



Innovation



PREPARED BY:

Johns Hopkins Bloomberg School of Public Health
Institute for Health and Productivity Studies

Ron Z. Goetzel, PhD
Enid Chung Roemer, PhD
Karen B. Kent, MPH
Inge Myburgh, MD

The de Beaumont Foundation

Brian C. Castrucci, DrPH, MA Emily Yu, MBA Abbey Johnson, MPH

ACKNOWLEDGEMENTS

The authors wish to thank everyone who participated in the focus groups, key informant interviews, and case study discussions that were the basis of this report. Also, a special thanks to Jennifer Lutz, Mark Miller, and Julia Haskins, who provided final editorial review.

SUGGESTED CITATION

The de Beaumont Foundation (2021). Seven Ways Businesses Can Align with Public Health for Bold Action and Innovation. Prepared by The Institute for Health and Productivity Studies at the Johns Hopkins Bloomberg School of Public Health and the de Beaumont Foundation. https://debeaumont.org/businesspublichealth/

TABLE OF CONTENTS

Seven
Ways Businesses Can Align
with Public Health(for Bold
Action and Innovation

Executive Summary	4
Background	5
Project Overview	7
Recommendations:	
1. Put out the fire	10
Improve the health and well-being of employees	12
3. Promote healthy communities	15
4. Become a "force multiplier"	18
5. Actively facilitate public-private partnerships	20
Advocate for development of accountability dashboards	23
7. Advocate for rebuilding and expansion of national public health workforce	25
Funding the Proposed Solutions	28
Conclusion	29
Appendix A: List of Focus Group Participants	31
Appendix B: Resources	33
References	34



EXECUTIVE SUMMARY

The U.S. is in the midst of several overlapping crises – health, economic, social, and political. For those who sit at the intersection of business and health, it is becoming clearer each day that the prosperity of the nation depends upon having a strong public health infrastructure with a distinct focus on preparedness and prevention. For real change to happen in public health, the business community needs to be a driving force.

This report presents seven practical steps that businesses can take to strengthen partnerships and improve the health of their employees, communities, and the nation. With support from the de Beaumont Foundation, these recommendations were informed by a series of focus groups and personal interviews with 40 business and public health leaders who shared ideas about what can be done to address the immediate COVID-19 crisis and its spillover effects on the health and well-being of Americans.

Employers have already adopted some of these recommendations at some level – for instance, providing health, well-being, and safety programs for their workers. A larger call to action is for businesses to partner with public health advocates in addressing the current COVID-19 pandemic and the lack of basic public health preparedness and prevention – actions required for the country's future economic security.

The business sector can play a vital role in amplifying efforts to rebuild a robust and resilient public health infrastructure that attends to the needs of workers, customers, and communities. Without ongoing investment in public health, the nation's standing as a global economic leader is threatened. The window of opportunity is open to create much-needed change and protect the health and prosperity of the nation. It is time to act.

"A healthy business cannot exist in a sick society."

- Peter Drucker, Citizenship and Courage, The Drucker Institute, 2017¹

Seven Ways Business Can Align with Public Health



1. "Put out the fire" of COVID-19 by following advice of credible public health experts.



2. Improve the health and well-being of employees.



3. Promote healthy communities.



4. Become a "force multiplier" by leveraging expertise, staff, and other resources to collaborate with local and state public health departments to be better prepared for future public health emergencies.



5. Actively facilitate public-private partnerships in the community.



6. Advocate for development of accountability dashboards that track and monitor progress toward achieving key economic and public health outcomes in a community.



7. Advocate for a rebuilding and expansion of a national public health workforce supported by a modern information technology infrastructure.

BACKGROUND

The COVID-19 pandemic has revealed that, as a society, the U.S. is woefully unprepared to deal with a major public health emergency. This crisis has laid bare the weakness of public health infrastructure in America. It has exposed historic inequities that place certain populations, especially minority communities, at disproportionate risk for infection and premature death.

The pandemic has significantly harmed the health and well-being of all Americans. Simultaneously, it has exacted a dramatic impact on the U.S. economy, with negative growth in gross domestic product (GDP) and high unemployment rates reminiscent of the Great Depression. Business executives from both large and small enterprises are concerned about the long-term impacts of the outbreak on their organizations' ability to survive financially and remain competitive globally.

"The single biggest issue facing businesses in the United States is: How do we manage our way through the coronavirus crisis? The CEO of every major company in the country is going to have to make public health the single top vision of the company."

- Adam Aron, CEO and President of AMC Theatres²

It has become increasingly clear that the future economic prosperity of the U.S. is dependent on rebuilding an effective public health infrastructure, with a distinct focus on preparedness and prevention, that can better weather future health and economic crises. COVID-19 is a stark lesson in the consequences of starving the nation's public health institutions of the necessary resources needed to support Americans' health and well-being.

The nation has learned that a robust and effective public health infrastructure is no longer a "nice-to-have" but rather a "must-have" component of a healthy and sustainable American economy. The moment has arrived for leaders in

business and public health to seize this opportunity to come together in support of a stronger public health infrastructure for America.

The issue of funding— answering the question: "How will we pay for all of this?"

A strategy is needed to overcome the inadequate support for public health. The barriers to increased funding are understandable. The U.S. is amassing growing public debt and businesspeople and legislators are reluctant to increase spending on government programs. At a time when the U.S. is facing unprecedented challenges, including a sudden collapse of the economy, suggesting more funding be allocated to re-build a public health infrastructure seems ill-advised to many.

There is no easy solution to the nation's public debt problem. For decades, lawmakers have put forth innumerable ways to reduce spending and raise revenues in order to balance the budget, but unfortunately, Congress has failed to achieve consensus on resolving the issue.

"[F]undamentally people understand that fiscal policy is going to have to get its act together, or else a lot of people are going to suffer, and the economy is going to suffer as well. ... I am hopeful... that there will soon be a plan in place that will have many dimensions, including improvement of public health."

- Former Federal Reserve Chair Ben Bernanke³

Consider the following: In April 2020, *The Washington Post* reported that the federal government had already committed more than \$6 trillion in its response to the COVID-19 crisis, Including roughly \$4 trillion in grants and loans that exceed the cost of 18 years of war in Afghanistan. That amount is likely to grow significantly over the course of 2021 as additional measures are needed to address the health and economic consequences of the

pandemic. Also, that amount does not include current and pending local and state spending necessary to address the pandemic, nor the reduction in government revenues due to job losses and reductions in taxes paid by struggling or shuttered businesses. Without a doubt, the cost of not having prepared for this emergency is higher than the cost of anticipating and preventing the spread of the virus. Further, the economic losses due to the virus are compounded by the human suffering experienced by individuals and families directly affected, in terms of their physical, mental, and social well-being, and the loss of loved ones.

"The bottom-line message ought to be, 'We're paying a huge price today for not adequately funding public health over the past decades— what can we do to correct that mistake?"

- Focus Group Participant

The price tag for rebuilding a robust public health infrastructure

The challenge of securing resources to address the pandemic is one faced by both business and public health. The proposals offered by leaders interviewed for this project are likely to cost money in the short run, but will cost less in the long run.

What would a fully capable and robust public health infrastructure cost? A 2019 analysis by DeSalvo et al. 6 estimated a \$4.5 billion price tag for rebuilding the current frail public health model in the U.S. and paid for by the federal government. An infrastructure investment in public health can be appended to other infrastructure initiatives considered by Congress and debated over several years. (See, for example, the bill introduced by Senator Patty Murray to rebuild the nation's public health infrastructure. The price tag for an expansive infrastructure bill has been estimated to be trillions of dollars and would include funding to repair and modernize roads, bridges, broadband, electrical grids, clean energy power generation, water systems, and sewage plants. An infusion of funding would create new jobs and support local economies, as happened when President Roosevelt created the Civilian Conservation Corps (CCC) and the Works Progress Administration (WPA) programs in response to the Great Depression of the 1930s. 8

While spending more money may seem the easy answer, spending money wisely to achieve the greatest public health impact is more complicated. Our project sought advice on how to do just that.

