A BLUEPRINT FOR THE 2021 ADMINISTRATION AND CONGRESS

The Promise of Good Health for All: Transforming Public Health in America
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.

### TFAH BOARD OF DIRECTORS

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gail Christopher, D.N.</td>
<td>Chair of the TFAH Board Executive Director</td>
</tr>
<tr>
<td></td>
<td>National Collaborative for Health Equity Former Senior Advisor and Vice President W.K. Kellogg Foundation</td>
</tr>
<tr>
<td>David Fleming, M.D.</td>
<td>Vice Chair of the TFAH Board Vice President of Global Health Programs PATH</td>
</tr>
<tr>
<td>Robert T. Harris, M.D.</td>
<td>Treasurer of the TFAH Board Senior Medical Director General Dynamics Information Technology</td>
</tr>
<tr>
<td>Theodore Spencer</td>
<td>Secretary of the TFAH Board Founding Board Member</td>
</tr>
<tr>
<td>Stephanie Mayfield Gibson, M.D.</td>
<td>Senior Physician Advisor and Population Health Consultant Former Senior Vice President, Population Health, and Chief Medical Officer KentuckyOne Health</td>
</tr>
<tr>
<td>Cynthia M. Harris, Ph.D., DABT</td>
<td>Director and Professor Institute of Public Health Florida A&amp;M University</td>
</tr>
</tbody>
</table>

### REPORT AUTHORS

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Auerbach, MBA</td>
<td>President and CEO</td>
</tr>
<tr>
<td>J. Nadine Gracia, M.D., MSCE</td>
<td>Executive Vice President and Chief Operating Officer</td>
</tr>
<tr>
<td>Rhea K. Farberman, APR</td>
<td>Director of Strategic Communications and Policy Research</td>
</tr>
<tr>
<td>Dara Alpert Lieberman, MPP</td>
<td>Director of Government Relations</td>
</tr>
<tr>
<td>Adam Lustig, MS</td>
<td>Manager, Promoting Health and Cost Controls in States</td>
</tr>
</tbody>
</table>

### TRUST FOR AMERICA’S HEALTH LEADERSHIP STAFF

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>John Auerbach, MBA</td>
<td>President and CEO</td>
</tr>
<tr>
<td>J. Nadine Gracia, M.D., MSCE</td>
<td>Executive Vice President and Chief Operating Officer</td>
</tr>
</tbody>
</table>
Table of Contents

INTRODUCTION ............................................................... 4

PRIORITY 1: Make substantial and sustained investments in a more effective public health system including a highly skilled public health workforce. .................. 9

PRIORITY 2: Mobilize an all-out effort to combat racism and other forms of discrimination and to advance health equity by providing the conditions that optimize health. ........ 13

PRIORITY 3: Address the social determinants of health including economic, social, and environmental factors that result in preventable illness, injuries and death. ........... 19

PRIORITY 4: Proactively address threats to the nation's health security. ............... 23

PRIORITY 5: Improve health, safety, and well-being for all people by providing pathways to optimal health across the life span. ........................................... 29

ENDORsing ORGANIZATIONS

The following organizations have endorsed this report:
American Public Health Association
Asian & Pacific Islander American Health Forum
Big Cities Health Coalition
Campaign for Tobacco-Free Kids
Prevention Institute
Public Health Institute
National Network of Public Health Institutes
Well-being and Equity (WE) in the World
Introduction

Our current public health infrastructure is dangerously inadequate.

Everyone in America should have the opportunity to lead a healthy life. Every community should be free from threats to health and all individuals and families should have access to services that support health and well-being regardless of who they are or where they live. A strong public health system is the foundation that allows the nation to fulfill this goal.

The COVID-19 pandemic is a stark demonstration of what can happen when federal, state and local policymakers chronically underinvest in public health, politicize public health, and fail to address the structural racism that has led to profound health disparities across the United States. As of this publication, the pandemic caused over 200,000 deaths in the United States, approximately 20 percent of the worldwide death total. Moreover, its impact on the U.S. economy and the economic security of millions of American families is unprecedented. The COVID-19 crisis must serve as a call to action to strengthen the nation’s public health system (a strong public health system is foundational to strong emergency preparedness) and to address the systemic inequities that have led to its disproportionate health and social impacts in communities of color.

Even before COVID-19, numerous health emergencies have elevated the urgency of a robust public health system, including measles and other vaccine-preventable infectious disease outbreaks including Zika and Ebola; opioid misuse, deadly vaping-related lung injuries; and the impacts of climate change on weather and the food supply. Each of these events has temporarily focused attention on the importance of the public health system. In response, the federal government sometimes provides supplemental funding to meet the immediate danger. But, one-time, supplemental funding does nothing to address the overall system’s chronic underfunding. Once the emergency recedes, support for the public health system quickly fades, leaving the country less prepared for the next emergency. The COVID-19 crisis has illuminated this stark reality. Without increased and sustained funding for the core elements of a robust public health system — including personnel, training, equipment, and data systems - the next emergency response will be less effective than it needs to be.

Poverty drives poor health, particularly in rural areas, urban areas and among older adults. In addition, structural racism and discrimination have created a long-standing public health crisis in the United States. Examples of the ways in which this structural racism impacts the lives of people of color abound and are especially obvious in rates of illness and life expectancy. American Indians have faced a health crisis since the earliest arrival of Europeans on the continent, a crisis that continues today with the longstanding dearth of economic and educational opportunities and the scarcity of accessible public health and healthcare services. Black Americans still live with the legacy of slavery and Jim Crow resulting in structural barriers to affordable housing, good-paying jobs, quality schools and safety in day-to-day activities. Latinx people face economic and social discrimination and the vilification of immigrants from Central and South America and the Caribbean. During World War II, Asian Americans were accused of being disloyal and forced into internment camps. Today they have been scapegoated by some for COVID-19 and other pandemics. These and other legacies and stressors have led to a shortened life span among some populations of color and a higher incidence of chronic and infectious disease.
Many of these inequities, spanning generations, result from poverty, discrimination, and disinvestment in communities of color — all rooted in structural racism. For example, the effects of historic, discriminatory housing policies that fostered residential segregation persist today. Residential segregation creates concentrated poverty, isolates communities of color, and decreases opportunity and resources in the community, which manifest as poorer quality schools, substandard housing, greater exposure to pollution, less healthy food access, less availability of healthcare services, lack of good jobs and limited opportunities for upward economic mobility — all of which negatively impact health and well-being.\(^3\)\(^4\)

Furthermore, rates of chronic illness across groups of Americans are growing and too many Americans still smoke.

Today four in 10 adults have two or more chronic diseases, such as diabetes, heart disease and cancer\(^5\) and Americans’ life expectancy was down in 2015, 2016 and 2017.\(^6\) While 2018 saw a slight increase in Americans’ life expectancy due to declines in cancer and prescription-drug-related deaths, the impact of COVID 19 will undoubtedly cause it to drop precipitously.\(^7\)

A strong public health system will save lives

Key drivers of everyone’s health are the conditions in which they live and work, meaning that solutions to the problem of health inequity exist in large part outside of traditional healthcare and beyond disease specific interventions.\(^8\) This reality reinforces the importance of investing in programs to address the social determinants of health. Social determinants of health are factors that significantly impact a person’s health, such as where they live or work and their access to healthy food, safe housing, jobs that pay a living way, and quality educational opportunities. Such investments are critical to improving health at the population level.

While the country grapples with COVID-19, police violence, the increased frequency and severity of weather-emergencies, the the growing rates of chronic illness and mental health and substance misuse epidemics, it is critical to state that much of this illness, hardship, economic disruption and death is preventable. What Americans need is a significant, multi-sector effort and a change in the nation’s priorities in order to put prevention front and center.

Essential elements of such a commitment are a robust 21st century public health infrastructure; an empowered, well-equipped public health workforce; and appropriate funding and program decisions including investments in the social determinants of health. Experts in public health are calling for at least a $4.5 billion annual investment in building the nation’s public health system at the state, local, tribal and territorial levels.\(^9\)

Faced with these cascading emergencies, the public health sector has been crippled by chronic underfunding. Congress and other agencies have decreased the Centers for Disease Control and Prevention’s (CDC) core funding for its own work and to support state and local level

---

**Social Determinants of Health**

<table>
<thead>
<tr>
<th>Economic Stability</th>
<th>Neighborhood and Physical Environment</th>
<th>Education</th>
<th>Food</th>
<th>Community and Social Context</th>
<th>Health Care System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
<td>Income</td>
<td>Expenses</td>
<td>Debt</td>
<td>Medical bills</td>
<td>Support</td>
</tr>
<tr>
<td>Housing</td>
<td>Transportation</td>
<td>Safety</td>
<td>Parks</td>
<td>Playgrounds</td>
<td>Walkability</td>
</tr>
<tr>
<td>Literacy</td>
<td>Language</td>
<td>Early childhood education</td>
<td>Vocational training</td>
<td>Higher education</td>
<td></td>
</tr>
<tr>
<td>Hunger</td>
<td>Access to healthy options</td>
<td>Social integration</td>
<td>Support systems</td>
<td>Community engagement</td>
<td></td>
</tr>
<tr>
<td>Discrimination</td>
<td>Health coverage</td>
<td>Provider availability</td>
<td>Provider linguistic and cultural competency</td>
<td>Quality of care</td>
<td></td>
</tr>
</tbody>
</table>

**Health Outcomes**

Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

Source: Kaiser Family Foundation
programs. State and local public health sectors lost an estimated 26,000 jobs between 2009 and 2019 due to funding cuts. These cuts make public health agencies less prepared to protect communities as public health needs are growing exponentially. Data systems are outdated. Public health laboratories lack needed equipment and a sufficient workforce. And critical communication systems are antiquated. The economic downturn caused by the COVID-19 pandemic is already leading to additional reductions in federal, state and local public health budgets at a time when the system needs to be strengthened, not cut.

