisdictions and even local lawmakers that advance policies in conflict with state restrictions.

These more recent efforts are similar to the same strategies the tobacco industry has used, and continues to use, to impose restrictions on tobacco-control efforts.<sup>617</sup> For example, the tobacco industry has supported the passage of state laws that limit the sales of tobacco products to youth while also preempting local governments from passing higher age requirements.<sup>618</sup>

Preemption laws that restrict local government innovation to advance health, well-being, and equity can have far reaching consequences. Many preemption campaigns and laws are funded and supported by business and industry in order to dilute consumer protections and protect corporate interests.

- When considering policies with public health implications, states should explicitly not preempt local governments from passing higher or more restrictive standards. It should be the goal of all policymakers to support the health and well-being of all individuals, and hindering local governments' ability to develop innovative solutions to important health needs will impede population health improvement in both the near and long term.
- When state laws prohibit action to promote health, policymakers should at a minimum explore policy options to remove preemption language from state statutes. An ideal policy would not only remove the preemptive language but also include minimum standards that local governments can build on.

## NULL AND VOID

### California's Statewide Soda Tax Ban<sup>616</sup>

- Approved on June 28, 2018, Assembly Bill 1838 banned new local taxes on soda and other sugar-sweetened beverages in California until 2031, and it prohibited soda tax measures that would have taken effect in 2018. While the bill does leave soda tax measures that had already been passed and implemented intact, it does not allow for any future policies to be passed.
- In the case of California, the state prohibited local governments from passing soda taxes and did not pass a soda tax of its own (null preemption).



**STATES WITH EFFECTIVE LEGISLATION AS OF 12/31/18**

	Policy Recommendation 1a	Policy Recommendation 1b			Policy Recommendation 2a	Policy Recommendation 3a	Policy Recommendation 3b	Policy Recommendation 3c
States	Universal Pre-Kindergarten Programs	School Nutrition: School Breakfast Program	School Nutrition: School Lunch Program	School Nutrition: Competitive Foods	Syringe Access Programs	Smoke-Free Laws	Tobacco Taxes	Alcohol Taxes
Alabama	0	0	0	0	0	0	1	1
Alaska	0	0	0	0	0	0	1	1
Arizona	0	0	1	1	0	1	1	1
Arkansas	0	1	0	1	0	0	1	1
California	0	0	0	1	1	1	1	1
Colorado	0	1	0	1	1	1	1	1
Connecticut	0	1	0	1	1	1	1	1
Delaware	0	1	1	0	1	1	1	1
D.C.	1	1	0	1	1	1	1	1
Florida	1	1	0	0	0	0	1	1
Georgia	1	1	0	0	0	0	1	1
Hawaii	0	1	1	0	1	1	1	1
Idaho	0	0	0	0	0	0	1	1
Illinois	0	1	1	1	0	1	1	1
Indiana	0	1	0	1	1	0	1	1
Iowa	1	0	1	0	0	1	1	1
Kansas	0	1	0	1	0	1	1	1
Kentucky	0	0	0	1	1	0	1	1
Louisiana	0	1	1	1	1	0	1	1
Maine	0	0	1	1	1	1	1	1
Maryland	0	1	1	1	1	1	1	1
Massachusetts	0	1	1	1	1	1	1	1
Michigan	0	1	1	0	0	1	1	1
Minnesota	0	1	0	0	0	1	1	1
Mississippi	0	0	0	1	0	0	1	1
Missouri	0	1	0	0	0	0	1	1
Montana	0	0	0	0	1	1	1	1
Nebraska	0	0	0	0	0	1	1	1
Nevada	0	1	0	0	1	0	1	1
New Hampshire	0	0	0	0	1	0	1	1
New Jersey	0	1	1	1	1	1	1	1
New Mexico	0	1	0	1	1	1	1	1
New York	1	1	1	0	1	1	1	1
North Carolina	0	0	1	1	1	0	1	1
North Dakota	0	0	0	0	1	1	1	1
Ohio	0	1	1	1	1	1	1	1
Oklahoma	1	0	0	1	0	0	1	1
Oregon	0	1	0	1	0	1	1	1
Pennsylvania	0	0	0	1	0	0	1	1
Rhode Island	0	1	1	1	1	1	1	1
South Carolina	0	1	1	1	0	0	1	1
South Dakota	0	0	0	0	0	1	1	1
Tennessee	0	1	1	1	1	0	1	1
Texas	1	1	0	1	0	0	1	1
Utah	0	0	0	0	1	1	1	1
Vermont	1	1	1	0	1	1	1	1
Virginia	0	1	0	1	1	0	1	1
Washington	0	1	1	1	1	1	1	1
West Virginia	1	1	1	0	0	0	1	1
Wisconsin	1	0	0	0	0	1	1	1
Wyoming	0	0	0	0	0	0	1	1
<b>Total States</b>	<b>10</b>	<b>31</b>	<b>20</b>	<b>28</b>	<b>27</b>	<b>29</b>	<b>51</b>	<b>51</b>

States that support state-funded pre-K to nearly 50 percent or more of their state's 4-year-olds

Statewide legislation explicitly authorizing syringe access programs

States that have passed comprehensive smokefree laws, per the American Lung Association

Rates vary and higher taxes are generally more effective.

Rates vary and higher taxes are generally more effective.

## STATES WITH EFFECTIVE LEGISLATION AS OF 12/31/18

	Policy Recommendation 4a	Policy Recommendation 5a	Policy Recommendation 5b	Policy Recommendation 6a	Policy Recommendation 6b	Policy Recommendation 6c	Policy Recommendation 6d
States	Complete Streets	Housing Rehabilitation Loan and Grants	Rapid Re-Housing Laws	Earned Income Tax Credit	Paid Sick Leave	Paid Family Leave	Fair Hiring Protections (Ban the Box)
Alabama	0	1	0	0	0	0	0
Alaska	0	1	0	0	0	0	0
Arizona	0	1	0	0	1	0	1
Arkansas	0	0*	0	0	0	0	0
California	1	1	1	1	1	1	1
Colorado	1	1	0	1	0	0	1
Connecticut	1	1	1	1	1	0	1
Delaware	1	0*	0	1*	0	0	1
D.C.	1	1	1	1	1	1	1
Florida	1	1	1	0	0	0	0
Georgia	1	1	0	0	0	0	1
Hawaii	1	1	0	1*	0	0	1
Idaho	0	1	0	0	0	0	0
Illinois	1	0*	0	1	0	0	1
Indiana	1	1	0	1	0	0	1
Iowa	0	1	1	1	0	0	0
Kansas	0	1	0	1	0	0	1
Kentucky	0	1	0	0	0	0	1
Louisiana	1	1	0	1	0	0	1
Maine	1	1	1	1	0	0	0
Maryland	1	1	0	1	1	0	1
Massachusetts	1	1	0	1	1	1*	1
Michigan	1	1	0	1	1*	0	1
Minnesota	1	1	0	1	0	0	1
Mississippi	1	0*	0	0	0	0	0
Missouri	1	0*	0	0	0	0	1
Montana	0	0*	0	1	0	0	0
Nebraska	0	1	0	1	0	0	1
Nevada	1	1	0	0	0	0	1
New Hampshire	0	1	0	0	0	0	0
New Jersey	1	1	0	1	1	1	1
New Mexico	0	1	0	1	0	0	1
New York	1	0*	1	1	0	1	1
North Carolina	1	1	0	0	0	0	0
North Dakota	0	1	0	0	0	0	0
Ohio	0	1	0	1*	0	0	1
Oklahoma	0	0	0	1*	0	0	1
Oregon	1	1	1	1	1	0	1
Pennsylvania	0	1	0	0	0	0	1
Rhode Island	1	1	0	1	1	1	1
South Carolina	1	1	0	1*	0	0	0
South Dakota	0	0*	0	0	0	0	0
Tennessee	1	1	0	0	0	0	1
Texas	0	1	1	0	0	0	0
Utah	1	1	0	0	0	0	1
Vermont	1	0*	0	1	1	0	1
Virginia	1	1	0	1*	0	0	1
Washington	1	1	0	1	1	1**	1
West Virginia	0	1	0	0	0	0	0
Wisconsin	0	1	0	1	0	0	1
Wyoming	0	0	0	0	0	0	0
<b>Total States</b>	<b>30</b>	<b>40</b>	<b>9</b>	<b>30</b>	<b>12</b>	<b>7</b>	<b>34</b>

\* These states have a law allowing a state agency or local municipality to use funds for housing rehabilitation (among other purposes) but do not specifically mention a program or fund to be used for such purposes. States may also fund such programs in the absence of statewide legislation

\*States with non-refundable EITCs

\*Mich. Comp. Laws § 408.963 adopts paid sick leave as of March 29, 2019

\* (H. 4640 § 29, 190th Gen. Court, Reg. Sess. (Mass. 2018) (enacted)  
 Enacted 2018, effective July 2019 (premiums) and January 2021 (benefits)  
 \*\* (S.B. 5975, 65th Leg., 3rd Special Sess. (Wash. 2017) (enacted))  
 Enacted 2017, effective January 2019 (premiums) and January 2020 (benefits)

## Endnotes

- 1 Braveman P, Arkin E, Orleans T, et al. "What Is Health Equity?" Robert Wood Johnson Foundation, May 1, 2017. <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html> (accessed December 20, 2018).
- 2 Bradley, E. H., B. R. Elkins, J. Herrin, and B. Elbel. 2011. Health and social services expenditures: Associations with health outcomes. *BMJ Quality and Safety*.
- 3 Bradley, E., and L. Taylor. 2013. *The American health care paradox: Why spending more is getting us less*. New York: Public Affairs.
- 4 *Summary: NASBO State Expenditure Report*. Washington, DC: The National Association of State Budget Officers, November 15, 2018. [https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/Issue%20Briefs%20/2018\\_State\\_Expenditure\\_Report\\_Summary.pdf](https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/Issue%20Briefs%20/2018_State_Expenditure_Report_Summary.pdf) (accessed December 20, 2018).
- 5 *Health, United States, 2017: With Special Feature on Mortality*. Hyattsville, MD: National Center for Health Statistics, 2018. <https://www.cdc.gov/nchs/data/abus/abus17.pdf> (accessed December 20, 2018).
- 6 "Data Table for Figure 1. Life Expectancy at Birth, by Sex, Race, and Hispanic Origin: United States, 2006–2016." In: *Centers for Disease Control and Prevention*, 2017. <https://www.cdc.gov/nchs/data/abus/abus17/fig01.pdf> (accessed December 20, 2018).
- 7 Chetty R, Stepner M, Abraham S, et al. "The Association Between Income and Life Expectancy in the United States, 2001–2014." *JAMA*, 315(16): 1750–1766, April 26, 2016. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4866586/> (accessed December 20, 2018).
- 8 *Health, United States, 2017: With Special Feature on Mortality*. Hyattsville, MD: National Center for Health Statistics, 2018. <https://www.cdc.gov/nchs/data/abus/abus17.pdf> (accessed December 20, 2018).
- 9 Segal LM, De Biasi A, Lieberman DA, et al. *Blueprint for a Healthier America 2016: Policy Priorities for the Next Administration and Congress*. Washington, DC: Trust for America's Health, October 2016. <https://www.tfah.org/report-details/blueprint-for-a-healthier-america-2016-policy-priorities-for-the-next-administration-and-congress/> (accessed December 20, 2018).
- 10 "Health Expenditures." In: *Centers for Disease Control and Prevention*, 2016. <https://www.cdc.gov/nchs/fastats/health-expenditures.htm> (accessed December 20, 2018).
- 11 Ortman JM, Velkoff VA, and Hogan H. *An Aging Nation: The Older Population in the United States*. Suitland, MD: U.S. Census Bureau, May 2014. <https://www.census.gov/prod/2014pubs/p25-1140.pdf> (accessed December 20, 2018).
- 12 Alzheimer's Association. "2018 Alzheimer's Disease Facts and Figures." *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, 14(3): 367–429, 2018. <https://www.sciencedirect.com/science/article/pii/S1552526018300414> (accessed July 13, 2018).
- 13 "Chronic Disease Self-Management Facts." In: *National Council on Aging*. <https://www.ncoa.org/news/resources-for-reporters/get-the-facts/chronic-disease-facts/#intraPageNav1> (accessed June 26, 2018).
- 14 "Falls Prevention Facts." In: *National Council on Aging*. <https://www.ncoa.org/news/resources-for-reporters/get-the-facts/falls-prevention-facts/> (accessed July 13, 2018).
- 15 Vespa J, Armstrong DM, and Medina L. *Demographic Turning Points for the United States: Population Projections for 2020 to 2060*. Suitland, MD: U.S. Census Bureau, March 2018. [https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25\\_1144.pdf](https://www.census.gov/content/dam/Census/library/publications/2018/demo/P25_1144.pdf) (accessed December 20, 2018).
- 16 U.S. Census Bureau. "Older People Projected to Outnumber Children for First Time in U.S. History." Press release, March 2018. <https://www.census.gov/newsroom/press-releases/2018/cb18-41-population-projections.html> (accessed December 20, 2018).
- 17 CityHealth: A Division of the de Beaumont Foundation and Kaiser Permanente. <http://www.cityhealth.org/> (accessed December 20, 2018).
- 18 "HI-5: Health Impact in 5 Years." In: *Centers for Disease Control and Prevention*. <https://www.cdc.gov/policy/hst/hi5/docs/hi5-overview-v7.pdf> (accessed December 20, 2018).
- 19 "Most Lower-Paid Workers Lack Paid Sick Leave." In: *Center on Budget and Policy Priorities*, March 2016. <https://www.cbpp.org/most-lower-paid-workers-lack-paid-sick-leave> (accessed December 20, 2018).
- 20 Von Wilpert M. "State and Local Policymakers Should Beware Preemption Clauses." *Working Economics Blog*, Economics Policy Institute, January 18, 2018. <https://www.epi.org/blog/state-and-local-policymakers-should-beware-preemption-clauses-snuck-into-legislation/> (accessed December 20, 2018).
- 21 "Social Determinants of Health." In: *Office of Disease Prevention and Health Promotion*. <https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-of-health> (accessed December 20, 2018).
- 22 Virginia Commonwealth University Center on Society and Health. *Why Education Matters to Health*. April 29, 2014. [https://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2014/rwjf412692](https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2014/rwjf412692) (accessed December 20, 2018).
- 23 Zimmerman E, Woolf SH, and Haley A. *Population Health: Behavioral and Social Science: Understanding the Relationship Between Education and Health: A Review of the Evidence and an Examination of Community Perspectives*. Rockville, MD: Agency for Healthcare Research and Quality, September 2015. <https://www.ahrq.gov/professionals/education/curriculum-tools/population-health/zimmerman.html> (accessed December 20, 2018).
- 24 Jones-Webb R and Wall M. "Neighborhood Racial/Ethnic Concentration, Social Disadvantage, and Homicide Risk: An Ecological Analysis of 10 U.S. Cities." *Journal of Urban Health*, 85(5): 662–76, 2008. 10.1007/s11524-008-9302-y (accessed December 20, 2018).
- 25 Berkman LF, Glass T, Brissette I, and Seeman TE. "From Social Integration to Health: Durkheim in the New Millennium." *Social Science Medicine*, 51(6): 843–57.
- 26 Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. *Perspect Psychol Sci* 2015; 10: 227–37.
- 27 Travis J and Western B (eds.). *The Growth of Incarceration in the United States: Exploring Causes and Consequences*. Washington, DC: National Academies Press, 2014. [http://johnjayjjay.cuny.edu/nrc/nas\\_report\\_on\\_incarceration.pdf](http://johnjayjjay.cuny.edu/nrc/nas_report_on_incarceration.pdf) (accessed December 20, 2018).
- 28 Paradies Y, Ben J, Denson N, et al. "Racism as a Determinant of Health: A Systematic Review and Meta-Analysis." *PLoS One*, September 23, 2015. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0138511> (accessed December 20, 2018).
- 29 Luo Y, Xu J, Granberg E, and Wentworth WM. "A Longitudinal Study of Social Status, Perceived Discrimination, and Physical and Emotional Health Among Older Adults." *Research on Aging*, 34(3): 275–301, December 14, 2011. 0164027511426151 (accessed December 20, 2018).
- 30 Pascoe EA and Smart RL. "Perceived Discrimination and Health: A Meta-Analytic Review." *Psychological Bulletin*, 135(4): 531–54, 2009.
- 31 Williams DR and Mohammed SA. "Racism and Health I: Pathways and Scientific Evidence." *American Behavioral Science*, 57(8): August 1, 2013. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3863357> (accessed December 20, 2018).
- 32 "Community Strategies to End Racism and Support Racial Healing: The Place Matters Approach to Promoting Racial Equity." Found in: National Collaborative for Health Equity. <http://www.nationalcollaborative.org/wp-content/uploads/2016/02/Community-Strategies-to-End-Racism-and-Support-Racial-Healing-The-Place-Matters-Approach-to-Promoting-Racial-Equity.pdf> (accessed December 20, 2018)