What is Public Health?

Public health promotes and protects the health of people and the communities where they live, learn, work, and play. While a doctor treats people who are sick, those...working in public health try to prevent people from getting sick or injured in the first place. Public health supports the belief that everyone should have a fair and just opportunity to achieve good health and well-being. 10

PROJECT OVERVIEW

In 2019, the de Beaumont Foundation and the Bipartisan Policy Center partnered to articulate the mutual value proposition for increased collaboration between the business and public health communities. That report, *Good Health is Good Business*, prepared before COVID-19 became an international crisis, urged public health officials to articulate to business leaders an "ask" that showcases the value proposition to the business community. This report follows that advice.

Right after he encounters the giant shark in the Steven Spielberg award-winning movie "Jaws," Roy Scheider, as Chief Brody, backs up slowly to shark hunter Quint, played by Robert Shaw, and mutters the immortal line, "You're gonna need a bigger boat."¹¹

In the summer of 2020, the Johns Hopkins Institute for Health and Productivity Studies convened business and public health leaders to discuss the multiple threats to lives and livelihoods created by COVID-19. The question posed to business and public health leaders was "How do we best address the COVID-19 pandemic today, while also preparing for future public health crises?"

The study team recruited 40 leaders in business and public health and asked them to participate in individual interviews or focus group discussions during the pandemic to capture their views in real time. (See the list of participants in Appendix A.) In those conversations, which were conducted virtually in July and August 2020, leaders were asked to offer practical recommendations that both business and public health officials could support to enhance public health institutions.

At the core of the ideas offered was a fundamental appreciation of how the current crisis presents an open window and unique opportunity to introduce innovative solutions that benefit the larger community where people live and work.

Throughout the discussions, it was emphasized by those interviewed that for the private sector to survive and thrive, the U.S. needs to do more than just react to crises. Rather, it needs to build and maintain an effective and resilient public health infrastructure that supports good health for all people.

Studies have shown that for every dollar invested in improving the health of the population, the U.S. stands to gain almost \$4 in economic benefit. Prevention is key to mitigating future crises and strategic planning is necessary to avoid unnecessary calamities.

Good Health is Good Business

Public health officials should prepare a series of 'asks.' These persuasive sets of proposals should be specific, tied to measurable objectives, data-driven, and illustrative of why they would benefit both public health and business stakeholders. Further, these appeals should emphasize the humanitarian missions of a business, emphasizing how a successful outcome would support individual, family, and community well-being. ... Importantly, business and public health officials should be prepared to advance from why to how.

 A 2019 report by the de Beaumont
 Foundation and
 Bipartisan Policy
 Center¹²

"Being super practical makes sense when working with businesses. They don't have the patience for process – they want specific actions."

- Focus Group Participant



The U.S., and especially local communities, needs to address not only the health and social needs of their citizens, but also the root causes of poor health – often referred to as the upstream social determinants of health – that affect people even before they step foot into a hospital.

Approach

The study team encouraged focus group participants to offer ambitious ideas (described as "big, hairy, audacious goals") as well as short-term actions to address communities' immediate threats using available resources.

To set the stage, the study team acknowledged three primary crises confronting the U.S.:

- 1. **Health:** The COVID-19 pandemic is affecting millions of Americans, causing an increased number in deaths and hospitalizations and a significant loss of freedom.
- 2. **Financial**: An unstable and unpredictable economy is causing massive layoffs, business closures, a decline in consumer confidence, loss of health insurance, housing insecurity, and difficulty in paying for basic needs.
- 3. **Cultural:** Structural racism and inequities, magnified by the disproportionate impact of COVID-19 on racial and ethnic minorities, have reached a breaking point in society, leading to growing calls for change across the country.

While these simultaneous crises were acknowledged by all who participated in the dialogues, the primary focus of the conversations was how to best respond to immediate and long-term threats arising from the pandemic. Addressing the health crisis will undoubtedly have a positive impact on the economy. But that will take time. The other financial and cultural predicaments will continue unabated unless they too are addressed by the business community in alliance with political and community leaders. In the end, these parallel crises need to be addressed simultaneously and in a forceful manner.

The health of communities depends on a strong and stable foundation. Every sector contributes to laying that foundation, and we all depend on its durability to prop us up. Factors like steady employment, quality education, and safe housing form the base of a functioning society – with a strong economy and long-lasting good health for everyone.¹⁴

- Public Health Reaching Across Sectors, a partnership of the de Beaumont Foundation and The Aspen Institute.

Recommendations

This report offers seven broad recommendations from the business and public health leaders interviewed. The recommendations are accompanied by explicit action items, and seek to strengthen and advance health equity in communities. They are:

- 1. "Put out the fire" of COVID-19 by following advice of credible public health experts.
- 2. Improve the health and well-being of employees.
- 3. Promote healthy communities.
- **4.** Become a "force multiplier" by leveraging expertise, staff, and other resources to collaborate with local and state public health departments to be better prepared for future public health emergencies.
- 5. Actively facilitate public-private partnerships in the community.
- **6.** Advocate for development of accountability dashboards that track and monitor progress toward achieving key economic and public health outcomes in a community.
- 7. Advocate for a rebuilding and expansion of a national public health workforce supported by a modern information technology infrastructure.

How to use this guide

Most recommendations in this guide focus on what businesses can do immediately — on their own or as part of coalitions to improve the health and well-being of their communities. Other recommendations describe what can be accomplished longer term and on a broader scale from an advocacy and education perspective. In terms of next steps, business leaders can 1) review the recommendations and action steps offered with their organization's executives, board, staff, or other stakeholders; 2) identify recommendations and action steps most aligned with their organization's and community's values; and 3) adapt and apply those recommendations and action steps to meet the needs of stakeholders.

"You never want a serious crisis to go to waste. ...[It's] an opportunity to do things that you thought you could not do before."

 Rahm Emanuel, former mayor of Chicago, senior advisor to President Clinton, and chief of staff to President Obama, at The Wall Street Journal CEO Council.¹⁵

Ready to Take Action?

Visit HealthAction.org for free resources and tools designed to help business leaders accelerate the COVID-19 response, strengthen vaccine acceptance, and rebuild public health.

"Put out the fire" of Covid-19 by following advice of credible public health experts

What is the problem?

Businesses will remain at limited capacity and operating with minimal service options until the spread of the virus is contained and people believe it is safe for them to engage with others with minimal risk of infection.

What is a solution?

Business leaders need to support credible public health advice to all their stakeholders, including employees, investors, and consumers.

In April 2020, the Edmond J. Safra Center for Ethics at Harvard University wrote, "Given the far greater and crucially broader trust levels in the business community as a whole, and the current partisan nature of U.S. politics, it is unlikely that [a scientifically sound] plan will succeed unless businesses [are] seen as also leading on this policy initiative and are plainly doing so in support of and in tight coordination with the White House ... An emergency equity injection of trust from leading businesses into the public is not just desperately needed ... [I]t could pay handsome returns both in avoiding the collapse of the public infrastructure on which business success depends and in the appreciation of that trust if business leads successfully." 16

Actions where businesses can take the lead

Action 1A: Publicly amplify, support, and implement recommendations from credible scientific sources

Internally and externally, businesses have numerous channels and spheres of influence they can use to encourage evidence-based practices to help minimize the spread of COVID-19. For example, employee newsletters, social media channels, on-site signage, paid advertising, town hall meetings, and modeling responsible behaviors can all support employee and community health.

Appendix B provides links to resources employers can access for the most up-to-date information on COVID-19 and how to respond to this pandemic.