The estimated cost of rebuilding the nation’s public health system is small when compared to the cost of not being prepared, as came to light during the COVID-19 crisis. In 2018, only 51 percent of the U.S. population was served by a comprehensive local public health system. Experts estimate the gap in the funding level required to ensure that everyone is afforded the protections of a comprehensive public health system to be approximately $13 per person. The cost of inaction is high. At the time of this publication, Congress had appropriated some $4 trillion to shore up the nation’s emergency response and healthcare systems to deal with the pandemic and to support businesses and families as the economic disruption of the crisis bore down on them. The cost of inaction and a lack of preparedness, in lives lost, economic hardship and in the ways in which social and racial inequities are exacerbated, is the price tag Americans cannot afford.

This Blueprint Report offers recommendations to the administration and Congress that will take office in January 2021. It highlights policy actions within five priority areas that are necessary to transform the public health system:

- Make substantial and sustained investment to create a more effective public health system, including a highly skilled public health workforce.
- Mobilize an all-out effort to combat racism and other forms of discrimination and to advance health equity.
- Address the social determinants of health including economic, social and environmental factors that result in preventable illnesses, injuries, and death.
- Reduce threats to the nation’s health security by acting proactively to protect the American public from threats such as climate change, weather events, and infectious disease outbreaks.
- Improve health, safety, and well-being across the life span, by addressing chronic disease and by providing pathways to optimal health from birth through old age.

If taken, these policy action steps will improve all Americans’ health, prevent harm, decrease healthcare spending, reduce health inequities, and save lives. The negative impact of underfunding the nation’s public health infrastructure increases each year as the range and severity of health security risks continue to grow. The time for action is now.
Racism is a Public Health Crisis

Spring and summer 2020 were trying seasons, provoking multiple reactions including despair, confusion, and anger, but also hopefulness and a determination that once and for all, conditions must change for the better. As America’s emergency departments filled with COVID-19 patients, America’s streets filled with protesters in response to more murders of unarmed Black people by police. In addition to the profound sadness and anger about what were preventable and unjustifiable deaths, millions of Americans were asking what could be done to convert the outrage into actionable transformation. They were asking, how can we plant the seeds of meaningful change?

Essential elements to bringing about such change involve acknowledging and overcoming structural racism and its impact on communities of color across multiple sectors including education, housing, employment, healthcare, policing, and criminal justice. This will not be easy, given how thoroughly racism in the United States is baked into the nation’s systems and structures, devaluing the lives of people of color, but it is work that must be done.\textsuperscript{16}

Racism impacts people of color in nearly every facet of their lives from where they live, to where they go to school and work, to where they shop and feel safe. Racism and its legacies are often at the root of the conditions in today’s communities of color that drive disproportionately poor health outcomes. The COVID-19 pandemic made this reality starkly obvious. According to CDC, as of July 2020, Blacks have died from COVID-19 at a rate that was double the rate of deaths for whites, 92.3 deaths per 100,000 people for Blacks, and 45.2 deaths per 100,000 people for whites.\textsuperscript{17} As of August 2020, age-adjusted COVID-19 mortality rates showed that Blacks died as a result of the virus at a rate 3.6 times higher than whites; Latinxs died at a rate 3.2 times higher than whites and Pacific Islanders died at a rate 3 times higher than whites.\textsuperscript{18}

Additional examples of the impacts of structural racism include the fact that Black women are up to four times more likely to die due to pregnancy related complications than white women\textsuperscript{19} and Black men are twice as likely to be killed by police than are white men.\textsuperscript{20}

A higher proportion of Black people have underlying medical conditions such as heart disease and diabetes due largely to policies that have created obstacles to healthy, affordable foods, opportunities for physical activity and safe and affordable housing.\textsuperscript{21}

In addition, during the COVID shutdown, a higher proportion of people of color are working in jobs designated as “essential,” such as frontline jobs in grocery stores, healthcare and mass transit systems.\textsuperscript{22} Another factor that impacts the health status of Black Americans, and puts them at greater risk of a serious outcome during an infectious disease outbreak, is the cumulative effect of having to navigate a racist world.\textsuperscript{23} These experiences range from police violence to perpetual microaggressions which can result in continual stress and damaging physiological changes.

The consequences of disparities in health insurance coverage and access to high quality care also impact the health of people of color during so-called normal times, and are exacerbated during public health emergencies. Increases in the
The context: The dominant consensus on race

- White Privilege
- National Values
- Contemporary Culture

The current manifestations: Social and institutional dynamics

- Processes that maintain racial hierarchies
- Racialized public policies and institutional practices

The outcomes: Racial disparities

- Racial inequalities in current levels of well-being
- Capacity for individual and community improvement is undermined

Ongoing racial inequalities

Source: The Aspen Roundtable on Community Change

Numbers of American Indian/Alaska Native, Black and Hispanic families with health insurance coverage created by the Affordable Care Act began to slip in 2017 due to changes in the program. According to the Kaiser Family Foundation, in 2018, almost 22 percent of the American Indian/Alaska Native community did not have health insurance. Within the Hispanic and Black communities, the uninsured rates were 19.0 and 11.5 percent respectively. Approximately 8 percent of Native Hawaiians and Pacific Islanders were uninsured and slightly over 7 percent of Asian Americans were uninsured. The uninsured rate for whites is 7.5 percent.\(^ {24}\)

Dr. Gail Christopher, the chairperson of TFAH’s Board of Directors, asked the following question in an essay published in The Crisis Magazine: “Could this pandemic help us, as a whole society, to finally see and understand the dire consequences and overwhelming implications of racism? If a critical mass of people is now seeing and recognizing our structural inequities — some for the first time — the next step involves acknowledging the consequences of those inequities.”\(^ {25}\)

Structural racism requires systemic and structural responses. Institutions within society from schools to workplaces and housing, from healthcare to policing and criminal justice are in dire need of significant change. The only way to ensure everyone has the same opportunity to live a long and healthy life is to reconstruct the institutions that are rooted in racist legacies and, once and for all, remove the societal barriers to good health in every community.

Racism in the United States has robbed people of color of their physical safety and economic opportunities for generations. It has impacted their physical and mental health and it has cut short too many lives. Collective change is urgently needed.
Make substantial and sustained investments in a more effective public health system, including a highly skilled public health workforce.

THE PROBLEM

Public health emergencies are not only growing in frequency, severity and complexity, they happen in the context of an already inadequate public health system. These new threats include the growing risks associated with climate change, environmental toxins, health inequities, and increasing levels of chronic and infectious disease. The nation’s public health and emergency preparedness infrastructure does not currently possess sufficient resources to ensure the well-being of all communities during health emergencies.

The magnitude of the impact of COVID-19 would be staggering by itself, but sadly, it also magnifies a life-threatening pattern, that is, a public health system that is only considered important during a crisis.

THE SOLUTION

The nation’s public health system must be comprehensive and nimble. It should focus on prevention and be able to meet everyday priorities as well as surge its capacity during an emergency. It requires not only increased funding for disease-specific prevention programs but also increased and more flexible investments to rebuild a strong and robust public health infrastructure.

In addition to a strong infrastructure, the public health sector needs increases in its categorical, i.e. issue or disease specific, funding. Such funding will allow it to address critical issues, such as the impact of climate change and the continuing epidemics of suicide, substance use, and obesity and the devastating impacts of structural racism.

A STRONG PUBLIC HEALTH SYSTEM IS THE KEY TO ENSURING AMERICANS’ HEALTH AND SAFETY

The public health system is most appreciated in the midst of a crisis, but typically neglected at other times. The result of this habitual underinvestment is a public health infrastructure unprepared to meet 21st century health challenges. The COVID-19 crisis is a stark illustration of the degree to which the public health system needs to be rebuilt and protected against politicization.

A 21st century public health system needs to be grounded in expertise in disease surveillance, data analytics, environmental monitoring, emergency preparedness, illness and injury prevention, health equity, and the social determinants of health. Unfortunately, in the United States today we are facing 21st century health challenges armed with 20th century tools. This weakened system is a threat to Americans’ health and welfare.
To meet the nation’s growing public health demands, the sector needs to both be prepared for short-term priorities and adopt a Public Health 3.0 approach. The Public Health 3.0 model is designed to meet health risks and to address the social determinants of health and health inequities. The 3.0 model enables public health leaders at the local level to be chief health strategists for their communities, working across sectors and leveraging data to improve health at the population level.26

Public health infrastructure refers to the essential core components of a health department including:

- A well-trained and well-resourced workforce.
- A state-of-the-art data and information system to assess and monitor population health status and factors that influence health and community needs.
- A public health laboratory system that can rapidly and accurately meet the demands of a steady flow of viruses and other organisms, novel and long-standing.
- Empowered public health leaders able to make recommendations and decisions devoid of political considerations.
- An emergency preparedness system that is well prepared and equipped to address all hazards at the earliest possible point and surge capacity when necessary.
- The capacity to address social determinants of health, end health disparities, and promote optimal health in all communities.
- Community partnership development, including engagement with key groups representing populations experiencing health disparities.