- 33 National Academies of Sciences, Engineering, and Medicine. 2017. *Communities in action: Pathways to health equity*. Washington, DC: The National Academies Press. doi: 10.17226/24624
- 34 Braveman P, Arkin E, Orleans T, et al. "What Is Health Equity?" Robert Wood Johnson Foundation, May 1, 2017. <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html> (accessed December 20, 2018).
- 35 Ibid.
- 36 Braveman P, Arkin E, Orleans T, et al. "What Is Health Equity?" Robert Wood Johnson Foundation, May 1, 2017. <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html> (accessed December 20, 2018).
- 37 "Achieving Health Equity: Why Health Equity Matters and What You Can Do to Help Ensure We All Have the Basics to Be as Healthy as Possible." In: *Robert Wood Johnson Foundation*. <https://www.rwjf.org/en/library/features/achieving-health-equity.html> (December 20, 2018).
- 38 Braveman P, Arkin E, Orleans T, et al. "What Is Health Equity?" Robert Wood Johnson Foundation, May 1, 2017. <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity-.html> (accessed December 20, 2018).
- 39 Pincus, F.L. Discrimination comes in many forms: Individual, institutional, and structural. *American Behavioral Scientist*, 40(2): 186-194, 1996
- 40 Williams DR and Mohammed SA. "Racism and Health I: Pathways and Scientific Evidence." *American Behavioral Science*, 57(8): August 1, 2013. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3863357> (accessed December 20, 2018).
- 41 Turner A. *The Business Case for Racial Equity*. East Battle Creek, MI: W.K. Kellogg Foundation, July 24, 2018. <https://www.wkkf.org/resource-directory/resource/2018/07/business-case-for-racial-equity> (accessed December 20, 2018).
- 42 Ibid.
- 43 "Consumer Expenditure Surveys: 2015 Data." In: *U.S. Bureau of Labor Statistics*, August 2016. <https://www.bls.gov/cex/> (accessed December 20, 2018).
- 44 LaVeist TA, Gaskin DJ, and Richard P. *The Economic Burden of Health Inequalities in the United States*. Washington, DC: Joint Center for Political and Economic Studies, 2009. <https://jointcenter.org/sites/default/files/Economic%20Burden%20of%20Health%20Inequalities%20Fact%20Sheet.pdf> (accessed December 20, 2018).
- 45 Turner A. *The Business Case for Racial Equity*. East Battle Creek, MI: W.K. Kellogg Foundation, July 24, 2018. <https://www.wkkf.org/resource-directory/resource/2018/07/business-case-for-racial-equity> (accessed December 20, 2018).
- 46 CityHealth: A Division of the de Beaumont Foundation and Kaiser Permanente. <http://www.cityhealth.org/> (accessed December 20, 2018).
- 47 "Pew-MacArthur Results First Initiative." In: *The Pew Charitable Trusts*. <https://www.pewtrusts.org/en/projects/pew-macarthur-results-first-initiative> (accessed December 20, 2018).
- 48 "HI-5: Health Impact in 5 Years." In: *Centers for Disease Control and Prevention*. <https://www.cdc.gov/policy/hst/hi5/docs/hi5-overview-v7.pdf> (accessed December 20, 2018).
- 49 "What Works for Health." In: *County Health Rankings & Roadmaps*. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health> (accessed December 20, 2018).
- 50 "The Win-Win Project." In: *Center for Health Advancement at the Fielding School of Public Health*, University of California, Los Angeles. <https://winwin.uclacla.org/> (accessed December 20, 2018).
- 51 The Community Guide. <https://www.thecommunityguide.org/> (accessed December 20, 2018).
- 52 Auerbach J. "The 3 Buckets of Prevention." *Journal of Public Health Management and Practice*, 22(3): 215-218, May/June 2016. [https://journals.lww.com/jphmp/Citation/2016/05000/The\\_3\\_Buckets\\_of\\_Prevention.1.aspx](https://journals.lww.com/jphmp/Citation/2016/05000/The_3_Buckets_of_Prevention.1.aspx) (accessed December 20, 2018).
- 53 "Picture of America: Prevention." In: *Centers for Disease Control and Prevention*. [https://www.cdc.gov/pictureofamerica/pdfs/Picture\\_of\\_America\\_Prevention.pdf](https://www.cdc.gov/pictureofamerica/pdfs/Picture_of_America_Prevention.pdf) (accessed December 20, 2018).
- 54 "Getting Ready for School Begins at Birth." In: *Zero to Three*. <https://www.zerotothree.org/document/153> (accessed December 20, 2018).
- 55 *The Foundations of Lifelong Health Are Built in Early Childhood*. Cambridge, MA: Center on the Developing Child at Harvard University, 2010. <https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2010/05/Foundations-of-Lifelong-Health.pdf> (accessed September 2014).
- 56 Garner AS, Shonkoff JP, Siegel BS, et al. "Early Childhood Adversity, Toxic Stress, and the Role of the Pediatrician: Translating Developmental Science Into Lifelong Health." *Pediatrics*, 129: e224-e231, 2011.
- 57 Institute of Medicine and National Research Council. *Children's Health, the Nation's Wealth: Assessing and Improving Child Health*. Washington, DC: The National Academies Press, 2004.
- 58 Friedman-Krauss AH, Barnett WS, Weisenfeld GG, et al. *The State of Preschool 2017: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research, 2018. <http://nieer.org/state-preschool-yearbooks/yearbook2017> (accessed December 20, 2018).
- 59 Ibid.
- 60 Ibid.
- 61 Committee on Early Childhood, Adoption, and Dependent Care. "Quality Early Education and Child Care From Birth to Kindergarten." *Pediatrics*, 115(1): 187-191, 2005. <http://pediatrics.aappublications.org/content/115/1/187.full> (accessed October 2014).
- 62 Ibid.
- 63 Barnett WS, Carolan ME, Squires JH, and Brown KC. *The State of Preschool 2013: State Preschool Yearbook*. New Brunswick, NJ: The National Institute for Early Education Research, 2013. <http://nieer.org/wp-content/uploads/2016/08/yearbook2013.pdf> (accessed December 20, 2018).
- 64 Barnett S and Gomez R. *Universal Pre-K: What Does it Mean and Who Provides It?*. New Brunswick, NJ: National Institute for Early Education Research, January 6, 2016. <http://nieer.org/2016/01/06/universal-pre-k-what-does-it-mean-and-who-provides-it> (accessed December 20, 2018).
- 65 Lieberman A. "Policy Recommendations: Universal Pre-K." In: *The New America Care Report*. Washington, DC: New America, September 28, 2016. <https://www.newamerica.org/in-depth/care-report/policy-recommendations-universal-pre-k/> (accessed December 20, 2018).
- 66 Atchison B and Pompelia S. *Transitions and Alignment from Preschool to Kindergarten*. Denver: Education Commission of the States, September 2018. <https://www.ecs.org/wp-content/uploads/Transitions-and-Alignment-From-Preschool-to-Kindergarten-1.pdf> (accessed December 20, 2018).
- 67 Lieberman A. "Policy Recommendations: Universal Pre-K." In: *The New America Care Report*. Washington, DC: New America, September 28, 2016. <https://www.newamerica.org/in-depth/care-report/policy-recommendations-universal-pre-k/> (accessed December 20, 2018).
- 68 Ibid.
- 69 Burger K. "How Does Early Childhood Care and Education Affect Cognitive Development? An International Review of the Effects of Early Interventions for Children from Different Social Backgrounds." *Early Childhood Research Quarterly*, 25(2): 140-165, 2010.
- 70 Wong VC, Cook TD, Barnett WS, and Jung K. "An Effectiveness-Based Evaluation of Five State Pre-Kindergarten Programs." *Journal of Policy Analysis and Management*, 27(1): 122-154.
- 71 Community Preventive Services Task Force. "Promoting Health Equity Through Education Programs and Policies: Center-Based Early Childhood Education." *The Community Guide*, March 2015. <https://www.thecommunityguide.org/findings/promoting-health-equity-through-education-programs-and-policies-center-based-early-childhood> (accessed December 20, 2018).

- 72 Halfon N and Hochstein M. "Life Course Health Development: An Integrated Framework for Developing Health, Policy, and Research." *The Milbank Quarterly*, 80(3): 433–479.
- 73 Gormley WT and Phillips D. "The Effects of Universal Pre-K in Oklahoma: Research Highlights and Policy Implications." *Policy Studies Journal*, 33(1): 65–82, 2005.
- 74 Fitzpatrick MD. "Starting School at Four: The Effect of Universal Pre-Kindergarten on Children's Academic Achievement." *The B.E. Journal of Economic Analysis & Policy*, 8(1), 2008.
- 75 "Benefit-Cost Results: State and District Early Childhood Education Programs." In: *Washington State Institute for Public Policy*, December 2015. <http://www.wsipp.wa.gov/BenefitCost?topicId=4> (accessed December 20, 2018).
- 76 "Universal Pre-Kindergarten Increase Access and Improve Academics." In: *Center for Health Advancement*, University of California, Los Angeles. <https://insight.livestories.com/s/v2/universal-pre-k-los-angeles/4f8b11cd-5323-4a6f-9434-203e8ecd204/> (accessed December 20, 2018).
- 77 Cascio E and Whitmore Schanzenback D. "The Impacts of Expanding Access to High-Quality Preschool Education." *Brookings Institution: Papers on Economic Activity*, 1:127–178, 2013.
- 78 Halfon N and Hochstein M. "Life Course Health Development: An Integrated Framework for Developing Health, Policy, and Research." *The Milbank Quarterly*, 80(3): 433–479.
- 79 Cascio E and Whitmore Schanzenback D. "The Impacts of Expanding Access to High-Quality Preschool Education." *Brookings Institution: Papers on Economic Activity*, 1:127–178, 2013.
- 80 Halfon N and Hochstein M. "Life Course Health Development: An Integrated Framework for Developing Health, Policy, and Research." *The Milbank Quarterly*, 80(3): 433–479.
- 81 Barnett S and Gomez R. *Universal Pre-K: What Does it Mean and Who Provides It?*. New Brunswick, NJ: National Institute for Early Education Research, January 6, 2016. <http://nieer.org/2016/01/06/universal-pre-k-what-does-it-mean-and-who-provides-it> (accessed December 20, 2018).
- 82 Parker E, Diffey L, and Atchison B. *How States Fund Pre-K: A Primer for Policymakers*. Denver: Education Commission of the States, February 2018. [https://www.ecs.org/wp-content/uploads/How\\_States\\_Fund\\_Pre-K.pdf](https://www.ecs.org/wp-content/uploads/How_States_Fund_Pre-K.pdf) (accessed December 20, 2018).
- 83 Ibid.
- 84 Friedman-Krauss AH, Barnett WS, Weisenfeld GG, et al. *The State of Preschool 2017: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research, 2018. <http://nieer.org/wp-content/uploads/2018/07/State-of-Preschool-2017-Full-7-16-18.pdf> (accessed December 20, 2018).
- 85 Ibid.
- 86 Parker E, Diffey L, and Atchison B. *How States Fund Pre-K: A Primer for Policymakers*. Denver: Education Commission of the States, February 2018. [https://www.ecs.org/wp-content/uploads/How\\_States\\_Fund\\_Pre-K.pdf](https://www.ecs.org/wp-content/uploads/How_States_Fund_Pre-K.pdf) (accessed December 20, 2018).
- 87 <https://wvde.state.wv.us/oel/universal-prek.php>
- 88 <https://wvde.us/early-and-elementary-learning/wv-universal-pre-k/>
- 89 [http://nieer.org/wp-content/uploads/2018/04/West-Virginia\\_YB2017.pdf](http://nieer.org/wp-content/uploads/2018/04/West-Virginia_YB2017.pdf)
- 90 Lieberman A. "Policy Recommendations: Universal Pre-K." In: *The New America Care Report*. Washington, DC: New America, September 28, 2016. <https://www.newamerica.org/in-depth/care-report/policy-recommendations-universal-pre-k/> (accessed December 20, 2018).
- 91 *Special Report: Supporting Dual-Language Learners in State-Funded Preschool*. New Brunswick, NJ: National Institute for Early Education Research, July 2018. [http://nieer.org/wp-content/uploads/2018/04/YB2017\\_DLL-Special-Report.pdf](http://nieer.org/wp-content/uploads/2018/04/YB2017_DLL-Special-Report.pdf) (accessed December 20, 2018).
- 92 Cooper H, Allen AB, Patail EA, and Dent AL. "Effects of Full-Day Kindergarten on Academic Achievement and Social Development." *Review of Educational Research*, 80(1): 34–70, March 1, 2010. <http://journals.sagepub.com/doi/abs/10.3102/0034654309359185> (accessed December 20, 2018).
- 93 Bingham GE and Hall-Kenyon KM. "Full- and Half-Day Kindergarten Programmes: Examining Impacts on Second Language Learners." *Early Child Development and Care*, 183:2, 185–199, March 19, 2012. <https://www.tandfonline.com/doi/abs/10.1080/03004430.2012.662227> (accessed December 20, 2018).
- 94 Gottfried MA and Le VN. "Full- Versus Part-Day Kindergarten for Children With Disabilities: Effects on Academic and Social-Emotional Outcomes." *American Educational Research Journal*, 53(3), 708–744. June 1, 2016. <http://journals.sagepub.com/doi/abs/10.3102/0002831216645903> (accessed December 20, 2018).
- 95 Pelletier J. "Ontario's Full-Day Kindergarten: A Bold Public Policy Initiative." *Public Sector Digest*, May 15–June 13, 2014: 41–49. [https://www.oise.utoronto.ca/atkinson/UserFiles/File/Publications/6-2014\\_-\\_Ontario\\_s\\_Full-day\\_Kindergarten\\_A\\_Bold\\_Public\\_Policy\\_Initiative.pdf](https://www.oise.utoronto.ca/atkinson/UserFiles/File/Publications/6-2014_-_Ontario_s_Full-day_Kindergarten_A_Bold_Public_Policy_Initiative.pdf) (accessed December 20, 2018).
- 96 Hahn RA, Rammohan V, Truman BI, et al. "Effects of Full-Day Kindergarten on the Long-Term Health Prospects of Children in Low-Income and Racial/Ethnic-Minority Populations: A Community Guide Systematic Review." *American Journal of Preventive Medicine*, 46(3): 312–323, 2014.
- 97 Cooper H, Allen AB, Patail EA, and Dent AL. "Effects of Full-Day Kindergarten on Academic Achievement and Social Development." *Review of Educational Research*, 80(1): 34–70, March 1, 2010. <http://journals.sagepub.com/doi/abs/10.3102/0034654309359185> (accessed December 20, 2018).
- 98 Community Preventive Services Task Force. "Promoting Health Equity Through Education Programs and Policies: High School Completion Programs." The Community Guide, 2014. <https://www.thecommunityguide.org/sites/default/files/assets/Health-Equity-High-School-Completion.pdf> (accessed December 20, 2018).
- 99 "Public High School 4-Year Adjusted Cohort Graduation Rate (ACGR), by Race/Ethnicity and Selected Demographic Characteristics for the United States, the 50 States, and the District of Columbia: School Year 2015–16." In: *National Center for Education Statistics*. [https://nces.ed.gov/ccd/tables/ACGR\\_RE\\_and\\_characteristics\\_2015-16.asp](https://nces.ed.gov/ccd/tables/ACGR_RE_and_characteristics_2015-16.asp) (accessed December 20, 2018).
- 100 "Public High School 4-Year Adjusted Cohort Graduation Rate (ACGR), by Selected Student Characteristics and State: 2010-11 through 2015-16." In: *National Center for Education Statistics*. [https://nces.ed.gov/programs/digest/d17/tables/dt17\\_219.46.asp](https://nces.ed.gov/programs/digest/d17/tables/dt17_219.46.asp) (accessed December 20, 2018).
- 101 Wilson SJ, Lipsey M, Tanner-Smith E, et al. "Dropout Prevention and Intervention Programs: Effects on School Completion and Dropout Among School-Aged Children and Youth." *Campbell Systematic Reviews*, April 14, 2011. <https://www.campbellcollaboration.org/library/dropout-prevention-intervention-programmes.html> (accessed December 20, 2018).
- 102 "The Win-Win Project." In: *Center for Health Advancement at the Fielding School of Public Health*, University of California, Los Angeles. <https://winwin.uclacha.org/> (accessed December 20, 2018).
- 103 Task Force on Community Preventive Services. "A Recommendation to Reduce Rates of Violence Among School-Aged Children and Youth by Means of Universal School-Based Violence Prevention Program." *American Journal of Preventive Medicine*, 33(2S), August 2007. <https://www.thecommunityguide.org/sites/default/files/publications/viol-AJPM-recs-schoolbased.pdf> (accessed December 20, 2018).
- 104 Wilson SJ and Lipsey MW. "School-Based Interventions for Aggressive and Disruptive Behavior: Update of a Meta-Analysis." *American Journal of Preventive Medicine*, 33(2S), August 2007. <https://www.thecommunityguide.org/sites/default/files/publications/viol-AJPM-schoolbased-Wilson-Lipsey.pdf> (accessed December 20, 2018).
- 105 Ibid.

- 106 Steinberger J, Daniels SR, and Hagberg N. "Cardiovascular Health Promotion in Children: Challenges and Opportunities for 2020 and Beyond: A Scientific Statement from the American Heart Association." *Circulation*, 134(12): e1–e20, 2016.
- 107 "Trends in the Prevalence of Physical Activity and Sedentary Behaviors National YRBS: 1991–2015." In: *Centers for Disease Control and Prevention*. [https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trends/2015\\_us\\_physical\\_trend\\_yrbs.pdf](https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trends/2015_us_physical_trend_yrbs.pdf) (accessed December 20, 2018).
- 108 American Academy of Pediatrics. "The Crucial Role of Recess in School." *Pediatrics*, 131: 183–188, 2013.
- 109 Fryar CD, Carroll MD, and Ogden CL. "Prevalence of Overweight and Obesity Among Children and Adolescents: United States, 1963–1965 Through 2011–2012." *National Center for Health Statistics*, September 2014. [https://www.cdc.gov/nchs/data/hestat/obesity\\_child\\_11\\_12/obesity\\_child\\_11\\_12.pdf](https://www.cdc.gov/nchs/data/hestat/obesity_child_11_12/obesity_child_11_12.pdf).
- 110 Hales CM, Carroll MD, Fryar CD, et al. "Prevalence of Obesity Among Adults and Youth: United States, 2015–2016." *National Center for Health Statistics, Data Brief*, 288, 2017. <https://www.cdc.gov/nchs/products/databriefs/db288.htm>
- 111 Ibid.
- 112 Ibid.
- 113 Warren M, Beck S, and Rayburn J. *The State of Obesity: Better Policies for a Healthier America, 2018*. Washington, DC: Trust for America's Health, 2018. <https://stateofobesity.org/wp-content/uploads/2018/09/stateofobesity2018.pdf> (accessed December 20, 2018).
- 114 Ward Z, Long M, Resch S, et al. "Simulation of Growth Trajectories of Childhood Obesity into Adulthood." *New England Journal of Medicine*, 377(22): 2145–2153, 2017.
- 115 Carey FR, Singh GK, Brown HS, et al. "Educational Outcomes Associated with Childhood Obesity in the United States: Cross-Sectional Results from the 2011–2012 National Survey of Children's Health." *International Journal of Behavioral Nutrition and Physical Activity*, 12(Suppl 1): S3, 2015. 10.1186/1479-5868-12-S1-S3.
- 116 "Child Food Insecurity." In: *Feeding America*. <https://www.feedingamerica.org/sites/default/files/research/map-the-meal-gap/2016/2016-map-the-meal-gap-child-food-insecurity.pdf> (accessed December 20, 2018).
- 117 "Child Nutrition Fact Sheet 2010." In: *Children's Defense Fund*, July 2010. <https://www.childrensdefense.org/wp-content/uploads/2018/08/child-nutrition-factsheet.pdf> (accessed December 20, 2018).
- 118 Cook J and Jeng K. *Child Food Insecurity: The Economic Impact on our Nation*. Chicago: Feeding America, 2009. <https://www.nokidhungry.org/sites/default/files/child-economy-study.pdf> (accessed December 20, 2018).
- 119 Warren M, Beck S, and Rayburn, J. *The State of Obesity: Better Policies for a Healthier America, 2018*. Washington, DC: Trust for America's Health, 2018. <https://stateofobesity.org/wp-content/uploads/2018/09/stateofobesity2018.pdf> (accessed December 20, 2018).
- 120 Obesity Prevention Source. "Economic Costs: Paying the Price for Those Extra Pounds." Harvard T.H. Chan School of Public Health. <https://www.hsph.harvard.edu/obesity-prevention-source/obesity-consequences/economic/> (accessed December 20, 2018).
- 121 Kim DD and Basu A. "Estimating the Medical Care Costs of Obesity in the United States: Systematic Review, Meta-Analysis, and Empirical Analysis." *Value Health*, 19(5): 602–613, 2016. 10.1016/j.jval.2016.02.008.
- 122 Finkelstein EA, Trogdon JG, Cohen JW, et al. "Annual Medical Spending Attributable to Obesity: Payer-and Service-Specific Estimates." *Health Affairs*, 28(5): w822–831, 2009. 10.1377/hlthaff.28.5. w822.
- 123 Hammond RA and Levine R. "The Economic Impact of Obesity in the United States. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy." *Diabetes, Metabolic Syndrome and Obesity*, 3: 285–295, 2010. 10.2147/DMSOTT.S7384 (accessed December 20, 2018).
- 124 Hermes A and Emerson B. *A Guide to the School Breakfast Program*. Washington, DC: National Conference of State Legislatures, August 2012. <http://www.ncsl.org/research/human-services/a-guide-to-the-school-breakfast-program.aspx> (accessed December 20, 2018).
- 125 Long MW, Luedicke J, Dorsey M, et al. "Impact of Connecticut Legislation Incentivizing Elimination of Unhealthy Competitive Foods on National School Lunch Program Participation." *American Journal of Public Health*, 103(7): 59–66, 2013.
- 126 Woodward-Lopez G, Gosliner W, Samuels SE, et al. "Lessons Learned from Evaluations of California's Statewide School Nutrition Standards." *American Journal of Public Health*, 100(11): 2137–2145, 2010.
- 127 Marrow MW and Pelletier JE. *Feeding America's Schoolchildren: Navigating the Complicated Legal Terrain and Practical Challenges of Federal School Nutrition Programs*. St. Paul, MN: Public Health Law Center, January 2013. <http://www.publichealthlawcenter.org/sites/default/files/resources/Feeding%20America's%20Schoolchildren.pdf> (accessed December 20, 2018).
- 128 "School Nutrition Standards." In: *School Nutrition Association*. <https://schoolnutrition.org/AboutSchoolMeals/SchoolNutritionStandards/> (accessed December 20, 2018).
- 129 "School Lunch Initiative." In: *Arizona Health Matters*. <http://www.arizonahealthmatters.org/promisepractice/index/view?pid=1058> (accessed December 20, 2018).
- 130 "Lunchtime Supports Learning: Students Need Adequate Time to Eat." In: *California Food Policy Advocates*. <https://cfpa.net/ab2449/> (accessed December 20, 2018).
- 131 "Food in Schools." In: *Public Health Law Center*. <http://www.publichealthlawcenter.org/topics/healthy-eating/food-schools> (accessed December 20, 2018).
- 132 Hartline-Grafton H. *Research Shows that the School Nutrition Standards Improve the School Nutrition Environment and Student Outcomes*. Washington, DC: FRAC, Food Research & Action Center, January 2016. <http://www.frac.org/wp-content/uploads/school-nutrition-brief.pdf> (accessed December 20, 2018).
- 133 Frisvold DE. "Nutrition and Cognitive Achievement: An evaluation of the School Breakfast Program." *Journal of Public Economics*, 124: 91–104, 2015.
- 134 Hoyland A, Dye L, and Lawton CL. "A Systematic Review of the Effect of Breakfast on the Cognitive Performance of Children and Adolescents." *Nutrition Research Reviews*, 22(2): 220–243, 2009.
- 135 Bhattacharya J, Currie J, and Haider SJ. "Breakfast of Champions? The School Breakfast Program and the nutrition of children and families." *Journal of Human Resources*, 41(3): 445–466, 2006.
- 136 Murphy S, Moore GF, Tapper K, et al. "Free Healthy Breakfasts in Primary Schools: A Cluster Randomised Controlled Trial of a Policy Intervention in Wales, UK." *Public Health Nutrition*, 14(2): 219–226, 2011.
- 137 Fox M, Hamilton W, and Lin B. "Effects of Food Assistance and Nutrition Programs on Nutrition and Health: Volume 4, Executive Summary of the Literature Review." *Economic Research Service, Food Assistance and Nutrition Research Reports*, 19(4): 1–10, 2004.
- 138 Gleason PM and Hedley-Dodd A. "School Breakfast Program But Not School Lunch Program Participation Is Associated with Lower Body Mass Index." *Journal of the American Dietetic Association*, 109 (2 Suppl): S118–128, 2009.
- 139 Williamson DA, Han H, Johnson WD, et al. "Modification of the School Cafeteria Environment Can Impact Childhood Nutrition: Results from the Wise Mind and LA Health studies." *Appetite*, 61(1): 77–84, 2013.
- 140 Belot M and James J. "Healthy School Meals and Educational Outcomes." *Journal of Health Economics*, 30(3): 489–504, 2011.