In addition to referring stakeholders to credible institutions, businesses can weave public health messaging into their marketing and advertising communications in a way that reinforces evidence-based practices in health promotion as illustrated by these three examples:

"Corporate leaders are saying, 'How can I continue to run my business? ... I want to support a process that allows me to continue my business. ... Help me do that in a rational way.""

- Focus Group Participant

A health care company can publicly acknowledge the important role of front-line workers (e.g., nurses, doctors, vaccine developers, ambulance drivers, and lab technicians) in addressing the COVID-19 crisis. In addition to recognizing these first responders and health care workers, the company could highlight public health workers, who work in the background, but provide the backbone for a healthy and thriving community (e.g., epidemiologists, contact tracers, community health workers, hospital janitors, and senior caretakers). This can be part of a campaign to support public health heroes.



- A technology company can describe its use of advanced technology (e.g., artificial intelligence, blockchain, cloud computing, supply chain automation, command centers, and personal phone apps) to address the COVID-19 crisis. It can also discuss how they engage with community public health agencies and why this is important.
- "Honor public health workers. Applaud them when they finish their shifts, just like we do for health care workers and early responders."
- Focus Group Participant
- An auto maker can showcase how it is keeping manufacturing floors safe, so it can remain open (e.g., monitoring team members for COVID-19 symptoms, checking in with employees on a daily basis, offering health education on COVID-19, and encouraging the use of personal protective equipment). The message would be, "we are keeping our workers healthy, on the job, and earning paychecks to maintain a resilient workforce that's ready to compete on a global scale."

✓ Action 1B: Identify one "go-to" spokesperson for credible information

To fight misinformation and the "noise" surrounding COVID-19 communications, businesses can identify one non-political spokesperson as the "go-to" voice of science and evidence regarding this pandemic. Ideally, this person could be an employee of the organization such as a Chief Medical Officer (CMO), Chief Health Officer (CHO), Chief Public Health Officer (CPHO), or an official at one's local public health department who can synthesize and tailor the latest information, recommendations, and guidance for businesses and communities. (See Action 5A for a broader discussion of individuals who may fill the role of public health liaisons both inside and outside the business.)

"We are at a tipping point where this can happen... we are in a crisis every day... drinking from a fire hose of information... exhausted. ...We need to pool our resources and come up with a common unifying message... that we're all in this together."

- Focus Group Participant

The official spokesperson would be an individual who is viewed as a respected and responsible source of unbiased scientific knowledge and advice. With spokespeople identified, the business community can then actively support a "one-stop" messaging approach by amplifying and repeating communications through that trusted source.

The bottom line

Communicating and modeling behaviors that align with public health expert advice will expedite a decrease in viral transmissibility and speed a return to normalcy.

Improve the health and well-being of employees

What is the problem?

Today, fewer than one in five employers have in place comprehensive and well-resourced workplace health and well-being programs (also known as worksite health promotion or workplace wellness). When properly designed, implemented, and evaluated, these programs have been shown to reduce health risks, curb safety incidents, enhance productivity, achieve cost savings, and contribute to overall business success. Failure to fully integrate employee health into the business model creates future obstacles to the successful management of health crises.

"If you are not working with your employees and helping your employees feel safe, especially in a COVID world...[you] are not doing enough."

- Larry Fink, BlackRock CEO²⁰

What is a solution?

Adopt evidence-based workplace health and well-being programs that are proven to be successful, thereby building and maintaining an *internal* culture of health that positively impacts both employees and stakeholders in an interconnected network and shared community.

Actions where businesses can take the lead

✓ Action 2A: Use publicly available health promotion tools and resources to design, implement, and evaluate impactful workplace programs

The science supporting effective workplace health and well-being programs is well-established. Numerous studies conducted over decades have tested various workplace health promotion models and the results have been incorporated into numerous tools and resources available to small and large employers alike. ²¹

Employers of all sizes have access to multiple vetted organizational health assessment tools and follow-up resources to support their workplace health and well-being programs. These include the CDC Worksite Health ScoreCard²² and an accompanying CDC Workplace Health Resource Center,²³ a clearinghouse for credible workplace program design and implementation information. Other scorecards and resource materials are available from the Health Enhancement Research Organization (HERO),²⁴ the American Heart Association,²⁵ the American Psychological Association,²⁶ the CEO Roundtable on Cancer,²⁷ the Business Group on Health,²⁸ and the National Institute for Occupational Health and Safety's Total Worker Health initiative.²⁹

"For some companies, public health is becoming even more important as more employees work at home and remotely. Because of an increasing sense of isolation, employees need to feel connected and a focus on employee health is even more important."

- Focus Group Participant

Businesses can take advantage of these free tools that provide guidance on how to achieve health improvement for their workers, thereby substantially reducing employees' susceptibility to communicable and non-

communicable diseases. The above-mentioned scorecards and resources offer ways to improve team health in the short and long term, including prevention of viral infections.

In addition to the immediate steps employers can take to enhance workers' health and well-being, there are longer-term strategies worth noting, as recommended by focus group participants. They include providing:

- Paid sick leave for all workers apart and distinct from paid time off (PTO) benefits that apply to vacation, holiday, military leave, and jury duty service;
- Paid maternity/paternity leave;
- Increased access to vaccinations (on-site or off-site);
- Flexible work schedules (e.g., compressed work week, job sharing, and flexible start/stop times) and greater flexibility in choice of work locations (e.g., home, satellite office, and socially distanced workspaces);
- Enhanced work/life balance and mental health support services (e.g., using apps, telehealth counseling, and stress management training);

"Businesses need to look at their Corporate Social Responsibility (CSR) and Environment, Sustainability, and Governance (ESG) efforts and ask how they affect the health of their employees and community."

- Focus Group Participant

- Child and adult day care benefits that extend beyond the legal requirements of the Family Medical Act (FMLA) – this may include programs that promote on-site or community day care programs run as cooperatives; and
- Livable wages that are in line with community norms and standards.

✓ Action 2B: Coalesce resources across departments and functions to improve workers' health and well-being

Businesses often face challenges in implementing the various health-promoting programs and policies referenced above because of the siloed nature of their organizations, which limits cross-fertilization of initiatives, data sharing, and use of common reporting systems. The various organizational functions are assigned different titles, including human resources, employee assistance, occupational health and safety, talent and recruitment, people operations, compensation and benefits, risk management, diversity and inclusion, corporate social responsibility, public affairs, community relations, health and wellness, training, and sustainability. These are often stand-alone functions with too little integration among them, although all are established to further the organization's overall mission.

Bringing together functional leaders from various in-house departments can benefit the businesses and save money.³⁰ Such integration efforts would go a long way in improving the health and well-being of workers as well as the broader communities in which employees and their families live.

As a start, company executives can assemble an internal inter-disciplinary group of functional leaders to examine the company's data and identify common health problems faced by the organization. This inter-disciplinary group can then partner with public health officials to better understand related public health concerns at the community level. These concerns are then communicated as part of a community health assessment, again with supportive data. A centralized approach to solving interrelated challenges of both company and community will allow for a focused response to common issues faced by the organization and larger community. Ideally, formal business-community partnerships will arise as a result.