PUBLIC HEALTH: FOUNDATIONAL CAPABILITIES AND SERVICES27

<table>
<thead>
<tr>
<th>Foundational Areas:</th>
<th>Foundational Capabilities:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Communicable disease control</td>
<td>- Health monitoring and assessment including surveillance, epidemiology and laboratory capacity</td>
</tr>
<tr>
<td>- Chronic disease and injury prevention</td>
<td>- All-hazards preparedness and response</td>
</tr>
<tr>
<td>- Environmental public health</td>
<td>- Policy development and support</td>
</tr>
<tr>
<td>- Emergency preparedness and response</td>
<td>- Public communications</td>
</tr>
<tr>
<td>- Policy development, support, and evaluation</td>
<td>- Community outreach and partnership development</td>
</tr>
<tr>
<td>- Advancing health equity</td>
<td>- Organizational and administrative competencies, i.e. leadership, governance and health equity</td>
</tr>
<tr>
<td>- Addressing the social determinants of health</td>
<td>- Accountability and performance management</td>
</tr>
<tr>
<td>- Maternal, child, and family health</td>
<td></td>
</tr>
<tr>
<td>- Healthy aging</td>
<td></td>
</tr>
<tr>
<td>- Social, emotional, and behavioral health</td>
<td></td>
</tr>
<tr>
<td>- Access and linkages to social services and clinical care</td>
<td></td>
</tr>
</tbody>
</table>
FROM HEALTHY PEOPLE 2020 AND 2030

Why Is Public Health Infrastructure Important?

Public health infrastructure provides communities, states, and the nation the capacity to prevent disease, promote health, and prepare for and respond to both acute (emergency) threats and chronic (ongoing) challenges to health. Infrastructure is the foundation for planning, delivering, evaluating, and improving public health.

All public health services depend on the presence of basic infrastructure. Every public health program—such as immunizations, infectious disease monitoring, cancer screening, asthma prevention, drinking water quality, and injury and suicide prevention—requires health professionals who have cross-cutting competencies and technical skills, up-to-date information systems, and public health organizations with the capacity to assess and respond to community health needs. Public health infrastructure has been referred to as “the nerve center of the public health system.” While a strong infrastructure depends on many organizations, public health agencies (health departments) are the central players. Federal agencies rely on the presence of solid public health infrastructure at all levels of government to support the implementation of public health programs and policies and to respond to health threats, including those from other countries.

RECOMMENDATIONS FOR POLICY ACTIONS

Rebuild and modernize the public health system by creating a mandatory $4.5 billion per year Public Health Infrastructure Fund to support foundational public health capabilities at the state, local, territorial and tribal levels. These infrastructure needs include modern facilities and health information and data systems. The funding may focus on “bricks and mortar” and systems development, but it should also include ongoing support for the workforce necessary to successfully leverage the investment. For example, skilled laboratory workers as well as up-to-date public health laboratories and equipment and sophisticated data managers and analysts as well as hardware and software investments, are needed. Additional funding should be provided to allow CDC and other federal agencies to have the internal resources to meet their own infrastructure needs and to provide data, technical assistance, oversight, and evaluations of resources to states, territories and tribes.

Preserve and protect the Prevention and Public Health Fund. The Prevention and Public Health Fund was created by the Affordable Care Act and is the only dedicated, mandatory funding source for prevention and public health programs within the federal budget. By statute, it is intended “to provide for expanded and sustained national investment in prevention and public health programs to improve health and help restrain the rate of growth in private and public healthcare costs.” Due to funds being directed to other spending, the Prevention Fund has lost nearly $12 billion. Congress should restore funding to the level of $2 billion per year and direct that all future spending from the fund be focused on critical public health needs. Cross-cutting investments are needed to revitalize the CDC’s data infrastructure, as well as to shore up state and local public health surveillance capabilities.

Preserve and protect the Prevention and Public Health Fund. The Prevention and Public Health Fund was created by the Affordable Care Act and is the only dedicated, mandatory funding source for prevention and public health programs within the federal budget. By statute, it is intended “to provide for expanded and sustained national investment in prevention and public health programs to improve health and help restrain the rate of growth in private and public healthcare costs.” Due to funds being directed to other spending, the Prevention Fund has lost nearly $12 billion. Congress should restore funding to the level of $2 billion per year and direct that all future spending from the fund be focused on critical public health needs. Cross-cutting investments are needed to revitalize the CDC’s data infrastructure, as well as to shore up state and local public health surveillance capabilities.

Modernize public health surveillance and data. The nation’s public health surveillance infrastructure currently relies on antiquated, disconnected systems and methods for tracking and responding to diseases. Local, state, and federal data systems have not kept pace with current technologies and result in delayed detection and response to public health threats. The COVID-19 crisis illuminates many of these weaknesses, as public health officials try to track disease patterns with incomplete data and archaic reporting mechanisms. Cross-cutting investments are needed to revitalize the CDC’s data infrastructure, as well as to shore up state and local public health surveillance capabilities.
TFAH supports an additional $450 million in immediate funding and $100 million per year over the next 10 years to modernize the public health surveillance enterprise and build secure, interoperable systems and a highly trained workforce. $50 million was included in the FY20 spending bill as a down payment on public health data modernization, and $500 million was including in the Coronavirus Aid, Relief, and Economic Security Act (P.L.116-136) but more immediate and annual funding is needed to modernize and sustain these systems.

**Recruiting and retaining the public health workforce.** A 21st century public health system, equipped to address emergencies and serve as chief health strategists for communities, requires a 21st century workforce. The most recent Public Health Workforce Interests and Needs Survey found that the public health workforce faces major challenges in turnover and attrition, putting the public’s health at risk. Reductions in federal, state and local public health budgets have undermined efforts to hire, train, and retain a strong public health workforce, which in turn limits governments’ ability to effectively protect and promote the health of their communities. In the 10 years following the 2008 recession, local public health departments lost an estimated 26,000 (16 percent) FTE staff positions due to federal, state, and local budget cuts. Already operating from this deficit, the loss of state and local revenues due to COVID-19 is likely to have a similar, if not worse impact on the public health workforce. Short-term funding from COVID-19 response packages do not allow for permanent recruitment and retention of public health staff. Congress should prioritize development of the public health workforce, including public health national service programs; funding incentives to enter and remain in the public health workforce, such as loan repayments; recruiting and retaining a workforce with needed skills, such as informatics; and improving training.

**Empower public health officials to make decisions based on science and devoid of political considerations.** Any efforts to infuse politics into public health decision-making puts the public’s health at risk.

**Provide full-year funding for federal agencies to allow for uninterrupted planning and program implementation.** Many federal agencies play a role in protecting and improving public health. When the government is operating under a short-term continuing resolution—or worse, a shut-down—public health and other programs that promote health can be crippled. Temporary funding through emergency supplementals or short-term continuing resolutions, followed by stagnant budgets, do not allow for recruitment and retention of highly skilled, full-time workers nor long-term project planning. Congress should enact full-year appropriations measures that fund federal agencies for the entire fiscal year. This is essential for effective and efficient use of taxpayer dollars and for planning and maintaining the workforce, supplies, and other capacities necessary to support all public health functions.
Mobilize an all-out effort to combat racism and other forms of discrimination and to advance health equity by providing the conditions that optimize health.

**THE PROBLEM**

Structural racism, systemic inequities, discrimination, and poverty have existed in the United States for generations and have been documented as predominant drivers of health inequities. Their impact results in higher rates of deaths from illness and injury among people of color, and this increased risk of poor health persists even when controlling for socioeconomic factors.

Many marginalized groups, including communities of color, gender and sexual minorities and people with disabilities, have been historically prevented from obtaining what is necessary to be healthy – a safe place to live, a job that pays a living wage, and access to quality education and healthcare services. Therefore, an explicit focus on ending systemic discrimination is fundamental to advancing equity, providing everyone fair and just opportunities for optimal health, and improving the nation’s health outcomes.

**THE SOLUTION**

To achieve health equity, opportunities and community conditions that allow all residents to live the healthiest life possible regardless of who they are, where they live, or their income level, are needed. This means overcoming centuries of inequitable policies and practices and addressing discrimination that persists today in virtually every sector, including education, employment, healthcare, housing, environment, policing and criminal justice. Central to addressing these inequities is acknowledging the history and current practices that have caused them, addressing their root causes, and taking action steps in multiple areas of social, economic and health policy to drive systemic change and to overcome the harmful barriers to health and well-being.

**STRUCTURAL RACISM, DISCRIMINATION AND DISADVANTAGE ARE BARRIERS TO GOOD HEALTH.**

Health disparities are preventable differences in the burden of disease, injury, violence, or in opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other population groups, and communities.