- 141 Schwartz MB, Henderson KE, Read M, et al. "New School Meal Regulations Increase Fruit Consumption and Do Not Increase Total Plate Waste." *Childhood Obesity*, 20(10): 1–6, 2015.
- 142 Cohen JFW, Richardson S, Parker E, et al. "Impact of the New U.S. Department of Agriculture School Meal Standards on Food Selection, Consumption, and Waste." *American Journal of Preventive Medicine*, 46(4): 388–394, 2014.
- 143 Jaime PC and Lock K. "Do School Based Food and Nutrition Policies Improve Diet and Reduce Obesity?" *Preventive Medicine*, 48(1): 45–53, 2009.
- 144 Hermes A and Emerson B. *A Guide to the School Breakfast Program*. Washington, DC: National Conference of State Legislatures, August 2012. <http://www.ncsl.org/research/human-services/a-guide-to-the-school-breakfast-program.aspx> (accessed December 20, 2018).
- 145 "School Nutrition Standards." In: *School Nutrition Association*. <https://schoolnutrition.org/AboutSchoolMeals/SchoolNutritionStandards/> (accessed December 20, 2018).
- 146 Marrow MW and Pelletier JE. *Feeding America's Schoolchildren: Navigating the Complicated Legal Terrain and Practical Challenges of Federal School Nutrition Programs*. St. Paul, MN: Public Health Law Center, January 2013. <http://www.publichealthlawcenter.org/sites/default/files/resources/Feeding%20America's%20Schoolchildren.pdf> (accessed December 20, 2018).
- 147 Taber DR, Chriqui JF, Perna FM, et al. "Weight Status Among Adolescents in States that Govern Competitive Food Nutrition Content." *Pediatrics*, 130(3): 437–444, 2012.
- 148 *Making It Happen: School Nutrition Success Stories*. Alexandria, VA: U.S. Department of Agriculture, 2005.
- 149 Hilleren H. *School Breakfast Program Cost/Benefit Analysis*. Madison, WI: University of Wisconsin, Extension, 2007. <https://fyi.uwex.edu/wischoolbreakfast/files/2009/10/Wisconsin-School-Breakfast-Cost-Benefit-Analysis-Report-20071.pdf> (accessed December 20, 2018).
- 150 *West Virginia Healthy Lifestyles Act: Year One Evaluation Report*. Morgantown, WV: West Virginia University, Robert C. Byrd Health Sciences Center, Health Research Center, 2009.
- 151 French SA, Story M, Jeffrey RW, et al. "Pricing Strategy to Promote Fruit and Vegetable Purchase in High School Cafeterias." *Journal of the American Dietetic Association*, 97: 1008–1010, 1997.
- 152 French SA, Jeffery RW, Story M, et al. "Pricing and Promotion Effects on Low-Fat Vending Snack Purchases: The CHIPS Study." *American Journal of Public Health*, 91: 112–117, 2001.
- 153 French SA, Story M, Fulkerson JA, and Hannan P. "An Environmental Intervention to Promote Lower-Fat Food Choices in Secondary Schools: Outcomes of the TACOS study." *American Journal of Public Health*, 94: 1507–1512, 2004.
- 154 "School Meals Legislation and Funding by State 2016-2017 School Year." In: *Food Research & Action Center*, February 2018. [http://frac.org/wp-content/uploads/state\\_leg\\_table\\_scorecard.pdf](http://frac.org/wp-content/uploads/state_leg_table_scorecard.pdf) (accessed December 20, 2018).
- 155 Cal. Educ. Code § 49550. [https://leginfo.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=EDC&sectionNum=49550](https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=EDC&sectionNum=49550) (accessed December 20, 2018).
- 156 "School Breakfast Scorecard School Year 2016-2017." In: *Food Research & Action Center*, February 2018. <http://www.frac.org/wp-content/uploads/school-breakfast-scorecard-sy-2016-2017.pdf> (accessed December 20, 2018).
- 157 Ga. Comp. R. & Regs. 160-5-6-.01, 2015. <http://www.gadoe.org/External-Affairs-and-Policy/State-Board-of-Education/Pages/PEABoardRules.aspx> (accessed December 20, 2018).
- 158 "Competitive Foods in Schools." In: *National Conference of State Legislatures*. <http://www.ncsl.org/research/health/competitive-foods-in-schools.aspx> (accessed December 20, 2018).
- 159 Levi J, Segal LM, St. Laurent R, et al. *F as in Fat: How Obesity Policies are Failing in America*. Washington, DC: Trust for America's Health, August 2007. [http://www.genesishealth.com/app/files/public/5363/pdf-article\\_obesity\\_0807r3.pdf](http://www.genesishealth.com/app/files/public/5363/pdf-article_obesity_0807r3.pdf) (accessed December 20, 2018).
- 160 *2017 State Legislative Summary: Fourth Quarter Report*. Oxen Hill, MD: School Nutrition Association. [https://schoolnutrition.org/uploadedFiles/Legislation\\_and\\_Policy/State\\_and\\_Local\\_Legislation\\_and\\_Regulations/2017-Fourth-Quarter-State-Legislation-Report.pdf](https://schoolnutrition.org/uploadedFiles/Legislation_and_Policy/State_and_Local_Legislation_and_Regulations/2017-Fourth-Quarter-State-Legislation-Report.pdf) (accessed December 20, 2018).
- 161 "2017-2018 State-Level Policy and Legislative Trends." In: *No Kid Hungry*. <https://bestpractices.nokidhungry.org/sites/default/files/download-resource/2017-2018%20State-Level%20Policy%20and%20Legislative%20Trends.pdf> (accessed December 20, 2018).
- 162 "State School Breakfast Legislation." In: *Food Research & Action Center*. <http://www.frac.org/state-school-breakfast-legislation> (accessed December 20, 2018).
- 163 "Colorado House Bill 13-1006: Breakfast After the Bell Program." In: *No Kid Hungry*. <http://bestpractices.nokidhungry.org/sites/default/files/download-resource/Colorado%20House%20Bill%2013-1006%3A%20Breakfast%20After%20the%20Bell%20Program.pdf> (accessed December 20, 2018).
- 164 "Breakfast After the Bell Nutrition Program HB 13-1006." In: *Colorado Department of Education*. <https://www.cde.state.co.us/nutrition/osnbreakfastafterthebellnutrition-programhb13-1006> (accessed December 20, 2018).
- 165 "Benefits of School Lunch." In: *Food Research & Action Center*. <http://www.frac.org/programs/national-school-lunch-program/benefits-school-lunch> (accessed December 20, 2018).
- 166 Warren M, Beck S, and Rayburn J. *The State of Obesity: Better Policies for a Healthier America, 2018*. Washington, DC: Trust for America's Health, 2018. <https://stateofobesity.org/wp-content/uploads/2018/09/stateofobesity2018.pdf> (accessed December 20, 2018).
- 167 "Facts: Offering Free Breakfast to All Students." In: *Food Research & Action Center*. <http://frac.org/wp-content/uploads/frac-facts-offering-free-breakfast-to-all-students.pdf> (accessed December 20, 2018).
- 168 Neuberger Z, Segal B, Nchako C, and Masterson K. *Take Up of Community Eligibility This School Year: More Than 6 Million Children Have Better Access to School Meals*. Washington, DC: Center on Budget and Priorities, February 25, 2015. <https://www.cbpp.org/research/take-up-of-community-eligibility-this-school-year> (accessed December 20, 2018).
- 169 "Local School Wellness Policy." In: *ChangeLab Solutions*. <http://www.changelabsolutions.org/local-school-wellness-policy>. (accessed December 20, 2018)
- 170 Hollis JL, Williams AJ, Sutherland R, et al. "A Systematic Review and Meta-Analysis of Moderate-to-Vigorous Physical Activity Levels in Elementary School Physical Education Lessons." *Preventive Medicine*, 86: 34–54, 2016.
- 171 Bezold CP, Konty KJ, Day SE, et al. The effects of changes in physical fitness on academic performance among New York City youth. *J Adolesc Health*. 2014;55(6):774-81.
- 172 Wittberg RA, Northrup KL, Cottrell LA. Children's aerobic fitness and academic achievement: a longitudinal examination of students during their fifth and seventh grade years. *Am J Public Health*. 2012;102(12):2303-7.
- 173 *Play to Learn: Active Recess Through Systematic Supervision*. Roseville, MN: Minneapolis Department of Health and Family Support, 2012. [http://nutritionservices.mpls.k12.mn.us/uploads/ar\\_toolkit\\_-\\_revised\\_fall\\_2012.pdf](http://nutritionservices.mpls.k12.mn.us/uploads/ar_toolkit_-_revised_fall_2012.pdf) (accessed December 20, 2018).
- 174 Ibid.
- 175 *Physical Activity Guidelines for Americans: 2nd edition*. Washington, DC: U.S. Department of Health and Human Services, 2018. [https://health.gov/paguidelines/second-edition/pdf/Physical\\_Activity\\_Guidelines\\_2nd\\_edition.pdf](https://health.gov/paguidelines/second-edition/pdf/Physical_Activity_Guidelines_2nd_edition.pdf) (accessed December 20, 2018).

- 176 SHAPE America Society of Health and Physical Educators. *Strategies for Recess in Schools*. Atlanta: Centers for Disease Control and Prevention, January 2017. <https://www.shapeamerica.org/uploads/pdfs/recess/SchoolRecessStrategies.pdf> (accessed December 20, 2018).
- 177 Erwin HE, Ickes M, Ahn S, and Fedewa A. "Impact of Recess Interventions on Children's Physical Activity: A Meta-Analysis." *American Journal of Health Promotion*, 28(159): 2014.
- 178 *The Association Between School-Based Physical Activity, Including Physical Education, and Academic Performance*. Atlanta: Centers for Disease Control and Prevention, July 2010. [https://www.cdc.gov/healthyyouth/health\\_and\\_academics/pdf/pa-pe\\_paper.pdf](https://www.cdc.gov/healthyyouth/health_and_academics/pdf/pa-pe_paper.pdf) (accessed December 20, 2018).
- 179 Hohmann J. "The Daily 202: Trump Over Performed the Most in Counties with the Highest Drug, Alcohol and Suicide Mortality Rates." *The Washington Post*, December 9, 2016. [https://www.washingtonpost.com/news/powerpost/paloma/daily-202/2016/12/09/daily-202-trump-over-performed-the-most-in-counties-with-the-highest-drug-alcohol-and-suicide-mortality-rates/584a2a59e9b69b7e58e45f2e/?utm\\_term=.d3109d2f4877](https://www.washingtonpost.com/news/powerpost/paloma/daily-202/2016/12/09/daily-202-trump-over-performed-the-most-in-counties-with-the-highest-drug-alcohol-and-suicide-mortality-rates/584a2a59e9b69b7e58e45f2e/?utm_term=.d3109d2f4877) (accessed December 20, 2018).
- 180 "Heroin: Overdose Prevention." In: *Centers for Disease Control and Prevention*. <https://www.cdc.gov/drugoverdose/opioids/heroin.html> (accessed December 20, 2018).
- 181 "HIV and Injection Drug Use in the United States." In: *Centers for Disease Control and Prevention*, October 27, 2015. <https://www.cdc.gov/hiv/risk/idu.html> (accessed December 20, 2018).
- 182 Magiorkinis G, Sypsa V, Magiorkinis E, et al. "Integrating Physiodynamics and Epidemiology to Estimate Transmission Diversity in Viral Epidemics." *PLoS Computational Biology*, 9(1): e1002876, 2013.
- 183 "HIV Among People Who Inject Drugs." In: *Centers for Disease Control and Prevention*, February 2018. <https://www.cdc.gov/hiv/group/hiv-idu.html> (accessed October 26, 2018).
- 184 "HIV in the United States." In: *Centers for Disease Control and Prevention*, 2018. <https://www.cdc.gov/hiv/statistics/overview/ataglance.html> (accessed October 23, 2018).
- 185 "Surveillance for Viral Hepatitis—United States, 2016." In: *Centers for Disease Control and Prevention*, 2018. <https://www.cdc.gov/hepatitis/statistics/2016surveillance/commentary.htm> (accessed October 23, 2018).
- 186 "HIV in the United States." In: *Centers for Disease Control and Prevention*, 2018. <https://www.cdc.gov/hiv/statistics/overview/ataglance.html> (accessed February 5, 2019).
- 187 Ibid.
- 188 Zibbell JE, Iqbal K, Patel RC, et al. "Increases in Hepatitis C Virus Infection Related to Injection Drug Use Among Persons Aged <30 Years—Kentucky, Tennessee, Virginia, and West Virginia, 2006–2012." *The Morbidity and Mortality Weekly Report*, 64(17): 453–458, 2015. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6417a2.htm> (accessed December 20, 2018).
- 189 "HIV Infection, Risk, Prevention, and Testing Behaviors among Persons Who Inject Drugs National HIV Behavioral Surveillance Injection Drug Use 20 U.S. Cities, 2015." *HIV Surveillance Special Report 18* (revised edition), May 2018. <http://www.cdc.gov/hiv/library/reports/hiv-surveillance.html>. <https://www.cdc.gov/hiv/pdf/library/reports/surveillance/cdc-hiv-hsr-nhbs-pwid-2015.pdf> (accessed October 26, 2018).
- 190 "HIV Among People Who Inject Drugs." In: *Centers for Disease Control and Prevention*, February 2018. <https://www.cdc.gov/hiv/group/hiv-idu.html> (accessed October 26, 2018).
- 191 Ibid.
- 192 "2015: Tracing Connections in an HIV-1 Outbreak in Indiana: AMD Helps Link HIV Genetic Data to Identify Transmission Clusters." In: *Centers for Disease Control and Prevention*, 2015. <https://www.cdc.gov/amd/stories/tracing-connections-hiv.html> (accessed December 20, 2018).
- 193 Patel MR, Combs B, Hall P, et al. "Reduction in Injection Risk Behaviors After Institution of an Emergency Syringe Exchange Program During an HIV Outbreak Among Persons Who Inject Drugs, Indiana 2015." *Open Forum Infectious Diseases*, 2(Suppl 1): 638a, December 2015. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4946556/> (accessed December 20, 2018).
- 194 Policy Surveillance Program. "Syringe Distribution Laws." Temple University, 2012–2017. <http://lawatlas.org/datasets/syringe-policies-laws-regulating-non-retail-distribution-of-drug-parapherna> (accessed December 20, 2018).
- 195 Luthra S. "Unable To Arrest Opioid Epidemic, Red States Warm To Needle Exchanges." *Kaiser Health News*, June 14, 2017. <http://khn.org/news/unable-to-arrest-opioid-epidemic-red-states-warm-to-needle-exchanges/> (accessed December 20, 2018).
- 196 Aspinall EJ, Nambiar D, Goldberg DJ, et al. "Are Needle and Syringe Programmes Associated with a Reduction in HIV Transmission Among People Who Inject Drugs: A Systematic Review and Meta-Analysis." *International Journal of Epidemiology*, 43(1), 235–248, 2014. <https://www.ncbi.nlm.nih.gov/pubmed/24374889> (accessed December 20, 2018).
- 197 Institute of Medicine. *Preventing HIV Infection Among Injecting Drug Users in High-Risk Countries. An Assessment of the Evidence*. Washington, DC: National Academies Press, 2006.
- 198 Volkow N. "Syringe-Exchange Programs Are Part of Effective HIV Prevention." *Nora's Blog*, National Institute of Drug Abuse, December 1, 2016. <https://www.drugabuse.gov/about-nida/noras-blog/2016/12/syringe-exchange-programs-are-part-effective-hiv-prevention> (accessed December 20, 2018).
- 199 Des Jarlais DC, Perlis T, Arastah K, et al. "HIV Incidence Among Injection Drug Users in New York City, 1990 to 2002: Use of Serologic Test Algorithm to Assess Expansion of HIV Prevention Services." *American Journal of Public Health*, 95(8): p. 1439–1444, 2005.
- 200 Ruiz MS, O'Rourke A, and Allen ST. "Impact Evaluation of a Policy Intervention for HIV Prevention in Washington, DC." *AIDS and Behavior*, 20(1): 22–28, 2016.
- 201 "HIV Cost-Effectiveness." In: *Centers for Disease Control and Prevention*, September 23, 2015. <https://www.cdc.gov/hiv/programresources/guidance/costeffectiveness/index.html> (accessed December 20, 2018).
- 202 "Syringe Services Programs." In: *Centers for Disease Control and Prevention*, May 17, 2016. <https://www.cdc.gov/hiv/risk/ssps.html> (accessed December 20, 2018).
- 203 Nguyen TQ, Weir BW, Des Jarlais DC, et al. "Syringe Exchange in the United States: A National Level Economic Evaluation of Hypothetical Increases in Investment." *AIDS and Behavior*, 18(11): p. 2144–2155, 2014.
- 204 Belani HK and PA Muennig. "Cost-Effectiveness of Needle and Syringe Exchange for the Prevention of HIV in New York City." *Journal of HIV/AIDS & Social Services*, 7(3): 229–240, 2008.
- 205 "Congress Eases Restrictions on Funding for Syringe Exchange." In: *amfAR*, January 8, 2016. <http://www.amfar.org/congress-eases-restrictions-on-funding-for-syringe-exchange/> (accessed December 20, 2018).
- 206 Policy Surveillance Program. "Syringe Distribution Laws." Temple University, 2012–2017. <http://lawatlas.org/datasets/syringe-policies-laws-regulating-non-retail-distribution-of-drug-parapherna> (accessed December 20, 2018).
- 207 "Syringe Services Programs and the Opioid Epidemic." In: *amfAR*. <https://www.amfar.org/ssp-opioid-epidemic/> (accessed December 20, 2018)
- 208 Smith N. "Four States Passed Needle Exchange Legislation in 2015, Two More in 2016." *Nathan Smith's Blog*, the Council of State Governments, May 24, 2016. <http://knowledgecenter.csg.org/kc/content/four-states-passed-needle-exchange-legislation-2015-two-more-2016> (accessed December 20, 2018).