✓ Action 2C: Empower a Chief Medical Officer (CMO), Chief Health Officer (CHO), or Chief Public Health Officer (CPHO) who will provide expert guidance on managing the COVID-19 pandemic and other health risks facing the organization

There is a movement in the business community to hire or contract with professionals with expertise in public health, occupational health and safety, health promotion, and mental health. These professionals, who are often MDs but can also be PhDs, RNs, MPHs, DrPHs, or PsyDs, may assume titles such as Chief Medical Officer, Chief Health Officer, or Chief Public Health Officers.² Their job is to advise senior leaders on how to manage immediate crises like COVID-19 and on longer-term strategies for improving the health and well-being of workers and communities, while also considering the business ramifications of such strategies.^{2,31}

There needs to be a new reality where public health considerations are regularly integrated into business plans and where ... a new brand of executive, a chief public health officer, has a seat at the table."32

- Michelle Williams, Dean of the Harvard School of Public Health

A final note regarding this recommendation for building and sustaining an internal culture of health is in order. While our nation is in the midst of the coronavirus pandemic, employers are re-examining how to best conduct operations post COVID-19. Team members are more likely to be home-based, communicate virtually, and not be constricted by "normal" work hours. Many of the practices once advocated to support workplace wellness will be obsolete. Applauded efforts, such as in-person conferences, corporate dining programs, and on-site exercise facilities may not match a future workplace. Sustaining a healthy and safe workplace, as newly defined for many, may require creative re-thinking. At a minimum, employers can review their leave policies to align them with national and local public health guidance. Further, employers can discover new ways to support employees who are adjusting to new challenges regarding work-life balance. Finally, companies can provide safety protections, ergonomic accommodations, and new software tools that are needed during and after the COVID-19 era.

The bottom line

With more than 150 million Americans spending most of their waking hours at work (as was the case before COVID-19), business leaders play a key role in promoting the health of our nation. Improving the health of workers, as well as the health of their families, directly benefits the company and the community, alike. By building and maintaining *internal cultures of health*, businesses can lead the way to a more robust and resilient workforce.

What is a Community Health Assessment?

A community health assessment refers to a state, tribal, local, or territorial assessment that identifies key health needs and issues through systematic, comprehensive data collection and analysis. In turn, this information can help with developing a community health improvement plan by justifying how and where resources should be allocated to best meet community needs.³³

Promote healthy communities

What is the problem?

Because employees have families, and those families live in and are a part of larger communities, it is not enough for businesses to focus on improving individual workers' health. It is equally crucial to support the health of communities in which employees live, work, learn, play, and pray.

Employers hold an often unrecognized and underutilized power to impact and influence public health in their communities, or their external culture of health.³⁴ While scientific institutions are the usual standard bearers for such information, there is a deterioration in public trust in the institutions tasked with communicating evidence-based public health recommendations.³⁵

What is a solution?

Businesses, individually or as part of a coalition, can implement strategic communications campaigns that emphasize the importance of public health and how a healthy community is aligned with a healthy economy and workforce. Further, businesses can advocate for widely accepted, non-partisan policies that improve public health at the local level.

Actions where businesses can take the lead

Action 3A: Support efforts to explain the value and importance of public health

To stay informed and ready to act against COVID-19 and other health threats, employers, consumers, suppliers, and other key stakeholders need to rely on public health institutions that provide clear and unambiguous information, directives, and data that inform recommended actions. This symbiotic relationship requires consistency from the public health department, as well as ongoing support from the business community. This can be accomplished by businesses supporting an intensified strategic communication effort that rebuilds trust in public health institutions, including university public health departments, the CDC, the National Institutes of Health (NIH), Food and Drug Administration (FDA), NIOSH, and local/state health agencies.

To complement the immediate messaging surrounding COVID-19, a parallel communication and marketing campaign can be launched, with support from the business community (locally and nationally), that explains the critical role of public health to economic models. To most Americans, public health is amorphous, not specific nor tangible, even though people have heard the term repeatedly throughout this crisis. As Dr. David Katz, founding director of the Yale-Griffin Prevention Research Center, ³⁶ has remarked, the "public" in public health is someone other than you — a faceless human. ³⁷ But, in reality, the public includes one's family members,

"You need to better define what public health is, in layperson terms, and the ask to business needs to be specific and actionable."

- Focus Group Participant

friends, co-workers, and neighbors, all of whom are confronted by personal health problems that are now in sharp focus with COVID-19.

The following is a sample message (to be refined and tested) derived from various comments by interviewees:

"What is public health and why do we, as businesses, support it? To be clear, public health is not the same as health care. Health care is organized to address illness. Public health is organized to prevent those illnesses from occurring in the first place. A strong and resilient public health workforce and supportive infrastructure will sustain healthy and vibrant communities that benefit our economy and keep all Americans safe and healthy. Here is how you can help...."

Specific follow-up marketing messages can emphasize individuals' ability to improve their health and well-being and thereby prevent a broad range of illnesses, including viral infections. The key themes in such a marketing campaign could be to inform, educate, and empower. A broader message would emphasize public health's larger role, which is to protect communities.

✓ Action 3B: Expand messaging beyond COVID-19

The COVID-19 crisis can provide a catalyst for a broader marketing and education campaign. Not only is public health essential in addressing the immediate danger of the pandemic, but it also plays a critical role in preventing and stemming non-communicable diseases such as diabetes, heart disease, cancer, respiratory disorders, and obesity that put people at higher risk for poor outcomes from the virus and premature death. This messaging needs to underscore a hopeful vision of a brighter future where public health institutions have adequate resources and the know-how to protect citizens from debilitating diseases. Such a positive future vision would portray people as back to work and school, enjoying dining with friends, and spending time with family across generations.

"Connecting public health to school systems will grow private-public partnerships. A Healthy Schools - Healthy Families campaign is the way to go."

- Focus Group Participant

Public sentiment about the value of public health is already high, with 73 percent of Americans in 2020 saying they recognize the importance of their local health department, up from 56 percent just two years earlier. However, the perception of public health as a bureaucratic and remote government agency undercuts the sector's efficacy and public trust. Public health has a marketing challenge, which the business community is especially well-equipped to help address – and, by extension, this enables companies to support their own interests in advancing community health.

Action 3C: Advocate for evidence-based public health policies that build and sustain healthy communities

In the spirit of not re-inventing the wheel, businesses are encouraging their local governments to adopt bipartisan policy initiatives that promote public health and health equity. One such initiative is CityHealth, ⁴⁰ an initiative of the de Beaumont Foundation and Kaiser Permanente that annually rates the nation's 40 largest cities on nine policy areas and awards them gold, silver, and bronze medals for their achievements. CityHealth advances a package of evidence-based policies that can help millions of people live longer, healthier lives in vibrant, prosperous communities. The initiative scores cities' efforts based on the combined strength and

number of policies they have in place; an approach which has drawn positive attention from the media and the business community.

The CityHealth package is not intended to be an exhaustive list to solve every pressing local problem; instead, nine policies are selected that meet these criteria: 1) largely under city jurisdictional authority, 2) backed by evidence, 3) pragmatic, including indications of bipartisan support, and 4) replicable, having been successfully implemented in at least one other U.S. jurisdiction. The policies selected by CityHealth were identified through an extensive consensus-building process that considered cities' legal authority and precedent, and were supported by a policy advisory committee representing key influencers across various sectors. The goal of CityHealth is to provide city leaders with a limited set of practical, achievable, and aspirational policies that align with the city's priorities and needs.

CityHealth's nine policy initiatives are listed below:

- Affordable housing inclusionary zoning that requires developers to set aside a portion of housing units for low- and moderate-income residents;
- **Earned sick leave** that reduces the spread of contagious illnesses, increase employment and income stability, and save money in health care costs;
- Food safety and restaurant inspections that require food establishments to publicly post food safety inspection grades, empower consumers, reduce foodborne illness, and save health care costs;
- Complete streets policies that prioritize safety by incorporating the needs of people using all forms of transportation, from walking, to biking, to driving, or taking the bus;
- Safer alcohol sales policies that address high density of alcohol outlets to decrease crime, increase safety, and reduce spending on health care and criminal justice costs;
- Healthy food procurement that ensures food sold and served in city buildings meets basic nutritional standards, provide more residents with affordable and healthy food choices, and may reduce medical costs associated with obesity;
- Smoke-free indoor air that protects non-smokers from the harmful effects of tobacco and reduces smokers' consumption of tobacco;
- High-quality and accessible universal pre-kindergarten that improves children's school readiness and success; and
- Tobacco 21 (now adopted nationwide) that establishes a minimum legal age of 21 for the sale of tobacco, thus reducing the number of young people using these products and greatly reduces the risk for addiction and disease.