While the underlying causes of health inequity and healthcare disparities are complex and interwoven, the COVID-19 pandemic has put a spotlight on the alarming disparities between people of color and whites, further heightening the urgency and critical need for leadership, commitment, and increased and directed resources to address these disparities.
The drivers of health inequities largely stem from structural racism, which fuels poverty and discrimination, undermines equity and opportunity, and is far reaching in health, education, economic opportunity, employment, housing, transportation, and criminal justice, among many other systems. The toll from racism is evident in the impact of the disinvestment in and marginalization of communities of color, unhealthy social, economic, and environmental conditions, and the lack of opportunities within those settings, which result in deaths at earlier ages and high rates of chronic and infectious diseases. It is important to note that health inequities continue to exist even when controlling for socioeconomic factors such as income or education level. Because the structural drivers of these disparities are largely rooted in system-level inequities, socioeconomic drivers, and biases, a multi-agency, multi-sector, coordinated effort will be required to correct them.

People of color have a shorter life expectancy of 10 years or more than whites in neighboring areas. For example, researchers have tied the legacy of historic redlining, which has led to intergenerational, concentrated poverty and environmental health risks, to persistently higher rates of asthma, obesity, and mortality from chronic disease. The infant mortality rates among Black infants and American Indian/Alaska Native infants are respectively 2.3 times and 2.0 times that of non-Hispanic white infants. Blacks, Latinxs, American Indians/Alaska Natives, Asian Americans, Native Hawaiians, and Pacific Islanders have higher rates of diabetes than non-Hispanic whites. Black and American Indian/Alaska Native women die from pregnancy-related causes at rates approximately three times higher than that of non-Hispanic white women. Similar disparities have borne out in the COVID-19 pandemic. While all populations, regardless of race, ethnicity, socioeconomic status, age, and sex are at risk for COVID-19 infection, people of color have experienced disproportionate health and economic impacts from COVID-19. The death rate among Blacks is nearly two times their percentage of the U.S. population; the Navajo Nation has the highest per capita rate of infection in the United States; and Latinxs and Native Hawaiians and Pacific Islanders represent a greater percentage of confirmed cases than their share of the population in several states.

Other groups face additional challenges. LGBTQ+ individuals face health disparities linked to societal stigma, discrimination and denial of human rights. Individuals with disabilities are less likely to receive preventive health services, are at higher risk for poor health outcomes, and may be overlooked in public health data. These disparities are compounded at intersections of demographics, such as Black LGBTQ+ people, who are subjected to higher rates of violence than white counterparts.

Daily occurrences of prejudice and discrimination result in adverse mental and physical health effects such as chronic stress, trauma, and elevated blood pressure. There is strong evidence that discrimination is associated with unhealthy changes to the body that can take their toll over time, such as long-term stress. A 2017 survey found that 92 percent of Blacks and about 75 percent of Latinxs
and American Indians reported being treated differently when seeking health services, looking for housing, interacting with the police and even doing day-to-day tasks. Such treatment can result in the avoidance of necessary healthcare and can reinforce social isolation.

Given the longstanding existence of health inequities, it is not realistic to expect a single program or policy to solve the nation’s health inequities. Action steps, however, can be taken to promote health equity. Policy, systems, and environmental changes with an intentional focus on health equity can lay the foundation for transformative efforts to end inequities. Attention should be paid to the allocation of resources to the populations most impacted and to meaningful and authentic engagement of members of those communities to set priorities and develop and implement initiatives to promote equity. Other sectors must also be involved as is the case when addressing the social determinants of health. For example, the elimination of racial segregation requires involvement from the housing, community finance, transportation and educational sectors. Approaches are needed to reduce health risks such as identifying the most pressing health needs in every community and prioritizing those areas for investment.
RECOMMENDATIONS FOR POLICY ACTIONS

The administration and Congress should make advancing health equity and eliminating health disparities a national priority. Policy, systems, and environmental changes must have an explicit focus on equity to yield the desired outcome of preventing and reducing disparities. Moreover, evaluation of these efforts is vital to monitor progress, demonstrate impact, and ensure accountability for federal policies and programs.

- Create a Truth, Racial Healing and Transformation Commission and fund communities to begin the process of acknowledging the history of racism and working to dismantle the myth of hierarchy based on race. The process of racial healing and transformation is a necessary building block for reforming the systems and beliefs that inhibit health. This process should be complemented by grants to local communities, built from the framework developed by the W.K. Kellogg Foundation, to implement multisector truth, racial healing and transformation collaborations at the local level.62, 63

- Reinforce the senior-level, federal interdepartmental task force on advancing equity for the nation, including a review of federal policies and programs in housing, employment, health, environmental justice and education that have contributed to health inequities. Federal departments must hold senior leadership accountable for developing concrete goals that are matched by policies, resources, and public reporting.

- All HHS Operating and Staff Divisions should be required to establish goals, develop related strategies and actions and annually and publicly report on efforts and progress towards achieving health equity goals. Investment in the design of rigorous and innovative evaluation methods will be needed to effectively capture the impact of comprehensive, upstream interventions and strategies including policy analyses and evaluation. All HHS Operating and Staff Divisions should assess and heighten the impact of policies, programs, and resources decisions to reduce health disparities and advance health equity.

- The HHS Office of Minority Health, the National Institute on Minority Health and Health Disparities, and the agency Offices of Minority Health (Agency for Healthcare Research and Quality, CDC, Centers for Medicare & Medicaid Services, Food and Drug Administration, Health Resources and Services Administration, and Substance Abuse and Mental Health Services Administration) are all vital to minority health and health equity leadership, infrastructure and expertise within HHS. The COVID-19 pandemic has underscored the importance of these offices and institutes, in light of the greater impact of the pandemic on communities of color. These offices and institutes must have the authorities, budget, and resources comparable to other offices, institutes, and centers within the respective agency and/or aligned to the statutory mandate of that office or institute.

Further develop and expand funding for programs that serve under-resourced and marginalized communities. Longstanding disinvestment in and marginalization of many communities of color across the country has resulted in fewer
resources and services for optimal health. These limited resources and services manifest as less access to healthcare services, less availability of healthy food grocers, and fewer community-based and social services.

- Congress should enact, fund and build on the Health Equity and Accountability Act (HEAA) and similar legislation to improve healthcare access and to reduce disparities among communities of color and populations at higher risk. HEAA can serve as a framework for multiple federal agencies to address underlying causes of health inequities.

- Congress should increase funding for existing programs that address health inequities such as CDC’s Racial and Ethnic Approaches to Community Health (REACH) program and Good Health and Wellness in Indian Country program so that every state has targeted resources for promoting health equity.

- The HHS secretary and all HHS operating and staff divisions should review HHS grant programs to ensure that such programs are directing their federal funding to close gaps in health outcomes in the most affected communities and evaluate the impact of such programs on health inequities.

- Congress and HHS operating and staff divisions should expand and fund programs throughout the Department to address health inequities that disproportionately impact people of color.

Ensure that federal funding to address equity engages those within the most affected communities.

- Establish policies, trainings and technical assistance to ensure that funded agencies establish meaningful mechanisms for community members to be involved in all program planning, implementation and evaluation. Provide funding for community leaders development programs.

- Adapt grantmaking practices to account for differential needs, resources, and capacity: federal agencies should consider disease burden and social context when determining grantmaking eligibility criteria, so that communities with the greatest health-related needs can benefit from competitive grant mechanisms.

- Create mechanisms within the grant funding process across all federal agencies that assist under-resourced communities and build capacity for those communities and organizations which are most often at a disadvantage in the grant application process, allowing them to develop competitive and successful grant applications.

Congress and state legislatures should create and appropriately fund programs to assist in the recruiting, hiring, and retention of a diverse public health workforce at all levels, including in senior leadership roles. Workforce diversity is essential to improving the quality of services, reducing health disparities, and advancing health equity. Studies document that minority practitioners are more likely to practice in underserved and minority communities. Evidence has shown that organizations with a more diverse workforce provide higher quality services and more culturally and linguistically appropriate services. Furthermore, an organization with a workforce that reflects the
community it serves can help build trust amongst community members for that organization. Diversity should exist at all levels of an organization, including in governance and leadership to promote organization-wide commitment and action to equity. Given the growing cultural diversity and changing racial and ethnic demographics of the U.S. population, a diverse public health workforce is imperative to meeting the needs of the population. Such programs could include tuition assistance or student loan forgiveness programs.

- The Office of Personnel Management should create and publish a government-wide diversity and inclusion strategic plan, and follow-up annual reports, including disaggregated data by race and ethnicity of federal workforce leaders. The plan should set goals to ensure that the composition of the federal workforce leadership reflects and is responsive to the nation’s diverse population such that varied perspectives are represented to address longstanding systemic inequities.

Improve publicly reported data collection quality and availability, require all agencies collect, disaggregate and report health data in such a way that the impact of health conditions, policies or interventions on specific population groups are known. In order to eliminate health disparities, it is vital to have quality, comprehensive, and consistently available disaggregated data to identify disparities, develop targeted, culturally and linguistically appropriate policies and programs, and monitor progress in reducing health inequities. The gaps in data are due in part to the nation’s fragmented and antiquated public health surveillance systems and the lack of interoperability between clinical and public health systems, all of which make it more difficult for clinicians to collect and report accurate data to public health agencies. The COVID-19 pandemic magnified the inadequacy of currently available disaggregated data and the challenges to data surveillance systems that are essential to monitoring testing; collecting data on confirmed cases, hospitalizations, and deaths; and developing tailored interventions, in particular among communities of color. If public health officials and policymakers cannot accurately assess differences in the health of different population groups, including at a more granular demographic level than broad racial categories, they cannot effectively address health disparities and disease prevention.