- 209 “What is Syringe Exchange.” In: *North Carolina Harm Reduction Coalition*. <http://www.nchrc.org/syringe-exchange/> (accessed December 20, 2018).
- 210 Drug Policy Alliance. Press release: “Governor Terry McAuliffe Legalizes Syringe Access Programs in Virginia.” February 23, 2017. <http://www.drugpolicy.org/news/2017/02/governor-terry-mcauliffe-legalizes-syringe-access-programs-virginia> (accessed December 20, 2018).
- 211 Monares F. “Bill Allowing Needle and Syringe Exchange Program Becomes Law.” *Bozeman Daily Chronicle*, June 2, 2017. [http://www.bozemandailychronicle.com/news/mtleg/bill-allowing-needle-and-syringeexchange-program-becomes-law/article\\_c765d8ab-3e44-581f-a60c-6b4b53cca513.html](http://www.bozemandailychronicle.com/news/mtleg/bill-allowing-needle-and-syringeexchange-program-becomes-law/article_c765d8ab-3e44-581f-a60c-6b4b53cca513.html) (accessed December 20, 2018).
- 212 Associated Press. “Sununu Signs Bill Allowing Needle Exchange Programs.” *US News & World Report*, June 16, 2017. <https://www.usnews.com/news/best-states/new-hampshire/articles/2017-06-16/sununu-signsbill-allowing-needle-exchange-programs> (accessed December 20, 2018).
- 213 “Syringe Exchange Programs in North Carolina: Information for Law Enforcement.” In: *North Carolina Harm Reduction Coalition*. <http://ncja.ncdoj.gov/getdoc/ac5819af-9621-433a-8b9c-5cc8ea8337e3/Instructions-for-Law-Enforcement-Syringe-Exchange.aspx> (accessed December 20, 2018).
- 214 “National Opioid Epidemic: Syringe Exchange Programs.” In: *amfAR, Opioid & Health Indicators Database*. [http://opioid.amfar.org/indicator/num\\_SSPs](http://opioid.amfar.org/indicator/num_SSPs) (accessed December 20, 2018).
- 215 Policy Surveillance Program. “Syringe Distribution Laws.” Temple University, 2012–2017. <http://lawatlas.org/datasets/syringe-policies-laws-regulating-non-retail-distribution-of-drug-parapherna> (accessed December 20, 2018).
- 216 Segal LM, De Biasi A, and Mueller JL. *Pain in the Nation: The Drug, Alcohol and Suicide Crises and The Need For A National Resilience Strategy*. Washington, DC: Trust for America’s Health, November 2017. <http://www.paininthenation.org/> (accessed December 20, 2018).
- 217 Davis C and Chang S. “Legal Interventions to Reduce Overdose Mortality: Naloxone Access and Overdose Good Samaritan Laws.” *The Network for Public Health Law*, 32(19): 2, 2013.
- 218 *Prescription Drug Abuse, Addiction And Diversion: Overview Of State Legislative And Policy Initiatives: Part 3: Prescribing Of Controlled Substances For Non-Cancer Pain*. Santa Fe, NM: The National Alliance for Model State Drug Laws, October 2013. <http://www.namsdl.org/library/7176E80B-1C23-D4F9-745A3D08D1C82161/> (accessed December 20, 2018).
- 219 *Health, United States, 2017: With Special Feature on Mortality*. Hyattsville, MD: National Center for Health Statistics, 2018. <https://www.cdc.gov/nchs/data/hus/hus17.pdf> (accessed December 20, 2018).
- 220 Yoon PW, Bastian B, Anderson RN, et al. “Potentially Preventable Deaths from the Five Leading Causes of Death—United States, 2008–2010.” *Morbidity and Mortality Weekly Report*, 63(17), May 2, 2014. <https://www.cdc.gov/mmwr/pdf/wk/mm6317.pdf> (accessed December 20, 2018).
- 221 “What Are the Risk Factors for Heart Disease?” In: *National Heart Lung and Blood Institute*, National Institutes of Health, 2012. <https://www.nhlbi.nih.gov/health/educational/hearttruth/lower-risk/risk-factors.htm> (accessed December 20, 2018).
- 222 “The Genetics of Cancer.” In: *National Cancer Institute, National Institutes of Health*, 2013. <http://www.cancer.gov/cancertopics/prevention-genetics-causes> (accessed December 20, 2018).
- 223 World Health Organization. “Risk Factors for Chronic Respiratory Diseases.” In: *Global Surveillance, Prevention and Control of Chronic Respiratory Diseases: A Comprehensive Approach*. Geneva, Switzerland: World Health Organization, 2007: 37–55. <https://www.who.int/gard/publications/GARD%20Book%202007.pdf> (accessed December 20, 2018).
- 224 “Stroke Risk Factors.” In: *Centers for Disease Control and Prevention*, 2010. [http://www.cdc.gov/stroke/risk\\_factors.htm](http://www.cdc.gov/stroke/risk_factors.htm) (accessed December 20, 2018).
- 225 Doll LS, Bonzo SE, Mercy JA, and Sleet DA (eds.). *Handbook of Injury and Violence Prevention*. New York: Springer, 2007.
- 226 “Tobacco Use in Racial and Ethnic Populations.” In: *American Lung Association*, 2018. <https://www.lung.org/stop-smoking/smoking-facts/tobacco-use-racial-and-ethnic.html> (accessed December 20, 2018).
- 227 Substance Abuse and Mental Health Services Administration. “Recent Trends in Menthol Cigarette Use.” *The NSDUH Report*, November 18, 2011. [https://www.samhsa.gov/data/sites/default/files/WEB\\_SR\\_088/WEB\\_SR\\_088/WEB\\_SR\\_088.pdf](https://www.samhsa.gov/data/sites/default/files/WEB_SR_088/WEB_SR_088/WEB_SR_088.pdf) (accessed December 20, 2018).
- 228 Levy DT, Blackman K, Tauras J, et al. “Quit Attempts and Quit Rates Among Menthol and Nonmenthol Smokers in the United States.” *American Journal of Public Health*, 101(7): 1241–1247, July 2011.
- 229 “Tobacco Fact Sheet: Menthol.” In: *Legacy for Health*, April 2014. <https://truthinitiative.org/sites/default/files/LEG-FactSheet-Topical-Menthol-APR2014.pdf> (accessed December 20, 2018).
- 230 Jamal A, Phillips E, Gentzke AS, et al. “Current Cigarette Smoking Among Adults—United States, 2016.” *Morbidity and Mortality Weekly Report*, 67: 53–59, 2018. <https://www.cdc.gov/mmwr/volumes/67/wr/mm6702a1.htm> (accessed January 30, 2018).
- 231 “CDC Health Disparities and Inequalities Report—United States, 2013.” *Morbidity and Mortality Weekly Report*, 62(3), 2013. <https://www.cdc.gov/mmwr/pdf/other/su6203.pdf> (accessed December 20, 2018).
- 232 McLeroy KR, Bibeau D, Steckler A, and Glanz K. “An Ecological Perspective on Health Promotion Programs.” *Health Education & Behavior*, 15(4): 351–377, December 1, 1988. <https://journals.sagepub.com/doi/abs/10.1177/109019818801500401> (accessed December 20, 2018).
- 233 *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/front-matter.pdf> (accessed December 20, 2018).
- 234 Xu X, Bishop EE, Kennedy SM, et al., “Annual Healthcare Spending Attributable to Cigarette Smoking: An Update.” *American Journal of Preventative Medicine*, 48(3): 326–333, March 2015. <https://www.ncbi.nlm.nih.gov/pubmed/25498551> (accessed December 20, 2018).
- 235 *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/front-matter.pdf> (accessed December 20, 2018).
- 236 *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012. <https://www.surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/full-report.pdf> (accessed December 20, 2018).
- 237 Xu X, Bishop EE, Kennedy SM, et al., “Annual Healthcare Spending Attributable to Cigarette Smoking: An Update.” *American Journal of Preventative Medicine*, 48(3): 326–333, March 2015. <https://www.ncbi.nlm.nih.gov/pubmed/25498551> (accessed December 20, 2018).
- 238 Ibid.
- 239 *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/front-matter.pdf> (accessed December 20, 2018).

- 240 Hyland A, Barnoya J, and Corral JE. "Smoke-Free Air Policies: Past, Present and Future." *Tobacco Control*, 21: 154–161, 2012.
- 241 *Tobacco Use and Secondhand Smoke Exposure: Smoke-Free Policies*. Atlanta: Centers for Disease Control and Prevention, the Community Guide, 2012. <https://www.thecommunityguide.org/findings/tobacco-use-and-secondhand-smoke-exposure-smoke-free-policies> (accessed December 20, 2018).
- 242 "Smoke-Free Public Housing and Multifamily Properties." In: *U.S. Department of Housing and Urban Development*. [https://www.hud.gov/program\\_offices/healthy\\_homes/smokefree](https://www.hud.gov/program_offices/healthy_homes/smokefree) (accessed December 20, 2018).
- 243 "States and Municipalities with Laws Regulating Use of Electronic Cigarettes." In: *Americans for Nonsmokers' Rights Foundation*, 1998. <http://www.no-smoke.org/pdf/ecigslaws.pdf> (accessed December 20, 2018).
- 244 Hopkins M, Hallett C, Babb S, et al. "Comprehensive Smoke-Free Laws—50 Largest U.S. Cities, 2000 and 2012." *Morbidity and Mortality Weekly Report*, 61(45): 914–917, 2012. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6145a3.htm>
- 245 "Smoke-Free Policies for Outdoor Areas." In: *County Health Rankings & Roadmaps, 2017*. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/smoke-free-policies-for-outdoor-areas> (accessed December 20, 2018).
- 246 "Smoke-Free Policies for Multi-Unit Housing." In: *County Health Rankings & Roadmaps, 2017*. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/smoke-free-policies-for-multi-unit-housing> (accessed December 20, 2018).
- 247 Hoffman SJ and Tan C. "Overview of Systematic Reviews on the Health-Related Effects of Government Tobacco Control Policies." *BMC Public Health*, 15: 744, 2015. <https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-015-2041-6> (accessed December 20, 2018).
- 248 *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/front-matter.pdf> (accessed December 20, 2018).
- 249 Homa DM, Neff LJ, King BA, et al. "Vital Signs: Disparities in Nonsmokers' Exposure to Secondhand Smoke—United States, 1999–2012." *Morbidity and Mortality Weekly Report*, 64(RR-04): 103–108, 2015. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6404a7.htm> (accessed December 20, 2018).
- 250 "Electronic Cigarettes Should Be Included in Smoke-Free Laws." In: *Campaign for Tobacco-Free Kids*, December 18, 2018. <https://www.tobaccofreekids.org/assets/factsheets/0387.pdf> (accessed December 20, 2018).
- 251 Hahn EJ. "Smokefree Legislation: A Review of Health and Economic Outcomes Research." *American Journal of Preventive Medicine*, 39(6 Suppl 1): S66–S76, 2010.
- 252 Tan CE and Glantz SA. "Association Between Smoke-Free Legislation and Hospitalizations for Cardiac, Cerebrovascular, and Respiratory Diseases: A Meta-Analysis." *Circulation*, 126(18): 2177–2183, 2012.
- 253 Hoffman SJ and Tan C. "Overview of Systematic Reviews on the Health-Related Effects of Government Tobacco Control Policies." *BMC Public Health*, 15: 744, 2015.
- 254 Hopkins DP, Razi S, Leeks KD, et al. "Smokefree Policies to Reduce Tobacco Use: A Systematic Review." *American Journal of Preventive Medicine*, 38(2 Suppl): S275–S289, 2010.
- 255 Hoffman SJ and Tan C. "Overview of Systematic Reviews on the Health-Related Effects of Government Tobacco Control Policies." *BMC Public Health*, 15: 744, 2015.
- 256 Sureda X, Fernandez E, Lopez MJ, and Nebot M. "Secondhand Tobacco Smoke Exposure in Open and Semi-Open Settings: A Systematic Review." *Environmental Health Perspectives*, 121(7): 766–773.
- 257 Okoli C, Johnson A, Pederson A, et al. "Changes in Smoking Behaviours Following a Smokefree Legislation in Parks and on Beaches: An Observational Study." *BMJ Open*, 3(6): 1–7, 2013.
- 258 "Comprehensive Tobacco Control Programs Reduce Tobacco Use." In: *The Community Guide*. <https://www.thecommunityguide.org/content/comprehensive-tobacco-control-programs-reduce-tobacco-use> (accessed December 20, 2018).
- 259 Lupton RJ and Townsend LJ. "A Systematic Review and Meta-Analysis of the Acceptability and Effectiveness of University Smoke-Free Policies." *Journal of American College Health*, 63(4): 238–247, 2015.
- 260 Pizacani BA, Maher JE, Rohde K, et al. "Implementation of a Smoke-Free Policy in Subsidized Multiunit Housing: Effects on Smoking Cessation and Secondhand Smoke Exposure." *Nicotine & Tobacco Research*, 14(9): 1027–1034, 2012.
- 261 Kennedy RD, Ellens-Clark S, Nagge L, et al. "A Smoke-Free Community Housing Policy: Changes in Reported Smoking Behavior—Findings From Waterloo Region, Canada." *Journal of Community Health*, 40(6): 1207–1215, 2015.
- 262 "Tobacco Use and Secondhand Smoke Exposure: Smoke-Free Policies." In: *The Community Guide*, 2012. <https://www.thecommunityguide.org/findings/tobacco-use-and-secondhand-smoke-exposure-smoke-free-policies> (accessed December 20, 2018).
- 263 Ong M, Lightwood J, and Glantz SA. *Health and Economic Impacts of the Proposed Florida Smoke-free for Health Initiative*. San Francisco: University of California, San Francisco, Center for Tobacco Control Research and Education, January 2002. <http://www.escholarship.org/uc/item/619328sg> (accessed December 20, 2018).
- 264 Kennedy RD, Zummach D, Filsinger S, and Leatherdale ST. "Reported Municipal Costs from Outdoor Smoke-Free By-Laws-Experience from Ontario, Canada. Tobacco." *Induced Diseases*, 12(1): 4–10, 2014.
- 265 King BA, Peck RM, and Babb SD. "National and State Cost Savings Associated with Prohibiting Smoking in Subsidized and Public Housing in the United States." *Preventing Chronic Disease*, 11: 140–222, 2014. [https://www.cdc.gov/pcd/issues/2014/14\\_0222.htm](https://www.cdc.gov/pcd/issues/2014/14_0222.htm) (accessed December 20, 2018).
- 266 Mason J, Wheeler W, and Brown MJ. "The Economic Burden of Exposure to Secondhand Smoke for the Child and Adult Never Smokers Residing in U.S. Public Housing." *Public Health Reports*, 130(3): 230–244, 2015.
- 267 "Smokefree Air Laws." In: *American Lung Association*. <http://www.lung.org/our-initiatives/tobacco/smokefree-environments/smokefree-air-laws.html> (accessed December 20, 2018).
- 268 "Map of Smokefree Indoor Air—Private Worksites, Restaurants, and Bars." In: *Centers for Disease Control and Prevention*, 2018. <https://www.cdc.gov/statesystem/smokefreeindoorair.html> (accessed December 20, 2018).
- 269 "Connecting for better health—Preemption Map." In: *Grassroots Change*. <https://grassrootschange.net/preemption-watch/#/category/smokefree> (accessed December 20, 2018).
- 270 "Smoke-Free Public Housing and Multifamily Properties." In: *U.S. Department of Housing and Urban Development*. [https://www.hud.gov/program\\_offices/healthy\\_homes/smokefree](https://www.hud.gov/program_offices/healthy_homes/smokefree) (accessed December 20, 2018).
- 271 Ibid.
- 272 "Smokefree Air Laws." In: *American Lung Association*. <http://www.lung.org/our-initiatives/tobacco/smokefree-environments/smokefree-air-laws.html> (accessed December 20, 2018).
- 273 "STATE System Multiunit Housing Fact Sheet." In: *Centers for Disease Control and Prevention*, 2015.
- 274 "Smoke-Free Air Law Information." In: *Public Health: Madison & Dane County*. <https://www.publichealthmdc.com/community-initiatives/reduce-drug-harm-violence/tobacco-free-columbia-dane-county-0> (accessed December 20, 2018).