In addition to these recommended policies, and to address the immediate COVID-19 pandemic, businesses can consider supporting local initiatives such as posting official health department certificates at the entrances of public places indicating compliance with COVID-19 re-opening guidelines. (See the South Carolina Restaurant and Lodging Association and the South Carolina Department of Parks, Recreation & Tourism program.⁴¹)

The bottom line

Reinforcing that public health is vital to a flourishing and resilient economy starts by raising awareness of the value of healthy communities, the *external culture of health*. In blunt terms, public health agencies need to do a better job of "selling" themselves to Americans. The business community can be helpful in assembling the talent, resources, and know-how to do just that.

Become a "force multiplier" by leveraging expertise, staff, and other resources to collaborate with local and state public health departments to be better prepared for future public health emergencies

What is the problem?

Over the past few decades, like many other underfunded and underinvested sectors, public health departments have experienced a steady decline in their capabilities because there are fewer workers, outdated surveillance and reporting systems, and an accelerated exit of highly qualified professionals. More than 56,000 local public health jobs were eliminated between 2008 and 2017 — nearly one-quarter of the workforce. 42

To compound this challenge, public health departments are being stretched even thinner during the COVID-19 crisis — a trend that is likely to continue without a substantial injection of new workers and a revamping of infrastructure. Without a robust public health workforce, businesses may feel the effects of insufficient staffing and resources that are critical to the health and well-being of their community.

What is a solution?

Businesses can support public health efforts by focusing volunteerism policies on efforts that expand the capacity of local health departments while simultaneously highlighting organizational expertise and successes.

Actions where businesses can take the lead

✓ Action 4A: Expand volunteer and pro bono activities

Businesses have had long-standing and robust volunteerism policies and practices. These can be expanded and re-focused with a greater emphasis placed on public health.

Businesses can support public health efforts by tapping into "hands-on" volunteer efforts such as Points of Light, ⁴³ the Hands On Network, ⁴⁴ Taproot Foundation, ⁴⁵ Medical Reserve Corps, ⁴⁶ and Catchafire. ⁴⁷ They can also offer pro-bono goods and services in such areas as supply chain logistics, data gathering, software and hardware technology, law and contracting, customer service, and, as noted above, marketing and communications. Volunteer, in-kind, and other support services can be made available to public health agencies in the form of food and personal protective equipment (PPE) distribution, data collection and analysis, transport, and other community health functions. To facilitate these efforts, employers can make available online applications that match employees' interests and skills with available volunteer opportunities in the community.

"Public health is behind in technology...this is the number one way that business can help.... The crisis is showing that we need to communicate faster, more efficiently, and effectively. We're still using fax machines from the 1980s."

- Focus Group Participant

✓ Action 4B: Inaugurate community-specific public health shared value consortia

In the spirit of shared value, many business leaders have pledged to give back to their communities – leaving a legacy that outlives their tenure. The alignment between business and public health interests presents a ready-made directive for this pledge. Leaders can come together to inaugurate "business and public health shared value" consortia under the leadership of a Chief Health Strategist (see Action 5A).⁴⁸ The initiatives adopted by these consortia may have an immediate goal such as protecting a community from COVID-19 through testing, tracing, social isolation, and immunization programs. Moving beyond the immediate crisis, the consortia can address the signs and symptoms of poor health in a community, including obesity, poor diet, physical inactivity, smoking behavior, hypertension, diabetes, opiate addiction, and health illiteracy.

Further upstream, the consortia may focus on structural changes needed to address the social determinants of health, including unaffordable housing, poverty, unemployment, unhealthy food "You need to understand a company's values to shape the conversations. Companies care about individual employee pride in their work. That's a hook to use. There are businesses that are interested in being a brain trust and long-term partners in the community – not just donating money."

- Focus Group Participant

environments, unequal access to health care, poor transportation, uneven education, and deficiencies in the built environment (e.g., lack of access to public recreational spaces and unhealthy air quality). These can be framed as efforts to "solve" the big problems faced by the community, (i.e., public health "moonshots").

To succeed, these initiatives need the support of residents, politicians, business leaders, and finance vehicles, including community development financial institutions (CDFIs).⁴⁹ They need to address local issues that have high visibility – focusing on public health needs that resonate with local stakeholders. Taking advantage of a behavioral economics principle known as "social contagion,"⁵⁰ the initiatives will spread as fellow business leaders adopt practices favored by peers in their community (e.g., other high-profile business leaders or professional industry associations).

✓ Action 4C: Recognize and reward early adopters

Finally, it is critical that business leaders who step forward in support of public health are recognized by peers for their efforts through press conferences, media events, and placement on community honor rolls. This type of recognition goes a long way in highlighting the contributions of individuals and their organizations to the needs of the community. These events can be endorsed by local business chambers, public health officials and political leaders, including mayors, county executives, legislators, and governors.

The bottom line

Complementing and supporting public health professionals with private sector resources will provide a significant multiplier effect that benefits both employers and health departments and improves community health measures.

"Businesses are more interested in listening to their colleagues than to public health. If companies step out and publicly articulate how they're valuing health, that might encourage other companies to follow suit."

- Focus Group Participant

Actively facilitate public-private partnerships in the community

What is the problem?

Businesses, for the most part, have been left to their own devices to find, interpret, and apply evidence-based strategies for addressing the immediate COVID-19 crisis and the longer-term physical and mental health problems facing employees, families, and communities. With the voluminous advice being offered by scientists, government, and private agencies, businesses are often at a loss when making strategic policy decisions regarding keeping their workers productive and safe.

What is a solution?

Set up stable mechanisms that ensure ongoing and mutually beneficial collaboration between local businesses and public health departments.⁵¹

Actions where businesses can take the lead

✓ Action 5A: Support the recruitment of a Chief Health Strategist position and situate that person in an influential office

To facilitate enhanced public-private collaboration, a Chief Health Strategist position,³⁹ representing the interests of both business and public health, can be housed in a prominent but non-political office. That

individual would function as a connector, facilitator, convener, or liaison to bring business and public health leaders together on a regular basis to address common community health issues. To be effective, the Chief Health Strategist would communicate with and help inform decision-making bodies such as city councils, county boards of supervisors, and state legislatures.

To further promote this idea, several roundtables and think tank discussions would be convened, sponsored by the business community, and facilitated by universities, business publications, foundations, think tanks, and government agencies such as the Office of the U.S. Surgeon General. The end goal of these meetings would be to prepare consensus task force reports detailing specific steps that communities can take to immunize businesses against immediate and ongoing public health threats.

"You need a clear communicator accessible to business. We have no idea who the right public health person is in our community – someone we can contact if have questions or need information. Public health needs to be more than a remote bureaucratic agency."

- Focus Group Participant

Many businesses already have in place business disruption and preparedness plans primarily focused on addressing natural disasters such as floods, fires, and hurricanes. With support from the Chief Health Strategist's office, those continuity plans would be extended to include immediate crises (such as COVID-19) as well as longer-term concerns related to public health. Public health experts, both internal and external to employer groups, would be convened to help businesses prepare emergency plans and execute them when needed.



As an added benefit, the Chief Health Strategist would help form a Public Health and Business Response Team. When not engaged in immediate actions to address emergencies such as COVID-19, the Response Team can develop contingency plans that include public health "stress tests" like those applied to financial institutions. These tabletop simulation drills would play out alternative "what if" scenarios in anticipation of future health emergencies and identify ways to leverage a unified community response. The combined expertise of a Chief Health Strategist and Response Team would be available to all organizations that sign on. This office would function as a shared resource to improve the health of all employees in the community, saving organizations the expense of developing such expertise on their own.

"Leverage schools of public health to bridge the gap. Most companies are small or medium and don't have the resources needed, like CMOs. You need a facilitator or convener function because businesses can't do this on their own. Bring someone to the table so that employers (particularly small ones) can say, 'I can do that.'"