- Sustain and grow investments in public health data modernization at the federal, state, tribal, territorial and local levels, including by enabling electronic case reporting to state and local health agencies, educating providers on data collection and reporting, and reducing duplicate reporting systems to the federal government. All data should be collected and disaggregated by race and ethnicity.

- Ensure that all HHS programs and public health agencies collect and publicly report standardized health and administrative data in a timely fashion and disaggregated by race and ethnicity, in accordance with the Office of Management and Budget Standards for the Classification of Federal Data on Race and Ethnicity, as well as by age, sex, primary language, disability status, sexual orientation, gender identity, and pregnancy status.
Address the social determinants of health including economic, social, and environmental factors that result in preventable illnesses, injuries, and death.

**THE PROBLEM**

The United States spends trillions of dollars a year on health, but most of that money goes toward treating disease rather than preventing it; therefore, rates of chronic disease and other preventable conditions continue to rise.\(^7\)

Social determinants of health are factors that significantly impact a person’s health, such as where a person lives or works, their access to affordable and healthy food, safe housing, jobs that pay a living wage or quality educational opportunities.\(^7\) Healthcare systems across the nation are increasingly recognizing the influence of the social determinants of health and are making efforts to screen patients for these factors. Some health systems focus on referring their patients to community services that will meet their social needs. Some insurers are exploring using healthcare resources to pay for nutrition, transportation or even short-term housing services for the most expensive patients. While these patient-centered efforts are admirable, they have limitations.\(^7\) They can only assist patients on a one-by-one, resource-intensive basis, therefore many patients in need are not served. And, the health systems are typically dependent on community services and policies which are often underfunded.\(^7\)

**THE SOLUTION**

Public health departments are uniquely situated to build collaborations across sectors, identify social determinants of health priorities in communities, and help address policies that inhibit good health. Given appropriate funding and technical assistance, more communities could address social factors that lead to poor health and contribute to high healthcare costs.

**ADDRESSING THE SOCIAL DETERMINANTS OF HEALTH WILL IMPROVE HEALTH OUTCOMES AND REDUCE HEALTHCARE SPENDING**

The United States spends over $3 trillion annually, approximately 18 percent of its gross domestic product, on health.\(^7\) Yet our health outcomes are not indicative of this massive spending level, and the United States lags behind other developed countries in practically every health metric.\(^7\)

A significant portion of that spending is dedicated to treatment of chronic health conditions, which could be prevented or mitigated with an increased focus on primary and upstream prevention policies. Primary prevention aims to prevent disease or injury before they occur and is often focused on individual behavior change. Upstream prevention also aims to prevent disease or injury but is more focused on public policies and programs that change the social, economic or environmental factors that can lead to poor health outcomes.
Prevention starts with people having the opportunity to lead a healthy lifestyle, yet for too many people living in America, poverty, discrimination, lack of access to education, their immediate environment, and other systemic barriers make it difficult to prioritize a healthy lifestyle and even more difficult to lead one. Most local and state health departments lack the necessary funding and tools to support cross-sector efforts to improve social determinants of health. Furthermore, CDC funding for FY2020 was about equal to its 2008 level after adjusting for inflation, while demands on public health have increased over that time. This chronic underfunding has restricted federal, state and local public health practitioners from effectively engaging in efforts to improve social determinants of health and thereby prevent chronic disease.

There is increased recognition that access to medical care alone will not prevent individuals from getting sick. While healthcare systems and insurers are now starting to identify unmet non-medical social needs of their patients, there are often inadequate resources in place to meet these needs. Programs that screen individuals for social needs and refer them to resources are necessary and can be lifesaving for that individual patient, but they do not prevent the conditions that cause individuals and whole communities to have unmet social needs in the first place. Healthcare systems and insurers are sometimes well-positioned to identify and possibly address such determinants, but these efforts are typically limited to their patient populations. As a result, their programs are often unable to serve
members of the larger community who do not interact directly with the healthcare system.

Strategies to improve the social determinants of health need to be bigger and broader and require a policy-level approach. In order to impact positive change for entire populations, it is important to invest in primary prevention and focus on whole communities rather than a subset of individual patients. This is no small task, and individual sectors alone lack the resources and control to succeed. Increasing investments in prevention policies to complement the significant investments already being made in disease treatment can promote health, lower healthcare costs, and increase economic productivity.79

Public health departments are uniquely situated to build collaborations across sectors, identify social determinants of health priorities in communities, and help promote policies that advance health. Public health’s approach is community-wide rather than patient-specific. And it is focused on the prevention of health problems by addressing and thereby reducing the need for social and economic assistance. In order for public health agencies to promote these preventive, community-wide measures, they need resources and partnerships with other sectors, such as housing, education, economic development and public safety. Yet, most local and state health departments lack the funding and tools to support such cross-sector efforts or are limited in doing so by disease-specific federal funding that must be spent in limited, categorical ways.

With appropriate and more flexible funding and technical assistance capacity, more public health departments could engage with their communities in efforts to address the social determinants of health that contribute to high healthcare costs. For several years, health departments across the country have developed health needs assessments and built the capacity and expertise to identify and lead community health improvement efforts. As the United States shifts to a more comprehensive approach to addressing social determinants of health, public health departments need the appropriate and flexible resources to collaborate and work effectively with cross-sector partners to improve community health.

RECOMMENDATIONS FOR POLICY ACTIONS

**Develop a White House led strategy focused on addressing the root causes of disease and on promoting health equity.** The strategy should include a focus on how to facilitate multi-sector collaborative efforts between housing, transportation, education, nutrition, healthcare and the public health sectors at the federal level in order to effectively ensure that coordination and collaboration is occurring at the state and local level. This strategy should include funding multi-year budgets to allow for multi-year grants to state, local, territorial and tribal health departments and organizations to fund the creation of partnerships to implement and evaluate programs beyond a single year window.

**HHS should prioritize local, state, and federal evidence-based public health policies** that have been shown to effectively improve the social determinants of health and develop mechanisms to scale these programs nationwide. Programs such as TFAH’s Promoting Health and Cost Control in States initiative, de Beaumont Foundation and Kaiser Permanente’s CityHealth, CDC’s High Impact in Five Years Initiative and others have identified policies that work and provide cost-savings.80, 81, 82 They should be scaled and spread throughout the nation with well-funded grant programs and assistance in their adoption in local, state, tribal and territorial locales.

**Congress should authorize and fund a social determinants of health program at CDC** to support local, territorial, tribal and state public health or other appropriate agencies to convene across sectors, gather data, identify priorities, establish plans, and take action steps to address unmet non-medical social needs such as those related to housing, food, utilities, safety, and transportation. The goal of the program would be to improve health outcomes and reduce healthcare costs. The program would support: 1) developing local and state partnerships between public health agencies, healthcare systems — such as those supported by Center for Medicare and Medicaid Services (CMS) Accountable Health Community model — to address identified social needs of patients, 2) convening relevant local and state organizations, agencies, and policymakers from multiple sectors to review and consider community-wide interventions and strategies to advance health-promoting social conditions, and 3) providing national training and technical assistance to grantees and other interested parties in the optimal approaches to improving health and reducing healthcare costs by addressing social determinants. Similar funding should be considered for other agencies - adapted to their missions and target populations — such as the Health Resources and Services Administration,
the Substance Abuse and Mental Health Services Administration, and the Administration for Community Living, etc. The Improving Social Determinants of Health Act 2020 (H.R. 6561) and (S: 4440) would authorize such a proposal at CDC and health departments. The administration should develop innovative payment models and/or incentives for insurance plans (such as Medicare Advantage) and/or healthcare systems to promote value-based payment, to screen patients for their social determinants of health needs and to ensure that those patient needs are met. Such incentives should prioritize the development of strong linkages between the healthcare and the public health sectors with requirements that health care payers and providers appropriately reimburse public health efforts to guarantee that non-medical social needs of beneficiaries are met. HHS should make permanent and expand the Accountable Health Communities model and develop an innovation model, similar to the Center for Medicare and Medicaid Innovation’s Bundled Payments for Care Improvement Initiative, in which applicants can select one or more non-medical social needs not currently being addressed in their community to improve through the implementation of evidence-based programs and/or policies.

Federal policies and programs should allow greater flexibility for the use of funding, including the ability to braid and blend funds, so that categorical funding can be used in conjunction with other funding streams to address needs that involve multiple sectors. Funding opportunity announcements should encourage such multiple funding sources coordination. Federal braiding and blending efforts could be modeled after local examples, such as Rhode Island’s Health Equity Zones initiative. However, opportunities for braiding and blending funding should not be an excuse to cut program budgets or end categorical funding where it is appropriate.