- 275 “Smoke-free policies for outdoor areas.” In: *What Works for Health: Policies and Programs to Improve Wisconsin’s Health*, 2018. <http://whatworksforhealth.wisc.edu/program.php?t1=21&t2=15&t3=98&id=619> (accessed December 20, 2018).
- 276 Voskuil KR, Palmersheim KA, Glysch RL, and Jones NR. *Burden of Tobacco in Wisconsin: 2010 Edition*. Madison, WI: University of Wisconsin Carbone Cancer Center, March 2010.
- 277 Palmersheim KA, Pfister KP, and Glysch RL. *The Impact of Wisconsin’s Statewide Smoke-free Law on Bartender Health and Attitudes*. Milwaukee: University of Wisconsin Center for Urban Initiatives and Research, 2010. [https://uwm.edu/cuir/wp-content/uploads/sites/111/2015/04/WI\\_Bartender\\_Study\\_2010.pdf](https://uwm.edu/cuir/wp-content/uploads/sites/111/2015/04/WI_Bartender_Study_2010.pdf) (accessed December 20, 2018).
- 278 Speight B. “Smoke and Mirrors: Tobacco Industry Claims Unfounded: Economic Studies Conclude Smoke Free Laws Do Not Harm Bar and Restaurant Business.” Madison, WI: WISPIRG Public Interest Group, February 2008. <https://wispirgfoundation.org/sites/pirg/files/reports/Smoke%20and%20Mirrors.pdf> (accessed December 20, 2018).
- 279 Ibid.
- 280 “Guide to Laws and Regulations for Restaurant Owners: Smoking.” In: *Wisconsin Restaurant Association*, 2010. <http://www.wirestaurant.org/pdf/membership/smoking11.pdf> (accessed December 20, 2018).
- 281 Gakhar M, Hazen A, Khanchandani H, et al. *Smoke-free Policies Establishing a Smoke-Free Ordinance to Reduce Exposure to Secondhand Smoke in Indoor Worksites and Public Places. An Action Guide*. Washington, DC: Partnership for Prevention, October 2007. <http://www.prevent.org/data/files/initiatives/smokefreepolicies.pdf>
- 282 *Smokefree Outdoor Areas Ordinance A Model California Ordinance Regulating Smoking in Outdoor Areas*. Oakland, CA: Technical Assistance Legal Center, Public Health Law & Policy, August 2011. [http://legacy.lawatlas.org/files/skc/Smokefree\\_Outdoor\\_Areas\\_Ordinance.pdf](http://legacy.lawatlas.org/files/skc/Smokefree_Outdoor_Areas_Ordinance.pdf) (accessed December 20, 2018).
- 283 D’Angelo H, Ammerman A, Gordon-Larsen P, et al. “Sociodemographic Disparities in Proximity of Schools to Tobacco Outlets and Fast-Food Restaurants.” *American Journal of Public Health*, 106(9): 1556-1562, September 2016. <https://www.ncbi.nlm.nih.gov/pubmed/27459453> (accessed December 20, 2018).
- 284 Wilson LM, Avila Tang E, Chander G, et al. “Impact of Tobacco Control Interventions on Smoking Initiation, Cessation, and Prevalence: A Systematic Review.” *Journal of Environmental and Public Health*, 2012(961724), March 8, 2012 <https://www.hindawi.com/journals/jeph/2012/961724/abs/> (accessed December 20, 2018).
- 285 “Tobacco Taxes.” In: *County Health Rankings & Roadmaps*, 2017. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/tobacco-taxes> (accessed December 20, 2018).
- 286 *The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/front-matter.pdf> (accessed December 20, 2018).
- 287 Hoffman SJ and Tan C. “Overview of Systematic Reviews on The Health-Related Effects of Government Tobacco Control Policies.” *BMC Public Health*, 15: 744, 2015.
- 288 Choi K and Boyle RG. “Changes in Cigarette Expenditure Minimizing Strategies Before and After a Cigarette Tax Increase.” *Tobacco Control*, 27: 99–104, 2018.
- 289 “Reducing Tobacco Use and Secondhand Smoke Exposure: Interventions to Increase the Unit Price for Tobacco Products.” In: *The Community Guide*, November 2012. <https://www.thecommunityguide.org/findings/tobacco-use-and-secondhand-smoke-exposure-interventions-increase-unit-price-tobacco> (accessed December 20, 2018).
- 290 “Map of Excise Tax Rates on Cigarettes.” In: *Centers for Disease Control and Prevention*, June 2018. <https://www.cdc.gov/statesystem/excisetax.html> (accessed December 20, 2018).
- 291 “Tobacco Tax Basics: An Introduction to Key Considerations for States.” In: *Tobacco Control Legal Consortium*, 2012. <http://www.publichealthlawcenter.org/sites/default/files/resources/tclc-fs-tobaccotax-basics-2012.pdf> (accessed December 20, 2018).
- 292 “U.S. Local Tobacco Tax Authority: A 50-State Review.” In: *Tobacco Control Legal Consortium*, 2016. <https://publichealthlawcenter.org/sites/default/files/resources/tclc-tobacco-tax-authority-50-state-review-2016.pdf> (accessed December 20, 2018).
- 293 “Cigarette Tax Increases by State per Year, 2000-2018.” In: *Campaign for Tobacco-Free Kids*, 2018. <https://www.tobaccofreekids.org/assets/factsheets/0275.pdf> (accessed December 20, 2018).
- 294 “Cigarette and Tobacco Products Tax.” In: *New York State Department of Taxation and Finance*, 2018. <https://www.tax.ny.gov/bus/cig/cigidx.htm> (accessed December 20, 2018).
- 295 “Table 13: Cigarette, Tobacco Products, Cigarette Retail License and Vending Machine Sticker Collection Fiscal Years 1987-2016.” In: *New York State Department of Taxation and Finance*, August 24, 2016. [https://www.tax.ny.gov/pdf/2015-16\\_Collections/Table13.pdf](https://www.tax.ny.gov/pdf/2015-16_Collections/Table13.pdf) (accessed December 20, 2018).
- 296 *Behavioral Risk Factor Surveillance System, 2016*. Atlanta: Centers for Disease Control and Prevention, 2016.
- 297 *Youth Risk Behavior Surveillance System, 2017*. Atlanta: Centers for Disease Control and Prevention, 2017.
- 298 *Best Practices for Comprehensive Tobacco Control Programs*. Atlanta: Centers for Disease Control and Prevention, 2014. [https://www.cdc.gov/tobacco/stateandcommunity/best\\_practices/pdfs/2014/state-funding-fact-sheet.pdf](https://www.cdc.gov/tobacco/stateandcommunity/best_practices/pdfs/2014/state-funding-fact-sheet.pdf) (accessed December 20, 2018).
- 299 “Tobacco Tax Basics: An Introduction to Key Considerations for States.” In: *Tobacco Control Legal Consortium*. <http://publichealthlawcenter.org/sites/default/files/resources/tclc-fs-tobaccotax-basics-2012.pdf> (accessed December 20, 2018).
- 300 *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2012. [https://www.cdc.gov/tobacco/data\\_statistics/sgr/2012/index.htm](https://www.cdc.gov/tobacco/data_statistics/sgr/2012/index.htm) (accessed December 20, 2018).
- 301 “Increasing the Minimum Legal Sale Age for Tobacco Products to 21.” In: *Campaign for Tobacco-Free Kids*, 2018. <https://www.tobaccofreekids.org/assets/factsheets/0376.pdf> (accessed December 20, 2018).
- 302 “Alcohol and Public Health: Alcohol-Related Disease Impact (ARDI). Average for United States 2006–2010 Alcohol-Attributable Deaths Due to Excessive Alcohol Use.” In: *Centers for Disease Control and Prevention*. [https://nccd.cdc.gov/DPH\\_ARDI/Default/Report.aspx?T=AAM&P=f6d7eda7-036e-4553-9968-9b17fad620e&R=d7a9b303-48e9-4440-bf47-070a4827e1fd&M=8E1C5233-5640-4EE8-9247-1ECA7DA325B9&F=&D="](https://nccd.cdc.gov/DPH_ARDI/Default/Report.aspx?T=AAM&P=f6d7eda7-036e-4553-9968-9b17fad620e&R=d7a9b303-48e9-4440-bf47-070a4827e1fd&M=8E1C5233-5640-4EE8-9247-1ECA7DA325B9&F=&D=) (accessed December 20, 2018).
- 303 Kanny D, Naimi TS, Liu Y, et al. “Annual Total Binge Drinks Consumed by U.S. Adults, 2015.” *American Journal of Preventive Medicine*, 54(4): 486–496, 2018. <https://www.ncbi.nlm.nih.gov/pubmed/29555021> (accessed December 20, 2018).
- 304 Ibid.
- 305 “Table 2.83B—Alcohol Use, Binge Alcohol Use, and Heavy Alcohol Use in Past Month among Persons Aged 12 to 20, by Demographic Characteristics: Percentages, 2014 and 2015.” In: *2015 National Survey on Drug Use and Health*. Rockville, MD: Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/data/sites/default/files/NSDUH-DefTabs-2015/NSDUH-DefTabs-2015/NSDUH-DefTabs-2015.htm#tab2-83b> (accessed December 20, 2018).

- 306 Sacks JJ, Gonzales KR, Bouchery EE, et al. "2010 National and State Costs of Excessive Alcohol Consumption." *American Journal of Preventive Medicine*, 49(5): e73–e79, 2015.
- 307 "Alcohol Taxes FAQ." In: *ChangeLab Solutions*. <http://www.changelabsolutions.org/node/5766/product/5721> (accessed December 20, 2018).
- 308 Wagenaar AC, Salois MJ, and Komro KA. "Effects of Beverage Alcohol Price and Tax Levels on Drinking: A Meta-Analysis of 1003 Estimates From 112 Studies." *Addiction*, 104(2): 179–190, 2009.
- 309 Elder RW, Lawrence B, Ferguson A, et al. "The Effectiveness of Tax Policy Interventions for Reducing Excessive Alcohol Consumption and Related Harms." *American Journal of Preventive Medicine*, 38(2), 217–229. <http://doi.org/10.1016/j.amepre.2009.11.005> (accessed December 20, 2018).
- 310 "Alcohol Taxes." In: *County Health Rankings & Roadmaps, 2017*. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/alcohol-taxes> (accessed December 20, 2018).
- 311 Sacks JJ, Gonzales KR, Bouchery EE, et al. "2010 National and State Costs of Excessive Alcohol Consumption." *American Journal of Preventive Medicine*, 49(5): e73–79, 2015.
- 312 "Alcohol Rates 2000-2010, 2013-2017." In: *Urban-Brookings Tax Policy Center, 2017*. <https://www.taxpolicycenter.org/statistics/alcohol-rates-2000-2010-2013-2017> (accessed December 20, 2018).
- 313 Meier PS, Holmes J, Angus C, et al. "Estimated Effects of Different Alcohol Taxation and Price Policies on Health Inequalities: A Mathematical Modelling Study." *PLoS Medicine*, 13(2): 1–27, 2016.
- 314 Giesbrecht N, Wettlaufer A, Cukier S, et al. "Do Alcohol Pricing and Availability Policies Have Differential Effects on Sub-Populations? A Commentary." *International Journal of Alcohol and Drug Research*, 5(3): 89–99, 2016.
- 315 Alcohol Epidemiology Program. *Alcohol Policies in the U.S.: Highlights from the 50 States*. Minneapolis: University of Minnesota, 2000.
- 316 "Alcohol Beverages Taxes, Beer." In: *National Institute on Alcohol Abuse and Alcoholism, 2018*. <https://alcoholpolicy.niaaa.nih.gov/apis-policy-topics/beer/30>.
- 317 Jernigan DH, Waters H, Ross C, and Stewart A. "The Potential Economic Effects of Alcohol Excise Tax Increases in Maryland." Baltimore: Johns Hopkins Bloomberg School of Public Health, January 4, 2011. [http://www.camy.org/\\_docs/resources/reports/alcohol-pricing/tax-report-2011-potential-economic-effects-alcohol-excise-tax-increases-maryland.pdf](http://www.camy.org/_docs/resources/reports/alcohol-pricing/tax-report-2011-potential-economic-effects-alcohol-excise-tax-increases-maryland.pdf) (accessed December 20, 2018).
- 318 Ibid.
- 319 Ibid.
- 320 Franchot P. *Comptroller of Maryland Alcohol & Tobacco Tax Annual Report, Fiscal Year 2009*. Annapolis: Treasury Department, Comptroller's Office, 2009. <http://www.comp.state.md.us/finances/revenue/alcoholtobacco/annual/AnnualReportFY2009.pdf> (accessed December 20, 2018).
- 321 Jernigan D and DeMarco V. "How Marylanders Beat the Alcohol Lobby." *The Washington Post*, May 20, 2011. [https://www.washingtonpost.com/opinions/how-marylanders-beat-the-alcohol-lobby/2011/05/18/AFVVF17G\\_story.html?noredirect=on&utm\\_term=.e7eeb10bf74](https://www.washingtonpost.com/opinions/how-marylanders-beat-the-alcohol-lobby/2011/05/18/AFVVF17G_story.html?noredirect=on&utm_term=.e7eeb10bf74) (accessed December 20, 2018).
- 322 Esser MB, Waters H, Smart M, and Jernigan DH. "Impact of Maryland's 2011 Alcohol Sales Tax Increase on Alcoholic Beverage Sales." *The American Journal of Drug and Alcohol Abuse*, 42:4, 404–411, 2016. 10.3109/00952990.2016.1150485 (accessed December 20, 2018).
- 323 "Alcohol—Excessive Consumption: Increasing Alcohol Taxes." In: *The Community Guide*. <https://www.thecommunityguide.org/findings/alcohol-excessive-consumption-increasing-alcohol-taxes> (accessed December 20, 2018).
- 324 "Alcohol Outlet Density Restrictions." In: *County Health Rankings & Roadmaps, 2014*. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/alcohol-outlet-density-restrictions> (accessed December 20, 2018).
- 325 "Excessive Alcohol Consumption." In: *The Community Guide*. <https://www.thecommunityguide.org/topic/alcohol-excessive-consumption> (accessed December 20, 2018).
- 326 Rammohan V, Hahn RA, Elder R, et al. "Effects of Dram Shop Liability and Enhanced Overservice Law Enforcement Initiatives on Excessive Alcohol Consumption and Related Harms: Two Community Guide Systematic Reviews." *American Journal of Preventive Medicine*, 41(3): 334–343, 2011.
- 327 Kanny D, Naimi TS, Liu Y, et al. "Annual Total Binge Drinks Consumed by U.S. Adults, 2015." *American Journal of Preventive Medicine*, 54(4): 486–496, 2018. <https://www.ncbi.nlm.nih.gov/pubmed/29555021> (accessed December 20, 2018).
- 328 McNichol E. *It's Time for States to Invest in Infrastructure*. Washington, DC: Center on Budget and Policy Priorities, August 10, 2017. <https://www.cbpp.org/research/state-budget-and-tax/its-time-for-states-to-invest-in-infrastructure> (accessed December 20, 2018).
- 329 "Facts about Physical Activity." In: *Centers for Disease Control and Prevention, 2014*. <https://www.cdc.gov/physicalactivity/data/facts.htm> (accessed December 20, 2018).
- 330 Ibid.
- 331 Ibid.
- 332 Retting R. *Pedestrian Traffic Fatalities by State: 2017 Preliminary Data*. Washington, DC: Governors Highway Safety Association, February 28, 2018. <https://www.ghsa.org/resources/spotlight-pedestrians18> (accessed December 20, 2018).
- 333 *Dangerous By Design 2016*. Washington, DC: Smart Growth America, January 2017. <http://www.smartgrowthamerica.org/dangerous-by-design/> (accessed December 20, 2018).
- 334 Lugo A. *Integrating Equity in Bike Advocacy: An interim report on the internal equity assessment at the League of American Bicyclists*. Washington, DC: League of American Bicyclists, June 2014. [http://bikeleague.org/sites/default/files/League\\_internal\\_equity\\_web.pdf](http://bikeleague.org/sites/default/files/League_internal_equity_web.pdf) (accessed December 20, 2018).
- 335 Lee AE and Handy SL. "Leaving Level-of-Service Behind: The Implications of a Shift to VMT Impact Metrics." *Research in Transportation Business & Management*, March 5, 2018. <https://www.sciencedirect.com/science/article/pii/S2210539517301323> (accessed December 20, 2018).
- 336 "Physical Activity: Built Environment Approaches Combining Transportation System Interventions with Land Use and Environmental Design." In: *Community Preventive Services Task Force, 2017*. <https://www.thecommunityguide.org/sites/default/files/assets/PA-Built-Environments.pdf> (accessed December 20, 2018).
- 337 Lowry M and Loh TH. "Quantifying Bicycle Network Connectivity." *Preventive Medicine*, 95(Suppl): S134–S140, 2017.
- 338 Yang L, Sahlqvist S, McMinn A, et al. "Interventions to Promote Cycling: Systematic Review." *BMJ*, 341: c5293, 2010. <https://www.bmj.com/content/341/bmj.c5293> (accessed December 20, 2018).
- 339 Ibid.
- 340 "Physical Activity." In: *The Community Guide*. [https://www.thecommunityguide.org/topic/physical-activity?field\\_recommendation\\_tid=All&items\\_per\\_page=All](https://www.thecommunityguide.org/topic/physical-activity?field_recommendation_tid=All&items_per_page=All) (accessed December 20, 2018).
- 341 "Physical Activity Builds a Healthy and Strong America." In: *Centers for Disease Control and Prevention*. <https://www.cdc.gov/physicalactivity/downloads/healthy-strong-america.pdf> (accessed December 20, 2018).
- 342 Moore T and Taylor P. *White Paper on the Economics of Complete Streets*. Portland, OR: ECONorthwest, August 23, 2013. <https://sccrtc.org/wp-content/uploads/2013/08/2013-complete-streets-whitepaper.pdf> (accessed December 20, 2018).

- 343 Nicholls J, Cannon S, Lindquist K, and Reeves P. *WA-RD 780.1 Washington's Complete Streets and Main Street Highways: Case Study Resource*. Olympia, WA: Washington State Department of Transportation, November 2011. [https://www.wsdot.wa.gov/sites/default/files/2015/02/24/ATP\\_WA-CompleteStreets.pdf](https://www.wsdot.wa.gov/sites/default/files/2015/02/24/ATP_WA-CompleteStreets.pdf) (accessed December 20, 2018).
- 344 Warren M, Beck S, and Rayburn J. "Complete Streets." In: *The State of Obesity: Better Policies for a Healthier America*, 2018. Washington, DC: Trust for America's Health, 2018. <https://stateofobesity.org/state-policy/policies/completestreets/> (accessed December 20, 2018).
- 345 Minn. Stat. Ann. § 174.75.
- 346 La. Stat. Ann. § 48:22.1.
- 347 Nev. Rev. Stat. Ann. § 403.575. See also: Md. Code Ann., Transp. § 8-905 (outlining requirements that must be included in any Complete Streets policy adopted by a local government).
- 348 *Complete Streets: Guide to Answering the Costs Question*. Washington, DC: Smart Growth America. <https://www.smartgrowthamerica.org/app/legacy/documents/cs/resources/cs-answering-the-costs-question.pdf> (accessed December 20, 2018).
- 349 "Physical Activity Builds a Healthy and Strong America." In: *Centers for Disease Control and Prevention*. <https://www.smartgrowthamerica.org/app/legacy/documents/cs/resources/cs-aarp-statelegislationtoolkit.pdf> (accessed December 20, 2018).
- 350 McNichol E. *It's Time for States to Invest in Infrastructure*. Washington, DC: Center on Budget and Policy Priorities, August 10, 2017. <https://www.cbpp.org/research/state-budget-and-tax/its-time-for-states-to-invest-in-infrastructure> (accessed December 20, 2018).
- 351 *Elements of a Complete Streets Policy: Effective 2018*. Washington, DC: Smart Growth America, 2018. <https://smartgrowthamerica.org/app/uploads/2018/02/CS-Policy-Elements.pdf> (accessed December 20, 2018).
- 352 "Active Communities." In: *Safe Routes to School National Partnership*. <https://www.saferoutespartnership.org/healthy-communities/101/about> (accessed December 20, 2018).
- 353 McDonald NC, Steiner RL, Palmer WM, et al. "Costs of School Transportation: Quantifying the Fiscal Impacts of Encouraging Walking and Bicycling For School Travel." *Transportation*, 43(1): 159–175, 2016.
- 354 "Chapter 1. The Need for Healthy Homes." In: *The Surgeon General's Call to Action to Promote Healthy Homes*. Rockville, MD: Office of the Surgeon General, 2009. <https://www.ncbi.nlm.nih.gov/books/NBK44196/> (accessed December 20, 2018).
- 355 Centers for Disease Control and Prevention. "Blood Lead Levels—United States, 1999–2002." *Morbidity and Mortality Weekly Report*, 54: 513–516, 2005.
- 356 DiGiuseppi C, Jacobs DE, Phelan KJ, et al. "Housing Interventions and Control of Injury-Related Structural Deficiencies: A Review of the Evidence." *Journal of Public Health Management & Practice*, 16(5 Suppl): 34–43, 2010.
- 357 "United States 2017 Healthy Housing Fact Sheet." In: *National Center for Healthy Housing*, 2017. [https://nchh.org/resource-library/Healthy-Housing-Fact-Sheet\\_USA.pdf](https://nchh.org/resource-library/Healthy-Housing-Fact-Sheet_USA.pdf) (accessed December 20, 2018).
- 358 Gibson M, Petticrew M, Bambra C, et al. "Housing and Health Inequalities: A Synthesis of Systematic Reviews of Interventions Aimed at Different Pathways Linking Housing and Health." *Health & Place*, 17(1): 175–184, 2011.
- 359 Pollack C, Egerter S, Sadegh-Mobari T, et al. "Where We Live Matters for Our Health: The Links Between Housing and Health." In: *Issue Brief 2: Housing and Health*. Princeton, NJ: Robert Wood Johnson Foundation, Commission to Build a Healthier America, 2008.
- 360 Hwang S, Fuller-Thomson E, Hurlchanski JD, et al. "Housing and Population Health: A Review of the Literature." *Sociology and Criminology Faculty Publications*, 126, 1999.
- 361 "Chapter 1. The Need for Healthy Homes." In: *The Surgeon General's Call to Action to Promote Healthy Homes*. Rockville, MD: Office of the Surgeon General, 2009. <https://www.ncbi.nlm.nih.gov/books/NBK44196/> (accessed December 20, 2018).
- 362 "United States 2017 Healthy Housing Fact Sheet." In: *National Center for Healthy Housing*, 2017. [https://nchh.org/resource-library/Healthy-Housing-Fact-Sheet\\_USA.pdf](https://nchh.org/resource-library/Healthy-Housing-Fact-Sheet_USA.pdf) (accessed December 20, 2018).
- 363 Kramer MR and Hogue CR. "Is Segregation Bad for Your Health?" *Epidemiologic Reviews*, 31: 178–194, 2009. <https://www.ncbi.nlm.nih.gov/pubmed/19465747> (accessed December 20, 2018).
- 364 Gee G and Ford C. "Structural Racism and Health Inequities: Old Issues, New Directions." *Du Bois Review*, 8: 115–132, 2011.
- 365 Boustian LP. *Racial Residential Segregation in American Cities* (NBER Working Paper No. 19045). Cambridge, MA: National Bureau of Economic Research, May 2013. <https://www.nber.org/papers/w19045> (accessed December 20, 2018).
- 366 Coulton C, Richter F, Kim S, et al. "Temporal Effects of Distressed Housing on Early Childhood Risk Factors and Kindergarten Readiness." *Children & Youth Services Review*, 68: 59–72, 2016.
- 367 Ross L, Drehoobl A, and Stickles B. *The High Cost of Energy in Rural America: Household Energy Burdens and Opportunities for Energy Efficiency*. Washington, DC: American Council for an Energy-Efficient Economy, Energy Efficiency for All, 2018. <https://www.nrdc.org/experts/khalil-shahyd/rural-families-overburdened-higher-energy-costs> (accessed December 20, 2018).
- 368 Ibid.
- 369 *State of Homelessness*. Washington, DC: National Alliance to End Homelessness. <https://endhomelessness.org/homelessness-in-america/homelessness-statistics/state-of-homelessness-report/> (accessed December 20, 2018).
- 370 Ibid.
- 371 Taylor L. "Housing And Health: An Overview Of The Literature." *Health Affairs Health Policy Brief*, June 7, 2018. <https://www.healthaffairs.org/doi/10.1377/hpb20180313.396577/full/> (accessed December 20, 2018).
- 372 Braveman P, Dekker M, Egerter S, et al. "Housing and Health." Commission to Build a Healthier America Issue Brief, Robert Wood Johnson Foundation, May 2011. [https://www.rwjf.org/content/dam/farm/reports/issue\\_briefs/2011/rwjf70451](https://www.rwjf.org/content/dam/farm/reports/issue_briefs/2011/rwjf70451) (accessed December 20, 2018).
- 373 Mazzara, A. "Census: Renters' Incomes Still Lagging Behind Housing Costs." Washington, DC: Center on Budget and Policy Priorities. <https://www.cbpp.org/blog/census-renters-incomes-still-lagging-behind-housing-costs> (accessed December 20, 2018).
- 374 Sermons MW and Henry M. *The Demographics of Homelessness Series: The Rising Elderly Population*. Washington, DC: National Alliance to End Homelessness, April 2010. <https://endhomelessness.org/resource/the-rising-elderly-population/> (accessed December 20, 2018).
- 375 "America's Growing Senior Population." In: *Bipartisan Policy Center*. September 2015. <https://bipartisanpolicy.org/wp-content/uploads/2015/09/BPC-Housing-Health-Senior-Population.pdf> (accessed December 20, 2018).
- 376 O'Regan, K. (May 7, 2015). U.S. Department of Housing and Urban Development. Housing America's Older Adults: Meeting the Needs of an Aging Population
- 377 "Housing Rehabilitation Loan & Grant Programs." In: *County Health Rankings & Roadmaps*, 2017. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/housing-rehabilitation-loan-grant-programs> (accessed December 20, 2018).
- 378 Gibson M, Petticrew M, Bambra C, et al. "Housing and Health Inequalities: A Synthesis of Systematic Reviews of Interventions Aimed at Different Pathways Linking Housing and Health." *Health & Place*, 17(1): 175–184, 2011.