- Focus Group Participant

✓ Action 5B: Attend one another's meetings

Regardless of whether a business decides to hire an in-house expert in public health, or establish a Chief Health Strategist role, there is a compelling need for employers to have a voice at community planning and public policy board meetings that focus on immediate public health crises or broader issues affecting the social determinants of health. Likewise, public health officials can be invited to the table when local business coalitions, chambers of commerce, and trade associations meet to discuss "health in all policies" (HiAP) under review by policy makers.

What is Health in All Policies?

Health in All Policies (HiAP) is a collaborative approach that integrates and articulates health considerations into policymaking across sectors to improve the health of all communities and people. HiAP recognizes that health is created by a multitude of factors beyond healthcare and, in many cases, beyond the scope of traditional public health activities.⁵²



✓ Action 5C: Take advantage of anchor institutions' expertise and foothold in the community

Businesses can exert their influence on other institutions in their community, especially hospitals, by working with their boards to address broader community concerns, including those faced by employers.

"Anchor institutions" have a stake in directing actions affecting business and population health. Anchor institutions include large hospitals and hospital systems; corporate headquarters; municipal and state governments; school systems; and colleges and universities that play an outsized role in a community. These institutions can perform an important role in promoting the health and economic well-being of their communities and serve as strong allies between the business and public health sectors, given their mutually shared interests. For example, to grow and thrive, these institutions need to attract and retain young, diverse, and skilled workers from other communities to join their ranks. In doing so, they promote the community's livability, quality of life, resources, and amenities. This, in turn, grows tax revenues that feed public services that make communities more attractive and garner high reputation scores.

Hospital systems are especially influential anchor institutions when it comes to issues related to health in a community. Health care executives play a significant role in shaping the health and well-being of employees, patients, and community residents. Hospital boards comprise influential members of the community who also have strong political and social ties. Hospitals in particular are required to conduct regular community health assessments and provide services to address local health and social needs. These hospital-driven priorities are quantified in Johns Hopkins Medicine's scoring system that ranks hospitals on health equity and other factors related to the social determinants of health.⁵³

The bottom line

Public-private collaboration needs to happen, and anchor institutions are especially well suited to facilitate such interactions. Chief medical, health, and public health leaders, working hand-in-hand with Chief Health Strategists, can be catalysts in quickly advancing public health initiatives for the long term.

The Johns Hopkins Center for Health Equity, the Bloomberg American Health Initiative, and IBM Watson Health have partnered to develop a health equity measure that will incentivize health care organizations to reduce care disparities. The organizations are seeking to identify meaningful metrics that could be included in future rankings of hospitals and health systems.⁵⁴

Advocate for development of accountability dashboards that track and monitor progress toward achieving key economic and public health outcomes in a community

What is the problem?

For any initiative to be successful, accountability and metrics are key. As the age-old adage reminds us, "If it isn't measured, it won't be managed." Business executives may be wary of supporting government programs, such as public health initiatives, that draw upon tax dollars without a concomitant pledge to track how the money is spent, and whether agreed-upon outcomes are achieved. Similarly, public health officials may be wary of an approach to displaying business metrics if they lack the needed funding to track these outcomes because data are not accessible nor easily linked to health measures, with transparency. Business and public health working together have the potential to generate new insights and learnings from data, and need to find ways to present those data in ways that are meaningful to both parties.

"Employers should know how much of their spending is for addressing the social determinants of health. Employers are paying for an increased disease burden whether they realize it or not."

- Focus Group Participant

What is a solution?

Convene a Business and Public Health Measurement and Accountability Task Force whose job is to develop a business and public health dashboard that annually reports on key business and public health measures for the local town, city, or county.

Actions where businesses can take the lead

Action 6A: Develop a prototype accountability dashboard

An immediate first task would be to agree on what the right accountability measures could be for a business and public health dashboard. There are several dashboard examples available from employers and cities that combine health and economic variables in a scorecard format. (See examples developed for businesses and government officials in the cities of San Antonio, Texas, and Nashville, Tennessee). 55,56

"CEOs need real-time data with which to make decisions – at the granular community level."

- Focus Group Participant

Another dashboard example is the National Health Security Preparedness Index, which provides state-specific scores reflecting the extent to which the state is prepared for, protected from, and resilient in the face of health threats or incidents with potentially negative health consequences.⁵⁷



A relevant resource on metrics and measures has been publicized by the Business for Social Responsibility Healthy Business Coalition. The coalition has developed a tool kit that offers a set of metrics that businesses can use to evaluate the near-term and long-term impacts that their products, services, and programs have on health outcomes. Examples of metrics include diversity of leadership, reskilling opportunities, housing affordability, travel time to work, volunteering activity, injury rates, use of vacation time, greenhouse gas emissions, community health partnerships, diabetes prevalence, and access to quality health care. A user-friendly Excel-based tool is

"Talk the language of value-oninvestment. Remind people that public health is not going to save money – just use the money much more efficiently."

- Focus Group Participant

also available for companies that can be tailored to the organization's specific needs.

To begin the process of gathering and applying key measures, employers need a clear understanding, in financial, social, and organizational culture terms, the impact of specific actions and strategies (e.g., the portion of their health care spending that could be avoided if there was appropriate investment in community health, including elements that address the social determinants of health). While many employers may "feel" they are paying for poor public health services in their communities, they generally do not have a grasp on how investments in improved public health would facilitate long-term benefits to their stakeholders. Further, it may not be obvious to businesses how a specific public health intervention would make a difference to them and their stakeholders — not only in dollars saved but also in achieving greater health equity.

The bottom line

Business and public health leaders require credible metrics that ensure accountability. For businesses to actively support targeted public health investments, they must be convinced that there is a measurable return-on-investment (ROI) or value-on-investment (VOI). At the same time, public health departments hold key data and information that can contribute important insights into employer policies and strategies. By working together to track Key Performance Indicators (KPIs), aligned with business and community health targets, both sectors can gauge forward progress on these outcomes.

Advocate for a rebuilding and expansion of a national public health workforce supported by a modern information technology infrastructure

What is the problem?

Recommendation 4 highlights the need to reinforce a public health workforce that has been depleted, underfunded, and underappreciated for many years. That recommendation urges employers to become "force multipliers" by aligning staff, resources, and know-how to public health agencies in their communities. The problem, unfortunately, extends beyond specific towns and cities. It is a national problem that requires broader and multi-state cooperation along with central coordination.

The pandemic has highlighted the need for a coordinated 21st century system that delivers core public health services day in and day out in the most efficient, effective, and equitable manner for Americans. There is a need to work collaboratively to better define roles and responsibilities among overlapping authorities and jurisdictions of various federal agencies, states, counties, and tribes.

What is a solution?

Businesses can play a more prominent role in advocating for "big, hairy, audacious goals" with federal policy makers to build a more permanent and reliable presence for public health in their local communities and across the nation. Support for a stronger, better resourced, and more effective public health workforce can take many forms. That workforce needs to be supported by advanced management information and surveillance capabilities that link clinical, social, and public health data for improved situational awareness, planning, implementation, and evaluation.

Actions where businesses can take the lead

 Action 7A: Advocate for expansion and modernization of the U.S. Public Health Service Commissioned Corps

Businesses can advocate for expansion of the Commissioned Corps of the U.S. Public Health Service⁵⁹ (USPHS Corps), a branch of the military that is led by the Assistant Secretary of Health and U.S. Surgeon General. The USPHS is a branch of the military. Its workforce of 6,100 officers includes physicians, nurses, dentists, engineers, and other professionals who work in agencies across government to advance health and protect the safety of the nation. Expansion of the USPHS may involve hiring individuals with public health (MPH) and business (MBA) degrees to complement those engaged in delivery of direct medical services. The Corps can further expand its reach by providing fellowship opportunities to new graduates or mid-career professionals who wish to apply their skills in real-world settings while accruing all the benefits of being part of the military.