Federal efforts to address the social determinants of health must address racism and other forms of discrimination. In the assessment of need and the selection of policy and programmatic responses, federal officials should highlight the disproportionate impact of discrimination on certain populations such as people of color, immigrants and those in rural areas and ensure that policies and practices are aimed at closing the gap with regard to preventable illnesses, injuries and deaths. This approach will allow the federal government to address long-standing discriminatory practices such as redlining or unfair banking policies.

The federal government should prioritize the elimination of poverty. Poverty is strongly associated with morbidity and mortality, and income-related health disparities are growing. The administration and Congress should develop a multi-faceted approach to tackling poverty and creating economic stability that includes a review by each federal agency of the steps necessary to end poverty including investment in anti-poverty programs and policies. Strategies that have demonstrated a positive health impact include increasing the national minimum wage, improving access to higher education or professional training for lower-income people, expanding state and federal earned income tax credits, growing federal support for affordable housing, making childcare more affordable, and expanding Supplemental Nutrition Assistance Program (SNAP) and Special Supplemental Nutrition Program for Women, Infants and Children (WIC) benefits.
Proactively address threats to the nation’s health security.

**THE PROBLEM**

As Americans now understand more than ever, a global pandemic, major natural disaster, or man-made terror event have the potential to take lives, disrupt global economies, and contribute to long-term physical and mental health problems in every community, and these events often disproportionately impact communities of color. These scenarios are not in the future — they are occurring with greater frequency and severity and may occur concurrently. From infectious diseases to major floods, to mass shootings, and the effects of climate change, communities are responding to threats to their health security, usually with inadequate resources.

**THE SOLUTION**

Leadership, planning, coordination and resources are the key tools to strengthen America’s ability to safeguard the health of every person and community during an emergency. Federal health security leadership is critical, and state and local governments must be armed with the necessary tools to prepare and respond to public health threats.

**GROWING AND SUSTAINING THE NATION’S HEALTH SECURITY CAPACITY SAVES LIVES AND MONEY**

A well-developed health security capacity saves lives and money. States, counties and cities are now responding to not only the devastation of the COVID-19 pandemic but also to more frequent and more severe disasters and disease outbreaks, all with annual funding for emergency preparedness that is inadequate.

Investments made since 2001 have helped strengthen emergency readiness, yet despite progress, assessments like the National Health Security Preparedness Index and Trust for America’s Health’s *Ready or Not* series find that there is wide variation across the nation in terms of health security surveillance, community planning, incident management, healthcare delivery, and other areas. Disparities in public health funding, rates of poverty, health inequities, geographic vulnerabilities, and limited access to healthcare are placing some communities at disproportionate risk during health emergencies. Furthermore, the COVID-19 crisis demonstrates the criticality of preparedness and coordination between the federal government, states and local communities and the ways lives are put at risk when such preparedness or coordination is weak.

In addition, the changing climate is impacting all Americans, with disproportionate impacts on some communities and individuals, typically lower-income communities and communities of color. More frequent and severe wildfires are producing smoke that can cause serious outcomes for people with asthma and other respiratory and cardiovascular diseases, including hospitalizations and premature death. Many states are seeing more extreme heat days, resulting in increased hospitalizations and deaths.
from heat stroke and cardiovascular, kidney and respiratory disorders with older adults at increased risk.\textsuperscript{105, 106} A changing climate is affecting the distribution and incidence of diseases moved by vectors such as mosquitoes and ticks.\textsuperscript{107} Extreme weather events also negatively impact mental health: 54 percent of adults and 45 percent of children suffer depression after a natural disaster,\textsuperscript{108} and those with underlying behavioral health conditions face risks from disruption of care and added stress.\textsuperscript{109} The nation is already experiencing extreme rainfall, flooding and droughts, which cause injuries, mold-related illnesses, respiratory infections, and water-borne diseases.\textsuperscript{110} Scientists also predict that the changing climate will negatively impact the quality and availability of the world’s food supply.\textsuperscript{111}

Policymakers must apply health equity principles to address climate change and extreme weather, so communities at highest risk— including people with low incomes, children and older residents, non-English speaking people, some communities of color, and people with chronic health conditions face risks from disruption of care and added stress.\textsuperscript{109} The nation is already experiencing extreme rainfall, flooding and droughts, which cause injuries, mold-related illnesses, respiratory infections, and water-borne diseases.\textsuperscript{110} Scientists also predict that the changing climate will negatively impact the quality and availability of the world’s food supply.\textsuperscript{111}

Because an infectious disease agent can circle the globe in as little as 36 hours, the world is only as prepared to fight an infectious disease outbreak as the least prepared nation.\textsuperscript{112} The COVID-19 crisis brought this reality home for millions of Americans but it’s not new to the public health community which has warned about such a scenario for years. In September 2019, the Global Preparedness Monitoring Board warned that the world is dangerously unprepared for a serious pandemic,\textsuperscript{113} and the Global Health Security Index found that none of the 195 nations assessed were prepared for pandemics or epidemics.\textsuperscript{114} The concept of global health security requires the public health capacity development of lower-income countries, especially those at increased risk, so local outbreaks do not become global catastrophes.\textsuperscript{115}

Vaccines are one of the greatest triumphs in the history of public health and medicine. Childhood vaccinations have saved millions of lives and prevented billions of dollars in hospitalizations and over $1 trillion in societal costs to the United States.\textsuperscript{116} However, vaccines have also been a victim of their own success, in that many people have not witnessed the death and pain caused by vaccine-preventable diseases and have therefore become lax about vaccinations. A second challenge is that some vaccines have fallen prey to misinformation about their safety. Rates of adult immunization remain harmfully low, with vaccine coverage for influenza, pneumococcal, hepatitis B and HPV vaccines far below Healthy People 2020 targets.\textsuperscript{117} While childhood vaccination remains high overall in the U.S., there are communities across the country that have experienced outbreaks of vaccine-preventable disease due to low immunization rates.\textsuperscript{118} And although national vaccination rates have improved, racial and ethnic disparities in vaccine coverage persist. Children and adults in communities of color receive recommended vaccines at rates below that of whites for all recommended vaccines.\textsuperscript{119, 120} A related area of concern is that child vaccination rates have plummeted during the COVID-19 crisis.\textsuperscript{121} A further challenge for the country’s vaccine infrastructure will be the demand for a COVID-19 vaccine once it is available. Congress should invest now in shoring up the systems that will be leveraged for distribution and dispensing of a potential COVID-19 vaccine, including immunization information systems, reporting and surveillance structures, training, outreach and education, and ultimately, distribution.
RECOMMENDATIONS FOR POLICY ACTIONS

Strengthen federal leadership and coordination, and ensure that public health policy is non-partisan and based on science. The White House should create a health security directorate, including senior advisors to the president with public health expertise to advise on health security issues and oversee the national biodefense strategy and interagency responses. The White House should ensure senior advisors to the president have a strong background in public health and/or biodefense and that senior-level interagency cooperation is progressing before, during, and after public health emergencies, including through regular meetings of the Biodefense Steering Committee and Biodefense Coordination Team. The White House, HHS, CDC, ASPR, Department of Homeland Security, the Federal Emergency Management Agency and the Food and Drug Administration should work together to clarify roles and responsibilities to improve the nation’s emergency preparedness and response capacity. Public health and science expertise must play a central role in our nation’s preparedness and response with CDC leading the public health response and in communicating with the public. All public health decision making should be solely based on science and insulated from political concerns.

Strengthen state, local, tribal and territorial public health emergency preparedness and response. More than any role of governmental public health, protecting communities from disasters and disease outbreaks is the most visible to and expected by the public. Health departments cannot sustain the progress made in public health preparedness — particularly a highly-trained workforce and well-exercised capabilities — without reliable funding. Funding cuts, short-term continuing resolutions, and emergency supplementals followed by cuts are harmful for public health, in that state and local departments cannot hire and maintain an adequate public health workforce. Although there has been progress in preparedness for many disasters since 9/11, the nation remains vulnerable to a highly virulent pandemic, radiological or nuclear incident, and chemical attack.

The administration and Congress should prioritize increased funding for CDC’s Public Health Emergency Preparedness program and HHS’s Hospital Preparedness Program to build and maintain the nation’s health security capacity.

Create incentives to support the building of sustainable preparedness and surge capacity across healthcare systems. COVID-19 has shown that a serious large-scale event, such as a pandemic, can lead to shortages of beds, healthcare personnel, and equipment, requiring cooperation among healthcare entities, across systems, and across geographic borders. Although there has been progress in developing healthcare coalitions in many regions and meeting CMS and other accreditation preparedness standards by individual healthcare facilities, these existing mechanisms have not been enough incentive for many facilities to create meaningful surge capacity and cooperation across competing entities. Congress and HHS should ensure long-term sustainability for building healthcare readiness across the system, including meaningful incentives and disincentives:
In addition to increasing funding for the Hospital Preparedness Program to promote cooperation between competing healthcare entities and public health, Congress and CMS, in coordination with the Office of the Assistant Secretary for Preparedness and Response, should provide payment incentives and reward facilities that maintain specialized disaster care capabilities.

Congress and HHS should work to build surge capacity across the system by establishing an external regulatory body to set, validate, and enforce standards for healthcare facility readiness, stratified by facility type, with authority to impose financial penalties.