- 379 Howden-Chapman P, Matheson A, Crane J, et al. "Effect of Insulating Existing Houses on Health Inequality: Cluster Randomized Study in the Community." *BMJ*, 334(7591): 460, 2007.
- 380 Thomson H and Thomas S. "Developing Empirically Supported Theories of Change for Housing Investment and Health." *Social Science & Medicine*, 124: 205–214, 2015.
- 381 Jacobs DE, Breyse J, Dixon SL, et al. "Health and Housing Outcomes from Green Renovation of Low-Income Housing in Washington, DC." *Journal of Environmental Health*, 76(7): 8–16, 2014.
- 382 Chapman R, Howden-Chapman P, Viggers H, et al. "Retrofitting Houses with Insulation: A Cost-Benefit Analysis of a Randomised Community Trial." *Journal of Epidemiology and Community Health*, 63(4): 271–277, 2009.
- 383 Howden-Chapman P, Matheson A, Crane J, et al. "Effect of Insulating Existing Houses on Health Inequality: Cluster Randomised Study in The Community." *BMJ*, 334(7591): 460, 2007.
- 384 "Single Family Housing Repair Loans & Grants." In: *U.S. Department of Agriculture*. <https://www.rd.usda.gov/programs-services/single-family-housing-repair-loans-grants> (accessed December 20, 2018).
- 385 "Maryland Housing Rehabilitation Program: Single Family." In: *Maryland Department of Housing and Community Development*. <https://dhcd.maryland.gov/Residents/Pages/mhrp-sf/default.aspx> (accessed December 20, 2018).
- 386 "Rapid Re-Housing." In: *U.S. Department of Housing and Urban Development*. <https://www.hudexchange.info/resources/documents/Rapid-Re-Housing-Brief.pdf> (accessed December 20, 2018).
- 387 "Housing First in Permanent Supportive Housing." In: *U.S. Department of Housing and Urban Development*. <https://www.hudexchange.info/resources/documents/Housing-First-Permanent-Supportive-Housing-Brief.pdf> (accessed December 20, 2018).
- 388 "Rapid Re-Housing." In: *U.S. Department of Housing and Urban Development*. <https://www.hudexchange.info/resources/documents/Rapid-Re-Housing-Brief.pdf> (accessed December 20, 2018).
- 389 Montgomery AE, Hill L, Culhane DP, and Kane V. *Housing First Implementation Brief*. Philadelphia: VA National Center on Homelessness Among Veterans, U.S. Department of Veterans Affairs, April 2014. <https://www.va.gov/homeless/nchav/docs/Housing-First-Implementation-brief.pdf> (accessed December 20, 2018).
- 390 "Notice CPD-16-11." In: *U.S. Department of Housing and Urban Development*, July 2016. <https://www.hudexchange.info/resources/documents/notice-cpd-16-11-prioritizing-persons-experiencing-chronic-homelessness-and-other-vulnerable-homeless-persons-in-psh.pdf> (accessed December 20, 2018).
- 391 Palepu A, Patterson ML, Moniruzzaman A, et al. "Housing First Improves Residential Stability in Homeless Adults With Concurrent Substance Dependence And Mental Disorders." *American Journal of Public Health*, 103(2): e30–e36, 2013.
- 392 Tsemberis S and Eisenberg RF. "Pathways to Housing: Supported Housing for Street-Dwelling Homeless Individuals with Psychiatric Disabilities." *Psychiatric Services*, 51(4): 487–493, 2000.
- 393 Gulcur L, Stefancic A, Shinn M, et al. "Housing, Hospitalization, and Cost Outcomes for Homeless Individuals with Psychiatric Disabilities." *Journal of Community and Applied Social Psychology*, 13: 171–186, 2003.
- 394 Stergiopoulos V, Gozdzik A, Misir V, et al. "Effectiveness of Housing First with Intensive Case Management in an Ethnically Diverse Sample of Homeless Adults with Mental Illness: A Randomized Controlled Trial." *PLoS One*, 10(7): e0130281, 2015.
- 395 Fitzpatrick-Lewis D, Ganann R, Krishnaratne S, et al. "Effectiveness of Interventions to Improve the Health and Housing Status of Homeless People: A Rapid Systematic Review." *BMC Public Health*, 11: 638, 2011.
- 396 Nelson G, Aubry T, and Lafrance A. "A Review of the Literature on the Effectiveness of Housing and Support, Assertive Community Treatment, and Intensive Case Management Interventions for Persons with Mental Illness Who Have Been Homeless." *American Journal of Orthopsychiatry*, 77(3): 350–361, 2007.
- 397 "Rapid Re-Housing Programs." In: *County of San Diego Health and Human Services Agency*. <http://sandiego.networkofcare.org/veterans/services/subcategory.aspx?tax=BH-0500.7000> (accessed December 20, 2018).
- 398 "Rapid Re-Housing Programs." In: *County Health Rankings & Roadmaps*, 2018. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/rapid-re-housing-programs> (accessed December 20, 2018).
- 399 Gubits D, Shinn M, Bell S, et al. *Family Options Study Short-Term Impacts of Housing and Services Interventions for Homeless Families*. Washington, DC: U.S. Department of Housing and Urban Development Office of Policy Development and Research, July 2015. [http://www.huduser.gov/portal/portal/sites/default/files/pdf/FamilyOptionsStudy\\_final.pdf](http://www.huduser.gov/portal/portal/sites/default/files/pdf/FamilyOptionsStudy_final.pdf) (accessed December 20, 2018).
- 400 *Homelessness Prevention and Rapid Re-Housing Program (HPRP): Year 2 Summary*. Washington, DC: U.S. Department of Housing and Urban Development, February 2013. [https://www.hudexchange.info/resources/documents/HPRP\\_Year2Summary.pdf](https://www.hudexchange.info/resources/documents/HPRP_Year2Summary.pdf) (accessed December 20, 2018).
- 401 "Rapid Re-Housing Programs." In: *County of San Diego Health and Human Services Agency*. <http://sandiego.networkofcare.org/veterans/services/subcategory.aspx?tax=BH-0500.7000> (accessed December 20, 2018).
- 402 Ly A and Latimer E. "Housing First Impact on Costs and Associated Cost Offsets: A Review of the Literature." *Canadian Journal of Psychiatry*, 60(11): 475–487, 2015.
- 403 Srebnik D, Connor T, and Sylla L. "A Pilot Study of the Impact of Housing First: Supported Housing for Intensive Users Of Medical Hospitalization and Sobering Services." *American Journal of Public Health*, 103(2): 316–321, 2013. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3558756/> (accessed December 20, 2018).
- 404 Ibid.
- 405 Bailey A. "State and Local Rental Assistance Supports Key Health and Homelessness Work." *Off The Charts*, Center for Budget and Policy Priorities, August 13, 2018. <https://www.cbpp.org/blog/state-and-local-rental-assistance-supports-key-health-and-homelessness-work> (accessed December 20, 2018).
- 406 "Homelessness Prevention and Rapid Re-Housing Program." In: *U.S. Department of Housing and Urban Development*. <https://www.hudexchange.info/programs/hprp/> (accessed December 20, 2018).
- 407 Cunningham M, Gillespie S, and Anderson J. *Rapid Re-Housing: What the Research Says*. Washington, DC: Urban Institute, June 2015. <https://www.urban.org/sites/default/files/publication/54201/2000265-Rapid-Re-housing-What-the-Research-Says.pdf> (accessed December 20, 2018).
- 408 "Rapid Re-Housing." In: *Ohio Balance of State Continuum of Care, Coalition on Homelessness and Housing in Ohio*. <https://cohhio.org/member-services-2/boscoc/rapid-rehousing/> (accessed December 20, 2018).
- 409 *An Evaluation of the Connecticut Rapid Re-housing Program*. University of Connecticut, 2016. [https://cceh.org/wp-content/uploads/2015/04/Rapid-Re-housing-Final-report\\_final.pdf](https://cceh.org/wp-content/uploads/2015/04/Rapid-Re-housing-Final-report_final.pdf) (accessed December 20, 2018).
- 410 "Rapid Re-Housing Programs." In: *County of San Diego Health and Human Services Agency*. <http://sandiego.networkofcare.org/veterans/services/subcategory.aspx?tax=BH-0500.7000> (accessed December 20, 2018).
- 411 "Rapid Re-Housing." In: *Philadelphia Office of Homeless Services*. <http://philadelphiaofficeofhomelesservices.org/services/rapid-re-housing/> (accessed December 20, 2018).
- 412 "Rapid Rehousing." In: *The Road Home*. <http://trhome.org/rapid-rehousing/> (accessed December 20, 2018).

- 413 “Housing First Checklist: Assessing Projects and Systems for a Housing First Orientation.” In: *U.S. Interagency Council on Homelessness*, September 2016. [https://www.usich.gov/resources/uploads/asset\\_library/Housing\\_First\\_Checklist\\_FINAL.pdf](https://www.usich.gov/resources/uploads/asset_library/Housing_First_Checklist_FINAL.pdf) (accessed December 20, 2018).
- 414 “Rapid Re-Housing Works.” In: *National Alliance to End Homelessness*. <https://endhomelessness.org/rapid-re-housing-works/> (accessed December 20, 2018).
- 415 Paradise J and Cohen Ross D. *Linking Medicaid and Supportive Housing: Opportunities and On-the-Ground Examples*. San Francisco: Henry J Kaiser Family Foundation, January 27, 2017. <https://www.kff.org/report-section/linking-medicaid-and-supportive-housing-issue-brief/> (accessed December 20, 2018).
- 416 “Inclusionary Zoning.” In: *County Health Rankings & Roadmaps*, 2018. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/inclusionary-zoning> (accessed December 20, 2018).
- 417 “Mapping State Interference.” In: *Partnership for Working Families*. <http://www.forworkingfamilies.org/preemptionmap> (accessed December 20, 2018).
- 418 Ibid.
- 419 Cilluffo A, Geiger A, and Fry R. “More U.S. Households Are Renting Than at Any Point in 50 Years.” *Fact Tank: News in the Numbers*, Pew Research Center, July 19, 2017. <http://www.pewresearch.org/fact-tank/2017/07/19/more-u-s-households-are-renting-than-at-any-point-in-50-years/> (accessed December 20, 2018).
- 420 Goldman TR. “Using the Low-Income Housing Tax Credit to Fill the Rental Housing Gap.” *Health Affairs Health Policy Brief*, June 7, 2018. <https://www.healthaffairs.org/doi/10.1377/hpb20180313.398185/full/> (accessed December 20, 2018).
- 421 “Housing Trust Funds.” In: *County Health Rankings & Roadmaps*, 2016. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/housing-trust-funds> (accessed December 20, 2018).
- 422 Sard B and Rice D. “Realizing the Housing Voucher Program’s Potential to Enable Families to Move to Better Neighborhoods.” January 12, 2016. <https://www.cbpp.org/research/housing/realizing-the-housing-voucher-programs-potential-to-enable-families-to-move-to> (accessed December 20, 2018).
- 423 Chetty R, Stepner M, Abraham S, et al. “The Association Between Income and Life Expectancy in the United States, 2001-2014.” *Journal of the American Medical Association*, 315 (16), April 2016.
- 424 Fontenot K, Semega J, and Kollar M. *Income and Poverty in the United States: 2017*. Suitland, MD: U.S. Census Bureau, September 12, 2018. <https://www.census.gov/library/publications/2018/demo/p60-263.html> (accessed December 20, 2018).
- 425 Ratcliffe C and McKernan S. *Child Poverty and its Lasting Consequences*. Washington, DC: Urban Institute, 2012. <http://www.urban.org/uploadedpdf/412659-child-poverty-and-its-lasting-consequence-paper.pdf> (accessed December 20, 2018).
- 426 Levi J, Segal LM, Rayburn J, et al. *A Healthy Early Childhood Action Plan: 2015, Policies For a Lifetime of Well-Being*. Washington, DC: Trust for America’s Health, November 2015. <https://www.tfah.org/wp-content/uploads/archive/assets/files/TFAH-2015-EarlyChildhoodRpt%20FINAL.pdf> (accessed December 20, 2018).
- 427 Powell L, Slater S, and Chaloupka F. “The Relationship between Community Physical Activity Settings and Race, Ethnicity and Socioeconomic Status.” *Evidence-Based Preventive Medicine*, 1(2): 135–144, 2004.
- 428 Bell JF, Wilson JS, and Liu GC. “Neighborhood Greenness and 2-Year Changes in Body Mass Index of Children and Youth.” *American Journal of Preventive Medicine*, 35(6): 547–553, 2008.
- 429 “Why Low-Income and Food Insecure People Are Vulnerable to Obesity.” In: *Food Research and Action Center*. <http://frac.org/initiatives/hunger-and-obesity/why-are-low-income-and-food-insecure-people-vulnerable-to-obesity/> (accessed November 2018).
- 430 *Tax Credits for Working Families: Earned Income Tax Credit*. Washington, DC: National Conference of State Legislatures, April 17, 2018. <http://www.ncsl.org/research/labor-and-employment/earned-income-tax-credits-for-working-families.aspx> (accessed December 20, 2018).
- 431 Ibid.
- 432 Maag E. “Refundable Credits: The Earned Income Tax Credit and the Child Tax Credit.” *Urban-Brookings Tax Policy Center Brief*, March 23, 2017. <https://www.taxpolicycenter.org/publications/refundable-credits-earned-income-tax-credit-and-child-tax-credit/full> (accessed December 20, 2018).
- 433 “What is the Earned Income Tax Credit?” In: *Tax Policy Center Briefing Book: A Citizen’s Guide to the Fascinating (though often complex) Elements of the US Tax System*. Washington, DC: Urban-Brookings Tax Policy Center. <https://www.taxpolicycenter.org/briefing-book/what-earned-income-tax-credit-eitc>.
- 434 Evans WN and Garthwaite CL. “Giving Mom a Break: The Impact of Higher EITC Payments on Maternal Health.” *American Economic Journal: Economic Policy*, 6(2): 258–290, 2014.
- 435 Hoynes H, Miller D, and Simon D. “Income, the Earned Income Tax Credit, and Infant Health.” *American Economic Journal: Economic Policy*, 7(1): 172–211, 2015.
- 436 Strully KW, Rehkopf DH, and Xuan Z. “Effects of Prenatal Poverty on Infant Health: State Earned Income Tax Credits and Birth Weight.” *American Sociological Review*, 75(4): 534–62, 2010.
- 437 Hamad R and Rehkopf DH. “Poverty, Pregnancy, and Birth Outcomes: A Study of the Earned Income Tax Credit.” *Paediatric and Perinatal Epidemiology*, 29(5): 444–452, 2015.
- 438 Arno PS, Sohler N, Viola D, and Schechter C. “Bringing Health and Social Policy Together: The Case of the Earned Income Tax Credit.” *Journal of Public Health Policy*, 30(2): 198–207, 2009.
- 439 Hoynes HW, Miller DL, and Simon D. “Income, The Earned Income Tax Credit, and Infant Health.” *American Economic Journal: Economic Policy*, 7(1): 172–211, February 2015. <http://pubs.aeaweb.org/doi/pdfplus/10.1257/pol.20120179> (accessed December 20, 2018).
- 440 Baker K. *Do Cash Transfer Programs Improve Infant Health: Evidence from the 1993 Expansion of the Earned Income Tax Credit*. South Bend, IN: University of Notre Dame, 2008. [http://economics.nd.edu/assets/24011/baker\\_paper.pdf](http://economics.nd.edu/assets/24011/baker_paper.pdf) (accessed December 20, 2018).
- 441 Strully KW, Rehkopf DH, and Xuan Z. “Effects of Prenatal Poverty on Infant Health: State Earned Income Tax Credits and Birth Weight.” *American Sociological Review*, 75(4): 1–29, August 2010. <https://journals.sagepub.com/doi/abs/10.1177/0003122410374086?journalCode=asra> (accessed December 20, 2018).
- 442 Ibid.
- 443 Hoynes HW, Miller DL, and Simon D. “Income, The Earned Income Tax Credit, and Infant Health.” *American Economic Journal: Economic Policy*, 7(1): 172–211, February 2015. <http://pubs.aeaweb.org/doi/pdfplus/10.1257/pol.20120179> (accessed December 20, 2018).
- 444 Evans WN and Garthwaite CL. “Giving Mom a Break: The Impact of Higher EITC Payments on Maternal Health.” *American Economic Journal: Economic Policy*, 6(2): 258–290, 2014.
- 445 Health indicators include self-reported “excellent” and “very good” health days per month; number of bad mental health days in the past month; and biomarkers of elevated stress levels from physical, blood, and urine tests.
- 446 Berger LM, Font S, Slack KS, and Waldfogel J. “Income and Child Maltreatment in Unmarried Families: Evidence from the Earned Income Tax Credit.” *Review of Economics of the Households*, 15(4) 1345–1372, September 26, 2016. <http://link.springer.com/article/10.1007/s11150-016-9346-9> (accessed December 20, 2018).
- 447 Sutphen O. “The State of the Earned Income Tax Credit.” *National Conference of State Legislatures LegisBrief*, 26(3), January 2018. <http://www.ncsl.org/LinkClick.aspx?fileticket=UxTWaDvKN7Y%3D&tabid=32022&portalid=1> (accessed December 20, 2018).