To be effective, the USPHS needs to modernize its situational awareness to meet the challenges of the 21st century. Driven by the rapid pace of innovation, there has been exponential growth in newly available data generated from electronic health records, insurance claims, smart phones, wearable devices, and social media. These data are large, complex, and often unstructured. They are drawn from multiple non-traditional

sources and often do not fit neatly into standard databases. This presents both opportunities and challenges to public health systems. Surveillance, a foundational activity in public health practice, is well suited for technological innovation. But public health's ability to capitalize on trends to transform raw data into useful information requires increasingly more advanced technology and analytic techniques. In addition to revamping its physical infrastructure, public health must invest in a tech-savvy workforce with the skills necessary to take advantage of those opportunities.

"Public health practice is a complex and wide-ranging set of functions that is information rich and heavily quantitative. The collection, analysis, interpretation, and dissemination of data underlie most of the essential services such as diagnosis and assessment, program design and implementation, and program monitoring and evaluation. Each of these activities involves sifting through large amounts of raw data to glean information and synthesize that information into actionable knowledge that can be used to achieve program and policy goals."

- Focus Group Participant

✓ Action 7B: Advocate for establishment of a U.S. Public Health Service Reserve Corps

Businesses can advocate for establishing a U.S. Public Health Service Reserve Corps that activates former Public Health Service Commissioned Corps officers to expand medical and public health capacity during times of need. By creating the Reserve Corps, local, state, and federal agencies will gain access to a larger team of health professionals to deploy across the nation to help train health care systems in detection and response; educate the public; provide direct patient care as needed; and support the public health infrastructure in communities that are often under-resourced and struggling.

An expanded professional public health workforce will free up resources in the private sector to enable employers to better prepare for future crises and avoid the devastation now being experienced. In addition, these trained professionals will become part of a talent pool from which the private sector can draw to address organization-specific health and productivity concerns.

"Organize public health like you do the military. The military spends very little time fighting wars; most of the time is spent in training, securing equipment, building infrastructure, planning, and on research and development. Why not replicate that model for public health to prevent future calamities like COVID-19?"

- Focus Group Participant



✓ Action 7C: Advocate for a Public Health Jobs Corps

Businesses can be at the forefront of voicing support for a non-military Public Health Jobs Corps, similar in design and structure to AmeriCorps, Teach for America, and the Peace Corps. These new employees would be recruited from high schools, community colleges, and universities, and would complement a permanent public health workforce located in urban and rural communities at greatest need for public health services. Public Health Jobs Corps employees would receive salaries, benefits, and some level of educational loan forgiveness for their service. This would address the need for job growth in under-developed communities as well as provide needed funding for higher education, job training, and career development. Federal authorization of a National Health Service Jobs Corps was included in the 2010 Affordable Care Act (ACA).⁶⁰

Individuals recruited for the Public Health Jobs Corps would function in a variety of roles, including as COVID-19 screeners, contact tracers, data gatherers, software engineers, communication experts, drivers, food distributors, health educators, logistics managers, surveillance/cybersecurity specialists, and community health workers employed by health, mental health, and social service agencies. When the COVID-19 crisis abates, these workers would be re-assigned to other under-resourced public health functions in communities to address such risk factors as infant and maternal mortality, social isolation and loneliness, opiate addiction, obesity, immunization programs, and transport for medical appointments. The Corps would also be available to address community-wide concerns that fall under the banner of social determinants of health, such as domestic violence, child abuse and neglect, drug addiction, homelessness, and other issues best handled by trained public health professionals.

From the standpoint of employers, these programs represent job creation and skill-building opportunities for local residents, while at the same time responding to long-standing social problems requiring attention.

The bottom line

Employers can leverage their influence with national policymakers to rebuild, reinforce, and expand the nation's public health workforce and its underlying technology infrastructure, by building on existing institutions, such as the military, as well as creating new employment opportunities for citizens at all levels of education.

FUNDING THE PROPOSED SOLUTIONS

Business should not bear the full burden of recovery from COVID-19

Many of the recommendations proposed in this report have already been adopted by businesses in the form of hiring medical and public health professionals, advancing their internal communication efforts, and supporting volunteerism in the community. To that extent, the ideas offered are not a significant stretch for business leaders when calling for actions that directly benefit their workforce.

"Employers are generally willing to make investments when they believe that these investments will benefit their business. But they are reluctant to take on costs when it is primarily the public that benefits, in which case it falls to the government to step in."

– The Private Sector Can't Pay for Everything, Noam Scheiber, The New York ${\sf Times}^{61}$



What may be new is a call to action for businesses to partner with public health agencies in the ongoing battle against the COVID-19 crisis and its after-effects. By design, most of the recommendations in this report are directed at business leaders and what they can do on their own. However, businesses should not be expected to do it alone. It is government's role to address larger societal issues as a collective action.

On a broad national basis, business leaders can advocate for existing and new federal legislation that supports ongoing investment in public health, building on the Public Health and Prevention Fund included as part of the 2010 ACA. 62 In addition to providing a stream of funding for prevention and public health efforts (\$1 billion a year), such a provision would reenergize the National Prevention Strategy that requires every government

agency to be accountable for improving public health. ⁶³ The ACA also authorizes funding for Workplace Wellness Program Grants of up to \$200 million to small businesses to establish and evaluate workplace wellness programs. ⁶⁰

Finally, on a national level, employers are encouraged to work with their local congressional leaders to support the establishment of a Congressional Health Office (CHO), akin to the Congressional Budget Office (CBO), used to score pending federal legislation.⁶⁴ The CBO is mandated to score any bill sent to Congress in terms of its monetary impact. The CHO would score these bills in terms of their population health impact.

"The case for investment needs to be positioned as an argument for health equity. Build on the notion of human capital – it's not just employees who benefit, but also consumers and communities."

- Focus Group Participant



CONCLUSION

In August 2019, a group of 181 executives from some of the nation's largest companies, represented by The Business Roundtable, came together to offer a "new statement on the purpose of a corporation." In that statement, business leaders declared that corporations should not only benefit shareholders, but also consider how they can benefit customers, employees, suppliers, and communities. ⁶⁵ This report offers specific ways companies can realize their pledge to stakeholders, both inside and outside their four walls.

While the ideas offered by the interviewees spanned a broad range of issues and approaches, the consistent thread is that public health is vital to business success. Without a strong foundation of community health, Americans cannot thrive collectively, let alone prosper economically. The private sector has a unique opportunity to raise its voice to help rebuild the nation's public health infrastructure, and in so doing secure the sector's future potential.

What is clear in assembling recommendations in this report is that many of them are needed immediately and should be implemented in the COVID-19 recovery process even as vaccines become widely available. Other recommendations may take years, if not decades, to be fully realized. While the current pandemic is an immediate focus and catalyst for action, the long-term effects may be more challenging – for example the mental and behavioral health fallout arising from COVID-19 such as increased anxiety, depression, loneliness, feelings of abandonment, social isolation, drug and

"In times of crisis, reliance upon science, evidence, and logic for sound policy is insufficient.

Political will is needed. To build it, leaders call on ordinary citizens to personally sacrifice by enlisting their hearts, minds, and bodies in a fight against an unseen enemy for a cause bigger than themselves."

Milbank Memorial Fund President
 Christopher F. Koller⁶⁶

alcohol addiction, and other diseases of despair, along with the complications of COVID-19 "long hauler" symptoms.

Beyond that, there is recognition that many unattended health factors put people at risk for non-communicable diseases that lead to hospitalizations and premature death. The diseases and disorders placing those infected by the virus at higher risk include diabetes, cardiovascular disease, obesity, auto-immune disease, and chronic

respiratory disorders. Underlying these medical conditions are behavioral and lifestyle factors such as unhealthy diet, physical inactivity, smoking behavior, substance use disorders, unattended mental health problems, and poor sleep habits.