States should engage healthcare providers, supply chain leaders and coalitions in emergency planning efforts. Local health care systems and public health leaders should coordinate through healthcare coalitions or other mechanisms to improve situational awareness and enable strategic movement of patients, personnel, and supplies. In addition, states should review credentialing standards to ensure facilities are able and ready to receive providers from other states during a surge response. States should adopt policies that promote readiness and surge capacity, such as the Nurse Licensure Compact and the Interstate Medical License Compact.

Increase funding for the purchase, pipeline system, distribution and dispensing of medical countermeasures (MCMs) for a wide range of threats. The COVID-19 pandemic uncovered deficits not just in the research and development of new vaccines and therapeutics for emerging threats, but in stockpiling and distribution of ancillary products such as personal protective equipment. Ad hoc distribution systems created in the middle of the crisis, however, should not be made permanent. HHS should take the lead on working with states on the amount and type of materials needed and on distribution plans for medical countermeasures and supplies through the Strategic National Stockpile and CDC’s Center for Preparedness and Response. HHS should also recommit to the regular meeting and empowerment of the Public Health Emergency Medical Countermeasures Enterprise (PHEMCE) process, with MCM research, development and stockpiling decisions made following input from across participating agencies. TFAH supports the Johns Hopkins University Center for Health Security’s call to set a goal of developing MCMs for a wide range of novel threats in months, not years, through investments in platform-based approaches and by developing therapeutics for high-risk viral families.

Accelerate crisis responses through a sizable standing public health emergency response fund and faster supplemental funding. In public health emergencies, the immediate response may quickly tax health departments and other response entities beyond their existing resources, and there is often a lag between when resources are needed and congressional approval of supplemental appropriations. In addition to stable core funding, the federal government needs readily available funds to enable a rapid response while Congress
assesses the need for supplemental funding. Congress should provide regular, no-year infusions of funds into the Public Health Emergency Rapid Response Fund and/or the Infectious Disease Rapid Response Fund to serve as a temporary bridge between preparedness and supplemental emergency funds. The Bipartisan Commission on Biodefense recommends at least $2 billion in funding for the Public Health Emergency Fund. Such funding should not come from existing preparedness resources, as response capacity cannot substitute for adequate readiness. The HHS Secretary should only use such funding for acute emergencies that require a rapid response to save lives and protect the public.

Develop Climate-Ready States & Cities. The administration and Congress should significantly increase funding to the CDC’s Climate & Health Program — expanding it sufficiently to guarantee the support necessary for every state, large cities, U.S. territories and tribes to become climate-ready. Currently, only 16 states and two cities are grantees of the CDC’s climate program, which provides them with assistance to implement its Building Resilience Against Climate Effects (BRACE) framework. The BRACE framework is used to identify likely climate impacts, potential health impacts, and high-risk populations and locations, and to create and implement adaptation plans. To build upon this foundation, the Administration should ensure:

- Increased funding for implementation of policies and public health interventions to alleviate the impacts of climate change. This investment will require an exponential increase in existing funding.

- Grantmaking that prioritizes populations and communities at highest risk and incorporates meaningful engagement from those community members.

- Grantees work across sectors, coordinate and share data with housing, transportation and other programs that are working toward climate adaptation and mitigation.

**Restore and strengthen clean air and water regulations.** Protecting Americans from environmental threats to security must include strengthening protections of air and water. The administration and Congress should restore the Clean Air Act and Clean Water Act protections.

**Demonstrate a long-term commitment to global health security.** The United States must help develop the core health security capacity of other countries to prevent and contain the threat of health emergencies, including strong leadership from the White House and relevant U.S. agencies in global health security efforts. Congress should solidify the U.S. role as a global health leader and its commitment to implementation of the Global Health Security Strategy by providing sustained annual funding for global health security programs across HHS, CDC and the U.S. Agency for International Development. The White House should also restore its commitment to global cooperation, including support for the World Health Organization.
Strengthen the immunization infrastructure and systems — from development through dispensing — to ensure that every American receives all necessary vaccinations across their lifespan.

The eventual availability of a COVID-19 vaccine demonstrates how urgent it is to modernize systems for development, distribution and dispensing of routine and emergency vaccines. The administration and Congress should prioritize:

- **Public-private partnership in vaccine development.** The federal government must continuously invest in the development and improvement of vaccines critical to the public’s health, including a universal influenza vaccine, and platform technologies that enable the rapid development of vaccines against emerging threats.

- **Increase research and effective messaging to improve vaccine confidence and fight misinformation.** Funding is needed to study the causes of vaccine resistance in different populations, educate the public on the safety and effectiveness of vaccines, and to educate clinical providers on methods for improving vaccine acceptance, especially among high-risk populations, undervaccinated communities, and communities of color, which face disparities in immunization rates.

- **Increase annual funding for CDC’s immunization program, also called the “317 program,”** which supports state and local immunization systems to increase vaccination rates among uninsured and underinsured adults and children, prevent and respond to outbreaks, educate the public and target hard-to-reach populations, improve vaccine confidence, establish partnerships, and improve immunization information systems. Funding has not kept up with needs as states have to spend immunization dollars to respond to outbreaks, deal with increases in the numbers of residents who lack health insurance and attempt to manage the impact of vaccine underutilization. At the same time, states are using out-of-date immunization information systems, a critical investment needed for effective deployment of a COVID-19 vaccine.

**Provide sufficient funding to ensure that no person faces financial barriers to receiving necessary vaccinations.** Even small cost sharing can be a disincentive for accessing vaccines, particularly among adults with lower incomes, and studies show an increase in vaccine access following elimination of copayments. While most Americans have no cost sharing for vaccines as a result of the Affordable Care Act, Medicare beneficiaries still face varying levels of copayments for recommended vaccines, some up to $200, and some state Medicaid plans still require payments. The administration and Congress should require zero cost sharing in Medicare Part D and B plans, and CMS should incentivize Part D plans to eliminate cost sharing and increase receipt of vaccines. CMS should also encourage all state Medicaid plans to cover recommended vaccines without cost sharing.
Improve health, safety, and well-being for all people by providing pathways to optimal health across the life span.

THE PROBLEM

Today, life expectancy in America is decreasing, poor health trends once associated with older adults are becoming commonplace in young people, and millions of Americans are burdened by mental health and substance misuse issues. The rise in deaths of despair (deaths associated with alcohol and drug misuse and suicide), the rise in chronic disease in young people, and the disproportionate disease burden within communities of color are an urgent call to action.

THE SOLUTION

The federal government should work with state and local governments and with community organizations to focus on and fund evidence-based interventions aimed at key risk points and risk factors across the life span, including maternal morbidity, adverse childhood events (ACEs), obesity, suicide, chronic disease, and substance misuse.

Investing in across-the-life span prevention, particularly tailored for those population groups most at risk, will not only result in a healthier population, doing so will reduce the need for spending on healthcare and disability programs.

IMPROVING AMERICANS’ HEALTH ACROSS THE LIFE SPAN

Only 3 percent of the nation’s annual $3.6 trillion in healthcare spending is directed toward public health and prevention; instead most healthcare spending is necessitated by preventable illness and injury. At present, 6 in 10 American adults have a chronic disease such as heart, kidney or lung disease, cancer, or diabetes, and 4 in 10 have at least two. Furthermore, health problems that were once thought of as issues for middle-aged and older adults, such as obesity and diabetes, are today reaching crisis proportions among children and teenagers. According to the latest available data, 18.5 percent of young people in the U.S., ages 2 to 19, have obesity.

The problems of substance misuse and suicide have also reached epidemic proportions across the country. The number of Americans dying due to substance misuse and suicide is up sharply over the last decade, and those deaths are not limited to a particular population or age group. For example, drug-related deaths for 18 to 34-year olds between 2007 and 2017 increased by 108 percent. In 2018, alcohol-induced deaths were highest among adults ages 55 to 74, accounting for 27.6 deaths per 100,000 people within that age group. The COVID-19 pandemic has worsen the mental health, suicide and substance misuse crises due to the effects of isolation, financial distress, disruption of care, and feelings of anxiety. Suspected
overdoses nationally — not all of them fatal — jumped 18 percent in March compared with last year, 29 percent in April and 42 percent in May, according to the Overdose Detection Mapping Application Program, a federal initiative that collects data from ambulance teams, hospitals and police.\textsuperscript{140}

In addition, lack of health insurance is a barrier to good health for all age groups and is a particular problem in low-income communities. In 2018, for the second year in a row, the number of adult Americans (under the age of 65) without health insurance increased to 30.1 million people.\textsuperscript{141}

The COVID-19 crisis greatly increased the number of Americans without health insurance. Approximately, 27 million people lost jobs and access to employer-sponsored health insurance programs between March and early May 2020.\textsuperscript{142}

Adults of color are at higher risk of being uninsured than are non-Hispanic whites. Among Hispanic adults 26.7 percent are uninsured, 15.2 percent of non-Hispanic Black adults are uninsured, 9 percent of non-Hispanic whites are uninsured.\textsuperscript{143}

Lack of access to health promoting programs and services is more likely to occur for people of color and is driving poorer health outcomes in those communities. Five percent of all children living in the United States (ages 0 to 17) lack health insurance.\textsuperscript{144} And amongst that group, Hispanic children were more likely to be uninsured than were white, non-Hispanic and Black children.\textsuperscript{145} Furthermore, the number of uninsured children in the U.S., which had been steadily declining for nearly a decade, increased in 2017 and 2018.\textsuperscript{146}

Lacking health insurance cannot only be life-threatening if a child is ill, it impedes their access to routine preventive care and important vaccinations.