- 448 Maxfield M. *The Effects of the Earned Income Tax Credit on Child Achievement and Long-Term Educational Attainment*. East Lansing: Michigan State University Job Market Paper, November 14, 2013. <https://www.msu.edu/~maxfiel7/20131114%20Maxfield%20EITC%20Child%20Education.pdf> (accessed December 20, 2018).
- 449 Simon D, McInerney M, Goodell S. “The Earned Income Tax Credit, Poverty, and Health.” *Health Affairs Health Policy Brief*, October 4, 2018. <https://www.healthaffairs.org/doi/10.1377/hpb20180817.769687/full/> (accessed December 20, 2018)
- 450 Sherman A and Mitchell T. *Economic Security Programs Help Low-Income Children Succeed Over Long Term, Many Studies Find*. Washington, DC: Center for Budget and Policy Priorities, July 17, 2017. <https://www.cbpp.org/sites/default/files/atoms/files/7-17-17pov.pdf> (accessed December 20, 2018).
- 451 “Why Is EITC Important?” In: *U.S. Internal Revenue Service*. <https://www.eitc.irs.gov/eitc-central/about-eitc/about-eitc> (accessed December 20, 2018).
- 452 Ibid.
- 453 “The Earned Income Tax Credit.” In: *Center for Budget and Policy Priorities Issue Brief*, April 29, 2018. <https://www.cbpp.org/sites/default/files/atoms/files/policybasics-eitc.pdf> (accessed December 20, 2018).
- 454 Strully KW, Rehkopf DH, and Xuan Z. “Effects of Prenatal Poverty on Infant Health: State Earned Income Tax Credits and Birth Weight.” *American Sociological Review*, 75(4): 1–29, August 2010 <https://journals.sagepub.com/doi/abs/10.1177/0003122410374086?journalCode=asra>
- 455 Hoynes H and Rothstein J. *Tax Policy Toward Low-Income Families*. Cambridge, MA: National Bureau of Economic Research, Working Paper 22080, March 2016. <https://www.nber.org/papers/w22080.pdf> (accessed December 20, 2018).
- 456 Eissa N and Liebman JB. “Labor Supply Response to the Earned Income Tax Credit.” *Quarterly Journal of Economics*, 111(2): 605–637, 1996.
- 457 Hotz VJ and Scholz JK. “The Earned Income Tax Credit.” In: Moffitt RA (ed.) *Means-Tested Transfer Programs in the United States*. Chicago: University of Chicago Press, 2003.
- 458 Meyer BD and Rosenbaum DT. “Welfare, the Earned Income Tax Credit, and the Labor Supply of Single Mothers.” *Quarterly Journal of Economics*, 116(3): 1063–1114, 2001.
- 459 Nichols A and Rothstein J. *The Earned Income Tax Credit*. Cambridge, MA: National Bureau of Economic Research, Working Paper 21211, May 2015. <https://www.nber.org/papers/w21211.pdf> (accessed December 20, 2018).
- 460 Dahl M, Schwabish J, DeLeire T, and Smeeding T. *The Earned Income Tax Credit and Expected Social Security Retirement Benefits Among Low-Income Women*. Washington, DC: Congressional Budget Office, Working Paper 2012-06. [https://www.cbo.gov/sites/default/files/cbofiles/attachments/WorkingPaper2012-06-EITC\\_and\\_SS\\_Retirement\\_Benefits.pdf](https://www.cbo.gov/sites/default/files/cbofiles/attachments/WorkingPaper2012-06-EITC_and_SS_Retirement_Benefits.pdf) (accessed December 20, 2018).
- 461 Chetty R, Friedman JN, and Rockoff J. *New Evidence on the Long-Term Impacts of Tax Credits*. Cambridge, MA: National Bureau of Economic Research, Statistics of Income Paper Series, November 2011. <http://www.irs.gov/pub/irs-soi/11rpchettyfriedmanrockoff.pdf> (accessed December 20, 2018).
- 462 Manoli DS and Turner N. *Cash-on-Hand and College Enrollment: Evidence from Population Tax Data and Policy Nonlinearities*. Cambridge, MA: National Bureau of Economic Research, Working Paper No. 19836, April 2016. <http://www.nber.org/papers/w19836>. The researchers studied effects on high school seniors whose family incomes were near the first kink point of the EITC benefit schedule.
- 463 Avalos A and Alley S. “The Economic Impact of the Earned Income Tax Credit (EITC) in California.” *California Journal of Politics and Policy*, 2(1), 2010.
- 464 Haskell J. *The State of the Earned Income Tax Credit in Nashville: An Analysis of Economic Impacts and Geographic Distribution of the ‘Working Poor’ Tax Credit, TY 1997–2004*. Nashville, TN: Vanderbilt University, 2006.
- 465 Hotz VJ and Scholz JK. “The Earned Income Tax Credit.” In: Moffitt RA (ed.) *Means-Tested Transfer Programs in the United States*. Chicago: University of Chicago Press, 2003.
- 466 Simpson NB, Tiefenthaler J, and Hyde J. “The Impact of the Earned Income Tax Credit on Economic Well-Being: A Comparison Across Household Types.” *Population Research and Policy Review*, 29(6): 843–64, 2010.
- 467 Greenstein R. *The Earned Income Tax Credit: Boosting Employment, Aiding the Working Poor*. Washington, DC: Center on Budget and Policy Priorities, 2005.
- 468 Muennig PA, Mohit B, Wu J, et al. “Cost Effectiveness of the Earned Income Tax Credit as a Health Policy Investment.” *American Journal of Preventive Medicine*, 51(6): 874–881, 2016.
- 469 Williams E and Waxman S. *States Can Adopt or Expand Earned Income Tax Credits to Build a Stronger Future Economy*. Washington, DC: Center on Budget and Policy Priorities, February 7, 2018. <https://www.cbpp.org/sites/default/files/atoms/files/1-30-14sfp.pdf> (accessed December 20, 2018).
- 470 *Tax Credits for Working Families: Earned Income Tax Credit*. Washington, DC: National Conference of State Legislatures, April 17, 2018. <http://www.ncsl.org/research/labor-and-employment/earned-income-tax-credits-for-working-families.aspx> (accessed December 20, 2018).
- 471 Ibid.
- 472 Ibid.
- 473 Ibid.
- 474 Ibid.
- 475 “Vermont.” In: *Promoting Tax Credits for Workers and Their Families*, 2018. <http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/vermont/> (accessed December 20, 2018).
- 476 Pescatore L. “New Jersey and Vermont Expand EITC.” *Promoting Tax Credits for Workers and Their Families*, July 2 2018. <http://www.taxcreditsforworkersandfamilies.org/news/new-jersey-and-vermont-expand-eitc/> (accessed December 20, 2018).
- 477 Feldman J, Sameroff R, Schickner N, et al. *Vermont Tax Expenditures 2017 Biennial Report*. Montpelier, VT: Legislative Joint Fiscal Office, Vermont Department of Taxes, January 15, 2017. <https://legislature.vermont.gov/assets/Legislative-Reports/2017-Tax-Expenditure-Report-1-27-17.pdf> (accessed December 20, 2018).
- 478 Woolf A. “Try the Earned Income Tax Credit.” *Burlington Free Press*, February 18, 2016. <https://www.burlingtonfreepress.com/story/news/2016/02/18/try-earned-income-tax-credit/80516894/> (accessed December 20, 2018).
- 479 Williams E and Waxman S. *States Can Adopt or Expand Earned Income Tax Credits to Build a Stronger Future Economy*. Washington, DC: Center on Budget and Policy Priorities, February 7, 2018. <https://www.cbpp.org/sites/default/files/atoms/files/1-30-14sfp.pdf> (accessed December 20, 2018).
- 480 “State EITC as Percentage of the Federal EITC.” In: *Urban-Brookings Tax Policy Center*, March 1, 2018. <https://www.taxpolicycenter.org/statistics/state-eitc-percentage-federal-eitc> (accessed December 20, 2018).
- 481 “Policy Basics: The Child Tax Credit.” In: *Center for Budget and Policy Priorities*, April 18, 2018. <https://www.cbpp.org/research/federal-tax/policy-basics-the-child-tax-credit> (accessed December 20, 2018).
- 482 Charney G. “The New Child Tax Credit.” *H&R Block*, December 28, 2017. <https://www.hrblock.com/tax-center/irs/tax-reform/new-child-tax-credit/> (accessed December 20, 2018).
- 483 “State Tax Credits.” In: *Tax Credits for Working Families*. <http://www.taxcreditsforworkersandfamilies.org/state-tax-credits/#1468434105770-44f9c6c5-52e0> (accessed December 20, 2018).
- 484 Chetty R, Friedman JN, and Rockoff J. *New Evidence on the Long-Term Impacts of Tax Credits*. Cambridge, MA: National Bureau of Economic Research, Statistics of Income Paper Series, November 2011. <http://www.irs.gov/pub/irs-soi/11rpchettyfriedmanrockoff.pdf> (accessed December 20, 2018).

- 485 “Policy Basics: The Child Tax Credit.” In: *Center on Budget and Policy Priorities*, April 2018. <https://www.cbpp.org/research/federal-tax/policy-basics-the-child-tax-credit> (accessed December 20, 2018).
- 486 *Child Support Pass-Through and Disregard Policies for Public Assistance Recipients*. Washington, DC: National Conference of State Legislatures, July 18, 2017. <http://www.ncsl.org/research/human-services/state-policy-pass-through-disregard-child-support.aspx> (accessed December 20, 2018).
- 487 Ibid.
- 488 Koball H and Douglas-Hall A. *State Policy Choices: Child Support*. New York: National Center for Children in Poverty, September 2004. [http://www.nccp.org/publications/pub\\_539.html](http://www.nccp.org/publications/pub_539.html) (accessed December 20, 2018).
- 489 “Child Support Overview” In: *National Conference of State Legislatures*, April 16, 2018. <http://www.ncsl.org/issues-research/human-services/child-support-homepage.aspx> (accessed December 20, 2018).
- 490 Short K. *The Research Supplemental Poverty Measure: 2012*. Suitland, MD: U.S. Census Bureau, November 2013. <https://www.census.gov/prod/2013pubs/p60-247.pdf> (accessed December 20, 2018).
- 491 “Employee Benefits in the United States—March 2018.” News Release: U.S. Department of Labor, Bureau of Labor Statistics, March 2018. Available at: <https://www.bls.gov/news.release/pdf/ebs2.pdf> (accessed December 20, 2018).
- 492 Chen ML. “The Growing Costs and Burden of Family Caregiving of Older Adults: A Review of Paid Sick Leave and Family Leave Policies.” *The Gerontologist*, 56(3): 391–396, 2016. <https://academic.oup.com/gerontologist/article/56/3/391/2605627> (accessed December 20, 2018).
- 493 Simonetta J. *Family and Medical Leave in 2012: Technical Report*. Washington, DC: U.S. Department of Labor, April 18, 2014. <https://www.dol.gov/asp/evaluation/fmla/FMLA-2012-Technical-Report.pdf> (accessed December 20, 2018).
- 494 Xia J, Hayes J, Gault B, and Nguyen H. *Paid Sick Days Access and Usage Rates Vary by Race/Ethnicity, Occupation, and Earnings*. Washington, DC: Institute for Women’s Policy Research, February 2016. <https://iwpr.org/wp-content/uploads/wpallimport/files/iwpr-export/publications/B356.pdf> (accessed December 20, 2018).
- 495 Ibid.
- 496 Drago R and Lovell V. *San Francisco’s Paid Sick Leave Ordinance: Outcomes for Employers and Employees*. Washington, DC: Institute for Women’s Policy Research, February 2011. [https://iwpr.org/wp-content/uploads/wpallimport/files/iwpr-export/publications/A138\\_edited.pdf](https://iwpr.org/wp-content/uploads/wpallimport/files/iwpr-export/publications/A138_edited.pdf) (accessed December 20, 2018).
- 497 Colla CH, Dow WH, Dube A, and Lovell V. “Early Effects of the San Francisco Paid Sick Leave Policy.” *American Journal of Public Health*, 104(12), 2453–2460, 2014. <http://doi.org/10.2105/AJPH.2013.301575> (accessed December 20, 2018).
- 498 DeRigne L, Stoddard-Dare P, Collins C, and Quinn L. “Paid Sick Leave and Preventive Health Care Service Use Among US Working Adults.” *Preventive Medicine*, 99: 58–62, 2017. <https://doi.org/10.1016/j.ypmed.2017.01.020> (accessed December 20, 2018).
- 499 Pichler S and Ziebarth N. *The Pros and Cons of Sick Pay Schemes: Testing for Contagious Presenteeism and Shirking Behavior*. Cambridge, MA: National Bureau of Economic Research, Working Paper 22530, August 2016. <https://www.nber.org/papers/w22530> (accessed December 20, 2018).
- 500 DeRigne L, Stoddard-Dare P, and Quinn L. “Workers Without Paid Sick Leave Less Likely to Take Time Off for Illness or Injury Compared to Those with Paid Sick Leave.” *Health Affairs*, 35(3), March 2016. <https://www.healthaffairs.org/doi/10.1377/hlthaff.2015.0965> (accessed December 20, 2018).
- 501 Kumar S, Quinn SC, Kim KH, et al. “The Impact of Workplace Policies and Other Social Factors on Self-Reported Influenza-Like Illness Incidence During the 2009 H1N1 Pandemic.” *American Journal of Public Health*, 102(1): 134–140, January 1, 2012.
- 502 *Serving While Sick: High Risks and Low Benefits for the Nation’s Restaurant Workforce, and Their Impact on the Consumer*. New York: Restaurant Opportunities Centers United, September 30, 2010. [http://roccument.org/wp-content/uploads/2013/04/reports\\_serving-while-sick\\_full.pdf](http://roccument.org/wp-content/uploads/2013/04/reports_serving-while-sick_full.pdf) (accessed December 20, 2018).
- 503 Watkins M. *Evaluating Paid Sick Leave: Social, Economic, and Health Implications for Washington*. Seattle: Economic Opportunity Institute, May 2013. <http://www.eoionline.org/wp/wp-content/uploads/paid-sick-days/WA-PSD-May13.pdf> (accessed December 20, 2018).
- 504 Asfaw A, Pana-Cryan R, and Rosa R. “Paid Sick Leave and Nonfatal Occupational Injuries.” *American Journal of Public Health*, 102(9): e59–e64, 2012.
- 505 Boushey H and Glynn SJ. *There Are Significant Business Costs to Replacing Employees*. Washington, DC: Center for American Progress, November 16, 2012. <https://www.americanprogress.org/wp-content/uploads/2012/11/CostofTurnover.pdf> (accessed December 20, 2018).
- 506 Milli J. *Valuing Good Health in Austin, Texas: The Costs and Benefits of Earned Sick Days*. Washington, DC: Institute for Women’s Policy Research, February 12, 2018. <https://iwpr.org/publications/value-earned-sick-time-public-health-austin-texas/> (accessed October 4, 2018).
- 507 Miller K, Williams C, and Yi Y. *Paid Sick Days and Health: Cost Savings from Reduced Emergency Department Visits*. Washington, DC: Institute for Women’s Policy Research, November 2011. <https://iwpr.org/wp-content/uploads/wpallimport/files/iwpr-export/publications/B301-PSD&ED.pdf> (accessed December 20, 2018).
- 508 Stewart WF, Ricci JA, Chee E, and Morganstein D. “Lost Productive Work Time Costs from Health Conditions in the United States: Results from the American Productivity Audit.” *Journal of Occupational and Environmental Medicine*, 45(12): 1,234–1,246, December 2003. <http://www.nationalpartnership.org/researchlibrary/work-family/psd/lost-productive-work-time-american-productivity-audit.pdf> (accessed October 4, 2018). Unpublished calculation based on \$225.8 billion annually in lost productivity, 71 percent due to presenteeism. Inflation calculation for 2017 dollars based on a calculation of \$160.32 billion in 2002 dollars using the U.S. Inflation Calculator (<http://www.usinflationcalculator.com>).
- 509 “Paid Sick Time Legislative Successes.” In: *A Better Balance*, May 21, 2018. <https://www.abetterbalance.org/resources/paid-sick-time-legislative-successes/> (accessed December 20, 2018).
- 510 “State Paid Family Leave and Medical Leave Insurance Laws.” In: *National Partnership for Women & Families*, July 2018. <http://www.nationalpartnership.org/research-library/work-family/paid-leave/state-paid-family-leave-laws.pdf> (accessed December 20, 2018).
- 511 Douglas G. “The Who, What, and Where of State Paid Sick Leave.” *Bloomberg BNA*, May 25, 2018. <https://www.bna.com/state-paid-sick-n57982092926/> (accessed December 20, 2018).
- 512 “Preemption Watch: Preemption Maps.” In: *Grassroots Change*. <https://grassrootschange.net/preemption-watch/#/map> (accessed December 20, 2018).
- 513 “Paid Sick Leave.” In: *National Conference of State Legislatures*, May 29, 2016. <http://www.ncsl.org/research/labor-and-employment/paid-sick-leave.aspx> (accessed December 20, 2018).
- 514 “Frequently Asked Questions (FAQs) About Minimum Wage and Earned Paid Sick Time.” In: *Industrial Commission of Arizona*. <https://www.azica.gov/frequently-asked-questions-about-wage-and-earned-paid-sick-time-laws> (accessed December 20, 2018).
- 515 “The First State: Implementing Connecticut’s Sick Days Law.” *CLASP Policy Brief*, July 18, 2013. <https://www.clasp.org/sites/default/files/publications/2017/04/Connecticut-Sick-Days-Implementation-CLASP.pdf> (accessed December 20, 2018).
- 516 “Toolkit: The Healthy Families Act.” In: *National Partnership for Women & Families*. <http://www.nationalpartnership.org/research-library/work-family/psd/healthy-families-act-intro-toolkit-1.pdf> (accessed December 20, 2018).