A healthy pregnancy is one of the best ways to ensure a healthy birth, and prenatal care reduces the risk of pregnancy complications.\textsuperscript{147} Many factors influence birth and maternal health; one central factor being the mother’s access to affordable and adequate healthcare during pregnancy. Nationally, about one in eight (12 percent) women of reproductive age were uninsured in 2018.\textsuperscript{148} In 2017, late or no prenatal care was most likely to be reported by American Indian /Alaska Native and non-Hispanic Black women at 12 and 10 percent, respectively. Eight percent of Hispanic women reported late or no prenatal care and 6 percent of Asian and Pacific Islander women reported late or no prenatal care. Five percent of non-Hispanic white women reported late or no prenatal care.\textsuperscript{149}
In recent years there have been alarming increases in maternal mortality, which disproportionally impacts Black women. According to a 2018 report, Black women were three to four times more likely to experience a pregnancy-related death than were white women.150

The first 1,000 days of life are critical for brain, body and socio-emotional development.151 Researchers have also documented the importance of preventing potentially traumatic events — or adverse childhood experiences (ACEs) — in children’s lives due to their potential for significant long-term health consequences.152 The conditions in children’s lives, from their family’s economic stability, to the availability of safe and affordable housing in the community, to access to quality childcare and educational opportunities, to their diets and opportunities for physical activity — all impact their health as children as well as later in life.

In the past decade, the United States has seen increased health risks among adolescents and young adults as rates of tobacco use including vaping, certain substance misuse, and suicide have skyrocketed among the age group. Suicide is now the second leading cause of death for American teenagers having increased 87 percent between 2007 and 2017.153

In middle age, an exploding number of Americans are dealing with chronic conditions. Obesity, diabetes and arthritis are now commonplace for this age group. According to the CDC, 78 percent of all Americans ages 55 and older have at least one chronic condition.154 Substance misuse, mental health and suicide are also affecting middle aged people. The national rate of suicide is highest for middle aged white men.155

As the Baby Boomer generation ages, there is a ballooning number of older adults. With older age comes increased risk of injury and illness, including dementia, falls, and sensory impairment as well as the negative emotional and physical consequences of social isolation, a reality our current public health infrastructure is not prepared for. The aging population will also impact younger Americans who may need to provide formal or informal caregiving for aging family members while also managing their own career and parental roles.

**RECOMMENDATIONS FOR POLICY ACTIONS**

All of these risk factors, for the oldest to the youngest among us, are contributing to declines in life expectancy — the first downward life expectancy in U.S. history and a phenomenon not seen in most other economically developed nations — as well as greater suffering, poorer quality of life and astronomical healthcare costs.

But the news is not all grim. Along with the greater awareness of the risks, there is also a growing body of evidence of the effectiveness of a number of policies, programs and approaches that safeguard Americans from harm. Among them is the clarity that access to high quality healthcare is critical but insufficient if not matched by multi-sector efforts to create healthier social and economic conditions in every community. Optimal health is rooted in a continuum across the life span.
Opportunities for policy action that will promote health and well-being exist at virtually every stage of Americans’ lives.

**Ensure all Americans have access to health insurance coverage.**

Health insurance and access to care are foundational to disease prevention, treatment, and overall health. While the Affordable Care Act enabled 20 million adults who previously did not have health insurance to gain that coverage, millions of individuals in the U.S. still lack coverage, and there are significant disparities in access to care by sex, age, race, ethnicity, education, and family income. The administration should ensure all people have access to coverage through mechanisms such as strengthening incentives to expand Medicaid in all states, making marketplace coverage more affordable for low- and moderate-income people, and improving outreach and marketing for enrollment.

**Ensure that prevention — particularly primary and upstream prevention — is incorporated into all federally funded efforts to prevent and treat illnesses and injuries.** Federal health spending should be directed to programs rooted in both primary and upstream prevention, well-grounded in science and based on strong evidence (see page 20 for an explanation of primary and upstream prevention). Where such evidence does not exist, Congress should fund research tailored to study and pilot population specific interventions focusing on those communities with the greatest need.

**Congress should create a national standard mandating employers to provide job-protected paid family and medical leave for all employees including for the birth or adoption of a child, taking care of a sick family member, or staying home when sick themselves.** The legislation should ensure all workers have workplace protections, such as paid leave. Communities of color and lower-wage workers are less likely to have paid sick days, leaving them at higher risk for illness or financial consequences.

**Invest in the well-being of children, adolescents and pregnant and postpartum women, and support families.** Such investments include ensuring access to prenatal and postpartum care for every expecting woman and new mothers; expanding access to school meals programs; economic policies that support families such as increased child tax credits and nutrition assistance programs; ensuring quality and affordable childcare in every community; and expanding Medicaid school-based health services, including mental healthcare.

**Develop and expand programs that support families undergoing stressful transitions and or economic hardship.** The U.S. Veterans Health Administration and the Department of Defense have behavioral health support systems and family assistance programs that should be expanded for military service members and their families. These programs should also be modeled by agencies outside of the Department of Defense/Veterans Administration structure. Additionally, public and private funders should invest in the expansion of evidence-based parenting programs in school, home, primary care, mental health and community settings.
Attack the nation’s obesity crisis by expanding programs that ensure all Americans have improved access to healthy and affordable food choices and opportunities for physical activity, including the following policy actions:

- Strengthen the Special Supplemental Nutrition Program for Women, Infants and Children (WIC) by expanding eligibility to age 6 for children and coverage to two years for postpartum mothers, certifying WIC participants for two years to eliminate duplicative paperwork and to encourage families to stay on WIC longer, and implementing an online purchasing solution to simplify the shopping experience. WIC works in tandem with other federal programs, healthcare providers, and food industry and retail partners to improve maternal and child health outcomes at the community level, however many WIC participants live in under-resourced communities. Additional funding should be made available to enhance community health linkages and address social determinants of health.

- Increase the price of sugary drinks through excise taxes and use the revenue to address health and socioeconomic disparities.

- Ensure that CDC has enough funding to grant every state appropriate funding to implement evidence-based obesity prevention strategies. Currently, CDC only has enough funding to work with 16 states.160

- Research shows that food companies disproportionately target unhealthy food advertising to children of color.161 Disincentivize the marketing of unhealthy food to children by ending federal tax loopholes and business costs deductions related to the advertising of such foods to young audiences.

Create conditions for children that promote both short and long-term good health by investing in early childhood programs and schools.

- Expand proven programs such as Head Start, Early Head Start, WIC and pre-kindergarten so that all children have access to the benefits of early childhood education and nutrition.

- Expand grants to enable the hiring of school-based mental health providers and referrals to local mental health providers for students who would benefit from such care. Ratios between on-site mental health providers and students should ensure that any student who needs mental health services receives that care in a timely manner.

- Increase investment in the CDC Division of Adolescent and School Health to allow for the expansion of its evidence-based programs that promote school-connectedness to all states. School connectedness is a proven protective factor in children’s and adolescents’ lives. Zero tolerance policies and other punitive tactics in schools that disproportionately remove children from schools and send to them to juvenile justice rather than mental health care, should be prohibited.162

Support specialized programs for adolescents and young adults that focus on substance misuse (including smoking and nicotine products of all kinds) and suicide prevention through the use of evidence-based primary prevention approaches that support adolescents and help their families. Support programs that protect
adolescents from bullying, violence and other forms of trauma and provide support when trauma occurs.

- Congress should increase funding for CDC’s National Center for Injury Prevention and Control including targeted funding to community-based suicide prevention programs such as Striving to Reduce Youth Violence Everywhere (STRYVE).

- All youth-serving systems should adopt trauma-informed and culturally competent policies and practices, and the juvenile justice system should adopt approaches that recognize that substance abuse and serious emotional disturbances are health issues not criminal justice issues.

- Establish multi-sector programs to reduce adverse childhood experiences (ACEs) and strengthen programs for those exposed to ACEs. Fund CDC research on effective strategies to reduce and mitigate the impact of ACEs. Increase federal funding for social-emotional learning programs in schools that promote protective factors.\(^{365}\)

- Congress should increase funding for the U.S. Department of Justice’s Office of Juvenile Justice and Delinquency Prevention to allow for the funding and technical assistance needed to grow state and local diversion programs.

- The federal government should increase funding for the Garrett Lee Smith State/Tribal Youth Suicide Prevention and Early Intervention Grant Program to allow it to serve more communities.

Establish age-friendly environments in public health, healthcare, and other sectors. Support and expand comprehensive efforts to assist local communities and states to become age-friendly, and transform the public health sector so age-friendly public health is a core activity in every locale.

- Congress should fund a Healthy Aging program within CDC to build state and local public health departments’ capacity to promote the health and well-being of older adults including determinants of health beyond healthcare. The unit would coordinate grants so that states can implement evidence-based programs that reduce risk factors for chronic illness, social isolation and healthcare costs thereby improving the health of older adults.
Endnotes


80 Ibid.


National Health Security Preparedness Index, https://nhspi.org/