- 517 “Paid Sick Days—State and District Statutes.” In: *National Partnership for Women & Families*, October 2018. <http://www.nationalpartnership.org/research-library/work-family/psd/paid-sick-days-statutes.pdf> (accessed December 20, 2018).
- 518 Addati L, Cassirer N, and Gilchrist K. *Maternity and Paternity at Work: Law and Practice across the World*. Washington, DC: International Labor Organization, 2014.
- 519 “State Family and Medical Leave Laws.” In: *National Conference of State Legislatures*, July 19, 2016. <http://www.ncsl.org/research/labor-and-employment/state-family-and-medical-leave-laws.aspx> (accessed December 20, 2018).
- 520 Ibid.
- 521 Donovan S. *Paid Family Leave in the United States*. Washington, DC: Congressional Research Service, September 12, 2018. <https://fas.org/sgp/crs/misc/R44835.pdf> (accessed December 20, 2018).
- 522 Laughlin L. “Maternity Leave and Employment Patterns of First-Time Mothers: 1961–2008.” Washington, DC: U.S. Census Bureau, 2011. <https://www2.census.gov/library/publications/2011/demo/p70-128.pdf> (accessed December 20, 2018).
- 523 Ibid.
- 524 Isaacs J, Healey O, and Peters HE. *Paid Family Leave in the United States: Time for a New National Policy*. Washington, DC: Urban Institute, 2017. <https://www.urban.org/research/publication/paid-family-leave-united-states> (accessed December 20, 2018).
- 525 Stearns J. “The Effects of Paid Maternity Leave: Evidence from Temporary Disability Insurance.” *Journal of Health Economics*, 43: 85–102, 2015.
- 526 Heymann J, Raub A, and Earle A. “Creating and Using New Data Sources to Analyze the Relationship Between Social Policy and Global Health: The Case of Maternal Leave.” *Public Health Reports*, 126(Suppl 3): 127–134, 2011.
- 527 Tanaka S. “Parental Leave and Child Health Across OECD Countries.” *Economic Journal*, 115(501): F7–F28, 2005.
- 528 Ruhm CJ. “Parental Leave and Child Health.” *Journal of Health Economics*, 19(6): 931–960, 2000.
- 529 Huang R and Yang M. “Paid Maternity Leave and Breastfeeding Practice Before and After California’s Implementation of the Nation’s First Paid Family Leave Program.” *Economics & Human Biology*, 16: 45–59, 2015.
- 530 Mirkovic KR, Perrine CG, and Scanlon KS. “Paid Maternity Leave and Breastfeeding Outcomes.” *Birth*, 43(3): 233–239, 2016.
- 531 Heymann J, Earle A, and McNeill K. “The Impact of Labor Policies on the Health of Young Children in the Context of Economic Globalization.” *Annual Review of Public Health*, 34: 355–72, 2011.
- 532 Borrell C, Palencia L, Muntaner C, et al. “Influence of Macrosocial Policies on Women’s Health and Gender Inequalities in Health.” *Epidemiologic Reviews*, 36(1): 31–48, 2014.
- 533 Chatterji P and Markowitz S. “Family Leave After Childbirth and the Mental Health of New Mothers.” *Journal of Mental Health Policy and Economics*, 15(2): 61–76, 2012.
- 534 Schuster MA, Chung PJ, Elliott MN, et al. “Perceived Effects of Leave From Work and the Role of Paid Leave Among Parents of Children with Special Health Care Needs.” *American Journal of Public Health*, 99(4): 698–705, 2009.
- 535 Earle A and Heymann J. “Protecting the Health of Employees Caring for Family Members with Special Health Care Needs.” *Social Science & Medicine*, 73(1): 68–78, 2011.
- 536 Boushey H and Glynn SJ. *There Are Significant Business Costs to Replacing Employees*. Washington, DC: Center for American Progress, November 16, 2012. <https://www.americanprogress.org/wp-content/uploads/2012/11/CostofTurnover.pdf> (accessed December 20, 2018).
- 537 Ibid.
- 538 Baum CL and Ruhm CJ. “The Effects of Paid Family Leave in California on Labor Market Outcomes.” *Journal of Policy Analysis and Management*, 35(2): 333–356, 2016.
- 539 Byker TS. “Paid Parental Leave Laws in The United States: Does Short-Duration Leave Affect Women’s Labor-Force Attachment?” *American Economic Review*, 106(5): 242–246, 2016.
- 540 Rossin-Slater M. *Maternity and Family Leave Policy*. Cambridge, MA: National Bureau of Economic Research, Working Paper 23069, 2017.
- 541 Houser L and Vartanian T. *Pay Matters: The Positive Economic Impacts of Paid Family Leave for Families, Businesses, and the Public*. New Brunswick, NJ: Center for Women and Work at Rutgers University, 2012.
- 542 Shepherd-Banigan M and Bell JF. “Paid Leave Benefits Among a National Sample of Working Mothers with Infants in the United States.” *Maternal Child Health Journal*, 18(1):286–295, January 2014. <https://www.ncbi.nlm.nih.gov/pubmed/23584928> (accessed December 20, 2018).
- 543 Stearns J. “The Effects of Paid Maternity Leave: Evidence from Temporary Disability Insurance.” *Journal of Health Economics*, 43: 85–102, 2015.
- 544 Heymann J, Raub A, and Earle A. “Creating and Using New Data Sources to Analyze the Relationship Between Social Policy and Global Health: The Case of Maternal Leave.” *Public Health Reports*, 126(Suppl 3): 127–134, 2011.
- 545 Curtis E, Hirsch BT, and Schroeder MC. “Evaluating Workplace Mandates with Flows Versus Stocks: An Application to California Paid Family Leave.” *Southern Economic Journal*, 83(2): 501–526, 2016.
- 546 Isaacs J, Healey O, and Peters HE. *Paid Family Leave in the United States: Time for a New National Policy*. Washington, DC: Urban Institute, 2017. <https://www.urban.org/research/publication/paid-family-leave-united-states> (accessed December 20, 2018).
- 547 Das T and Polachek SW. “Unanticipated Effects of California’s Paid Family Leave Program.” *Contemporary Economic Policy*, 33(4): 619–635, 2015.
- 548 “State Paid Family Leave and Medical Leave Insurance Laws.” In: *National Partnership for Women & Families*, July 2018. <http://www.nationalpartnership.org/research-library/work-family/paid-leave/state-paid-family-leave-laws.pdf> (accessed December 20, 2018).
- 549 “Paid Sick Time Legislative Successes.” In: *A Better Balance*, May 21, 2018. <https://www.abetterbalance.org/resources/paid-sick-time-legislative-successes/> (accessed December 20, 2018).
- 550 “State Paid Family Leave and Medical Leave Insurance Laws.” In: *National Partnership for Women & Families*, July 2018. <http://www.nationalpartnership.org/research-library/work-family/paid-leave/state-paid-family-leave-laws.pdf> (accessed December 20, 2018).
- 551 Ibid.
- 552 Ibid.
- 553 Ibid.
- 554 Silver BE, Mederer H, and Djurdjevic E. *Launching the Rhode Island Temporary Caregiver Insurance Program (TCI): Employee Experiences One Year Later*. Washington, DC: U.S. Department of Labor, Women’s Bureau, April 2016. [https://www.dol.gov/wb/media/RI\\_paid\\_leave\\_report.pdf](https://www.dol.gov/wb/media/RI_paid_leave_report.pdf) (accessed December 20, 2018).
- 555 Ibid.
- 556 “State Paid Family Leave and Medical Leave Insurance Laws.” In: *National Partnership for Women & Families*, July 2018. <http://www.nationalpartnership.org/research-library/work-family/paid-leave/state-paid-family-leave-laws.pdf> (accessed December 20, 2018).
- 557 “Monthly TDI/TCI Claims Summary.” In: *Rhode Island Department of Labor and Training*. <http://www.dlt.ri.gov/lmi/uiadmin.htm> (accessed September 26, 2018).
- 558 Silver BE, Mederer H, and Djurdjevic E. *Launching the Rhode Island Temporary Caregiver Insurance Program (TCI): Employee Experiences One Year Later*. Washington, DC: U.S. Department of Labor, Women’s Bureau, April 2016. [https://www.dol.gov/wb/media/RI\\_paid\\_leave\\_report.pdf](https://www.dol.gov/wb/media/RI_paid_leave_report.pdf) (accessed December 20, 2018).

- 559 “State Paid Family Leave and Medical Leave Insurance Laws.” In: *National Partnership for Women & Families*, July 2018. <http://www.nationalpartnership.org/research-library/work-family/paid-leave/state-paid-family-leave-laws.pdf> (accessed December 20, 2018).
- 560 Isaacs J, Healey O, and Peters HE. *Paid Family Leave in the United States: Time for a New National Policy*. Washington, DC: Urban Institute, 2017. <https://www.urban.org/research/publication/paid-family-leave-united-states> (accessed December 20, 2018).
- 561 “State Paid Family Leave and Medical Leave Insurance Laws.” In: *National Partnership for Women & Families*, July 2018. <http://www.nationalpartnership.org/research-library/work-family/paid-leave/state-paid-family-leave-laws.pdf> (accessed December 20, 2018).
- 562 Goggins BR and DeBacco DA. *Survey of State Criminal History Information Systems, 2014*. Washington, DC: US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, 2015. <https://www.ncjrs.gov/pdffiles1/bjs/grants/249799.pdf> (accessed December 20, 2018).
- 563 Petersilia J. “When Prisoners Return to the Community: Political, Economic and Social Consequences.” *Sentencing & Corrections*, (9): 3, 2000. <https://www.ncjrs.gov/pdffiles1/nij/184253.pdf> (accessed December 20, 2018).
- 564 “Criminal Justice Facts.” In: *The Sentencing Project*. <http://www.sentencingproject.org/criminal-justice-facts/> (accessed December 20, 2018).
- 565 Pager D, Western B, and Sugie N. “Sequencing Disadvantage: Barriers to Employment Facing Young Black and White Men with Criminal Records.” *Annals of the American Academy of Political and Social Science*, 623(1): 195–213, 2009.
- 566 Agan AY and Starr SB. *Ban the Box, Criminal Records, and Statistical Discrimination: A Field Experiment*. University of Michigan Law and Economics Research Paper No. 16-012. Ann Arbor, MI: University of Michigan, 2016.
- 567 Pager D. “The Mark of a Criminal Record.” *American Journal of Sociology*, 108(5): 937–975, 2003.
- 568 Decker S, Spohn C, Ortiz N, and Hedberg E. *Criminal Stigma, Gender, and Employment: An Expanded Assessment of the Consequences of Imprisonment for Employment*. Washington, DC: National Institute of Justice, January 2014.
- 569 Pager D. “The Mark of a Criminal Record.” *American Journal of Sociology*, 108(5): 937–975, 2003.
- 570 Agan AY and Starr SB. *Ban the Box, Criminal Records, and Statistical Discrimination: A Field Experiment*. University of Michigan Law and Economics Research Paper No. 16-012. Ann Arbor, MI: University of Michigan, 2016.
- 571 Doleac JL and Hansen B. *Does “Ban the Box” Help or Hurt Low-Skilled Workers? Statistical Discrimination and Employment Outcomes when Criminal Histories are Hidden*. Cambridge, MA: National Bureau of Economic Research, 2016.
- 572 Stacy C and Cohen M. *Ban the Box and Racial Discrimination: A Review of the Evidence and Policy Recommendations*. Washington, DC: Urban Institute, February 21, 2017. Retrieved from <https://www.urban.org/research/publication/ban-box-and-racial-discrimination> (accessed December 20, 2018).
- 573 Christman A and Rodriguez MN. “Research Supports Fair Chance Policies.” Washington, DC: National Employment Law Project, August 1, 2016. <https://www.nelp.org/publication/research-supports-fair-chance-policies/> (accessed December 20, 2018).
- 574 Jackson O, Sullivan R, and Zhao B. “Reintegrating the Ex-Offender Population in the U.S. Labor Market: Lessons from the CORI Reform in Massachusetts.” *New England Public Policy Center Research Reports*, 17(1), 2017. <https://www.bostonfed.org/publications/new-england-public-policy-center-research-report/2017/reintegrating-the-ex-offender-population-in-the-us-labor-market.aspx> (accessed December 20, 2018).
- 575 “Ban the Box.” In: *County Health Rankings and Roadmaps*, 2018. <http://www.countyhealthrankings.org/take-action-to-improve-health/what-works-for-health/policies/ban-the-box> (accessed December 20, 2018).
- 576 D’Alessio SJ, Stolzenberg L, and Flexon JL. “The Effect of Hawaii’s Ban the Box Law on Repeat Offending.” *American Journal of Criminal Justice*, 40(2): 336–352, 2015.
- 577 Stacy C and Cohen M. *Ban the Box and Racial Discrimination: A Review of the Evidence and Policy Recommendations*. Washington, DC: Urban Institute, February 21, 2017. Retrieved from <https://www.urban.org/research/publication/ban-box-and-racial-discrimination> (accessed December 20, 2018).
- 578 Berracasa, Estevez A, Juffras J, et al. *The Impact of “Ban the Box” in the District of Columbia*. Washington, DC: Office of the District of Columbia Auditor, 2016.
- 579 *Economic Benefits of Employing Formerly Incarcerated Individuals in Philadelphia*. Philadelphia: Economy League of Greater Philadelphia, 2011. <http://economyleague.org/uploads/files/712279713790016867-economic-benefits-of-employing-formerly-incarcerated-full-report.pdf> (accessed December 20, 2018).
- 580 Avery B and Hernandez P. *Ban the Box: U.S. Cities, Counties, and States Adopt Fair-Chance Policies to Advance Employment Opportunities for People with Past Convictions*. Washington, DC: National Employment Law Project, 2018. <https://www.nelp.org/publication/ban-the-box-fair-chance-hiring-state-and-local-guide/> (accessed December 20, 2018).
- 581 “Mapping State Interference.” In: *Partnership for Working Families*. <http://www.forworkingfamilies.org/preemptionmap> (accessed December 20, 2018).
- 582 Avery B and Hernandez P. *Ban the Box: U.S. Cities, Counties, and States Adopt Fair-Chance Policies to Advance Employment Opportunities for People with Past Convictions*. Washington, DC: National Employment Law Project, 2018. <https://www.nelp.org/publication/ban-the-box-fair-chance-hiring-state-and-local-guide/> (accessed December 20, 2018).
- 583 Cal. Govt Code § 12952 (West).
- 584 Cal. Govt Code § 12952 (West).
- 585 Colo. Rev. Stat. Ann. § 24-5-101 (West).
- 586 Emsellem M and Ziedenberg J. *Strategies for Full Employment Through Reform of the Criminal Justice System*. Washington, DC: Center on Budget and Policy Priorities, March 30, 2015. [https://www.cbpp.org/sites/default/files/atoms/files/3\\_30\\_15fe\\_emsellem.pdf](https://www.cbpp.org/sites/default/files/atoms/files/3_30_15fe_emsellem.pdf) (accessed December 20, 2018).
- 587 Stacy C and Cohen M. *Ban the Box and Racial Discrimination: A Review of the Evidence and Policy Recommendations*. Washington, DC: Urban Institute, February 21, 2017. Retrieved from <https://www.urban.org/research/publication/ban-box-and-racial-discrimination> (accessed December 20, 2018).
- 588 Ibid.
- 589 Waller M. *Transitional Jobs: A Next Step in Welfare to Work Policy*. Washington, DC: The Brookings Institution, May 2002. <https://www.brookings.edu/wp-content/uploads/2016/06/wallertransjobs.pdf> (accessed December 20, 2018).
- 590 Ibid.
- 591 Maxwell NL and Rotz D. *Building the Employment and Economic Self-Sufficiency of the Disadvantaged: The Potential Of Social Enterprises*. Princeton, NJ: Mathematica Policy Research, 2015.
- 592 Butler D, Alson J, Bloom D, et al. *What Strategies Work for the Hard-To-Employ: Final Results of the Hard-to-Employ Demonstration and Evaluation Project and Selected Sites from the Employment Retention and Advancement Project*. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services, 2012.
- 593 Jacobs E. *Returning to Work After Prison: Final Results from the Transitional Jobs Reentry Demonstration*. Manpower Demonstration Research Corporation, 2012.
- 594 Hoadley J, Wagnerman K, Alker J, and Holmes M. *Medicaid in Small Towns and Rural America: A Lifeline for Children, Families, and Communities*. Washington, DC: Georgetown Center for Children and Families, June 2017.

- 595 Buettgens M. *The Implications of Medicaid Expansion in the Remaining States*. Washington, DC: Urban Institute, May 16, 2018. <https://www.rwjf.org/en/library/research/2018/05/implications-of-state-medicaid-expansion.html> (accessed December 20, 2018).
- 596 Kaiser Family Foundation. *Status of State Action on the Medicaid Expansion Decision*. Washington, DC. January 04, 2019. <https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/> (accessed January 4, 2019).
- 597 Pavetti L. *Work Requirements Don't Cut Poverty, Evidence Shows*. Washington, DC: Center for Budget and Policy Priorities, June 7, 2016. <https://www.cbpp.org/research/poverty-and-inequality/work-requirements-dont-cut-poverty-evidence-shows> (accessed December 20, 2018).
- 598 Pavetti L, Derr M, and Martin ES. *Assisting TANF Recipients Living with Disabilities to Obtain and Maintain Employment: Conducting In-Depth Assessments*. Princeton, NJ: Mathematica Policy Research, February 2008.
- 599 Bauer L, Whitmore Schanzenbach D, and Shambaugh J. *Work Requirements and Safety Net Programs*. Washington, DC: The Brookings Institution, The Hamilton Project, October 2018. [https://www.brookings.edu/wp-content/uploads/2018/10/WorkRequirements\\_EA\\_web\\_1010\\_2.pdf](https://www.brookings.edu/wp-content/uploads/2018/10/WorkRequirements_EA_web_1010_2.pdf)
- 600 Ku L and Brantley E. "Myths About The Medicaid Expansion And The 'Able-Bodied.'" *Health Affairs Blog*, March 6, 2017. <https://www.healthaffairs.org/doi/10.1377/hblog20170306.059021/full/> (accessed December 20, 2018).
- 601 Crawford M and Onstott M. "Healthy Behavior Incentives: Opportunities for Medicaid." *Center for Health Care Strategies Brief*, November 2014. [https://www.chcs.org/media/Healthy-Behavior-Incentives\\_Opportunities-for-Medicaid\\_1.pdf](https://www.chcs.org/media/Healthy-Behavior-Incentives_Opportunities-for-Medicaid_1.pdf) (accessed December 20, 2018).
- 602 Garfield R, Damico A, and Orgera K. "The Coverage Gap: Uninsured Poor Adults in States that Do Not Expand Medicaid." *Henry J Kaiser Family Foundation Issue Brief*, June 12, 2018. <https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/> (accessed December 20, 2018).
- 603 Beronio K, Po R, Skopec L, and Glied S. *Affordable Care Act Expands Mental Health and Substance Use Disorder Benefits and Federal Parity Protections for 62 Million Americans*. Washington, DC: U.S. Office of the Assistant Secretary for Planning and Evaluation, ASPE Research Brief, 2013. <https://aspe.hhs.gov/report/affordable-care-act-expands-mental-health-and-substance-use-disorder-benefits-and-federal-parity-protections-62-million-americans> (accessed December 20, 2018).
- 604 *Behavioral Health: Options for Low-Income Adults to Receive Treatment in Selected States*. Washington, DC: U.S. Government Accountability Office, 2015. <https://www.gao.gov/assets/680/670894.pdf> (accessed December 20, 2018).
- 605 Balasubramanian BA, Cohen DJ, Jetelina KK, et al. "Outcomes of Integrated Behavioral Health with Primary Care." *The Journal of the American Board of Family Medicine*, 30(2): 130–139, 2017. <http://www.jabfm.org/content/30/2/130> (accessed December 20, 2018).
- 606 *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2016.
- 607 Ibid.
- 608 "How 2 Health Systems Are Rethinking Mental Health Care for a Value-Based World." *Today's Daily Briefing*, Advisory Board, June 5, 2017. <https://www.advisory.com/daily-briefing/2017/06/05/mental-health> (accessed December 20, 2018).
- 609 Dall T, West T, Chakrabarti R, et al. *The Complexities of Physician Supply and Demand: Projections from 2016 to 2030*. Washington, DC: Association of American Medical Colleges, 2018. <https://news.aamc.org/content/downloadable/133/> (accessed December 20, 2018).
- 610 "Health professional Shortage Areas – Primary Care." Grand Forks, ND: Rural Health Information Hub, 2017. <https://www.ruralhealthinfo.org/rural-maps/health-workforce> (accessed on December 20, 2018)
- 611 "Ranks of Nurse Practitioners Grow to Meet Primary Care Demand." In: *American Association of Nurse Practitioners*, November 11, 2018. <https://www.aanp.org/news-feed/ranks-of-nurse-practitioners-grow-to-meet-primary-care-demand> (accessed December 20, 2018).
- 612 Institute of Medicine. *The Future of Nursing Leading Change, Advancing Health*. Washington, DC: National Academies of Sciences, Engineering, and Medicine, 2010. <http://nationalacademies.org/hmd/~media/Files/Report%20Files/2010/The-Future-of-Nursing/Future%20of%20Nursing%202010%20Recommendations.pdf> (accessed December 20, 2018).
- 613 "Telehealth: Helping Hospitals Deliver Cost-Effective Care." In: *American Hospital Association Issue Brief*, 2016. <https://www.aha.org/system/files/content/16/16telehealthissuebrief.pdf> (accessed December 20, 2018).
- 614 *State Telehealth Laws: A Comprehensive Scan of the 50 States & the District of Columbia & Reimbursement Policies*. Sacramento CA: Public Health Institute Center for Connected Health Policy, 2018. <https://www.cchpca.org/telehealth-policy/state-telehealth-laws-and-reimbursement-policies-report> (accessed December 20, 2018).
- 615 "Fundamentals of Prevention." In: *ChangeLab Solutions*, September 2013. [https://changelabsolutions.org/sites/default/files/Fundamentals\\_Premption\\_FS\\_FINAL\\_20130911.pdf](https://changelabsolutions.org/sites/default/files/Fundamentals_Premption_FS_FINAL_20130911.pdf) (accessed December 20, 2018).
- 616 Assembly Bill No. 1838, Chapter 61. In: *California Legislative Information*. [https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180AB1838](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1838) (accessed December 20, 2018).
- 617 "Preemption: The Biggest Challenge to Tobacco Control." In: *Tobacco Control Legal Consortium Fact Sheet*. <http://publichealthlawcenter.org/sites/default/files/resources/tclc-fs-preemption-tobacco-control-challenge-2014.pdf> (accessed December 20, 2018).
- 618 Ibid.



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