Further upstream, there are the social determinants of health wherein individuals' postal Zip code may be more determinative of poor health outcomes and early death than their genetic code. These societal factors include discrimination, unequal healthcare access and service use, occupation, education, low income, and wealth gaps.⁶⁷ These social determinants of health most directly affect people from racial and ethnic minority groups who are dying at higher rates than the general population and more often fill roles as essential workers.

"We've created a dichotomy between lives and livelihood. It's not either or; they're intertwined."

- Focus Group Participant

Businesses and communities will not recover until COVID-19 is effectively managed. Communities need not make a choice between lives and livelihood. Both can and should be addressed simultaneously – using science and common sense to guide decisions.

In the end, nothing speaks louder than success. Communities that adopt successful prevention and mitigation strategies will thrive and receive recognition for their efforts. To make a lasting impact, public health investments made now must endure so that what is spent on personnel, materials, expertise, technology, and surveillance systems will not go to waste.

Americans want to feel safe and protected by leaders in both public and private sectors. Addressing the threats faced by America requires closer collaboration and collective action.

"The pandemic has awakened Americans to the importance of robust public health systems, in the same way that 9/11 opened our eyes to the sophisticated threats to our national security, the great recession to the fragility of our financial system, and the election of various populist leaders around the world in the twenty-first century to the dangers of political extremism."

- Nicholas Christakis, physician and sociologist, quoted in The Washington Post⁶⁸

APPENDIX A: LIST OF FOCUS GROUP PARTICIPANTS

Dexter Shurney, MD, MBA, MPH SVP, Chief Medical Officer, Well-Being Division Executive Director, Blue Zone Institute Adventist Health Blue Zones LLC

Georges C. Benjamin, MD, MACP, FACEP(E), FNAPA, Hon FRSPH, Hon FFPH Executive Director American Public Health Association

Michael O'Donnell, MBA, MPH, PhD

Chief Executive Officer

Art & Science of Health Promotion Institute

Carolyn Mullen

Chief of Government Affairs & Public Relations

Association of State and Territorial Health

Officials

Anand Parekh, MD, MPH Chief Medical Advisor Bipartisan Policy Center

LuAnn Heinen, MPP Vice President Business Group on Health

Judy Monroe, MD

President & CEO

CDC Foundation

Jason Lang, MPH, MS

Team Lead, Workplace Health Programs

Centers for Disease Control and Prevention (CDC)

K. Andrew Crighton, MD

Chief Executive Officer

CEO Roundtable on Cancer

Ned Calonge, MD, MPH President & CEO Colorado Trust Monica Lupi, JD, MPH

Managing Director

The Kresge Foundation

Pamela Hymel, MD, MPH, FACOEM Chief Medical Officer Disney Parks and Resorts

Brent Pawlecki, MD, MMM Chief Health Officer Goodyear

Scott Hall, JD, MBA
Senior Vice President for Civic and Community
Initiatives
Greater Kansas City Chamber of Commerce

Nico Pronk, PhD, MA President Health Partners Institute

Paul Terry, PhD
Senior Fellow & Editor in Chief
HERO and the American Journal of Health Promotion

William Kassler, MD, MPH Chief Medical Officer IBM

Joshua Sharfstein, MD Vice Dean Public Health Practice and Community Engagement Johns Hopkins Bloomberg School of Public Health

Shelley A. Hearne, PhD
Inaugural Alfred Sommer and Michael Klag Decanal
Professor of the Practice for Public Health Advocacy;
Director, Center for Public Health Advocacy
Johns Hopkins Bloomberg School of Public Health

David Grossman, MD, MPH
Senior Investigator, Pediatrician at Kaiser
Permanente Washington, and Senior Medical
Director for the Washington Kaiser Permanente
Medical Group

Kaiser Permanente

Jeff Levi, PhD

Professor, Department of Health Policy and Management Milken Institute School of Public Health, George Washington University

Alina Baciu, PhD, MPH
Senior Program Officer
Roundtable on Population Health Improvement
National Academies of Sciences, Engineering, and
Medicine, Health and Medicine Division

Michael Thompson

President & CEO

National Alliance of Healthcare Purchasers
Coalition

Kitty Hsu Dana Program Director, Health and Wellness National Leagues of Cities

Sami Jarrah, MPH

Chief Financial Officer & Deputy Commissioner

New York City Department of Health and Mental
Hygiene

Seth Serxner, PhD Chief Health Officer, Sr VP of Population Health Optum Health

Rachel A. Davis

Executive Director

Prevention Institute

Jessica Solomon Fisher, MCP

Vice President for Strategic Initiatives

Public Health National Center for Innovations

Public Health Accreditation Board

Jennifer Fassbender, MS

Director of Program Initiatives

Reinvestment Fund

Nebeyou Abebe, MA, PMP Global VP, Health & Wellbeing Sodexo

Leslie Meehan, MPA
Director of Primary Prevention
Tennessee Department of Health

Lauren Powell, MPH, PhD

Vice President, Head of Healthcare Industry
TIME'S UP Healthcare

President & CEO,
The Equitsit, LLC

David Katz, MD, MPH, FACPM, FACP Founder and President True Health Initiative

John Auerbach, MBA

President & CEO

Trust for America's Health

Reed Tuckson, MD, FACP

Managing Director

Tuckson Health Connections LLC

John Quelch, SM,DBA, MBA, MA Vice Provost, University of Miami; Dean, Miami Herbert Business School Leonard M. Miller University Professor University of Miami

Lawrence Bowdish, PhD

Senior Director, Research and Issue Networks
US Chamber of Commerce Foundation

Peter Wald, MD, MPH Enterprise Medical Director USAA

David Hoke Senior Director, Health & Wellbeing Walmart

Maria Flake, MPH Special Projects, Systems Transformation, Office of the Secretary Washington State Department of Health

APPENDIX B: RESOURCES

Harvard University https://ethics.harvard.edu/covid-19-response

The Edmond J. Safra Center for Ethics report, *Roadmap to Pandemic Resilience*, ¹⁶ calls for large-scale testing, tracing, and supported isolation (TTSI) as the formula for effectively addressing the COVID-19 pandemic. The report's recommendations are highlighted below.

- There is an immediate need to "massively scale-up testing, contact tracing, isolation, and quarantine." Large-scale testing will allow for a steady re-opening of parts of the economy that have been shut down, protect front-line workers, and contain the virus to levels where it can be effectively managed and treated until an effective vaccine is widely available.
- Massive testing needs to be accompanied by contact tracing and social isolation. This means: 1) investing in contact tracing personnel; 2) providing clear mechanisms and norms of governance and enforcement in the design and use of peer-to-peer warning apps; 3) support for quarantine and isolation in the form of jobs protections and material support for time spent in quarantine and isolation; and 4) unobstructed access to health care.

Johns Hopkins University and Medicine Coronavirus Resource Center https://coronavirus.jhu.edu/

The Johns Hopkins Coronavirus Resource Center (CRC) is a continuously updated source of COVID-19 data and expert guidance. The site aggregates and analyzes the best data available on COVID-19—including cases, as well as testing, contact tracing and vaccine efforts—to help the public, policymakers and health care professionals worldwide respond to the pandemic.⁶⁹

Centers for Disease Control and Prevention (CDC) https://www.cdc.gov/coronavirus/2019-ncov/index.html While guidance from government public health agencies changes over time as new research is accumulated, a key recommendation by the CDC is that everyone wear a mask because wearing a mask helps protect the wearer and others in the community. To

Public Health Communications Collaborative (PHCC) https://publichealthcollaborative.org/

The Public Health Communications Collaborative (PHCC) was established in September 2020 to coordinate and amplify public health messaging on COVID-19 and increase Americans' confidence in guidance from the Centers for Disease Control and Prevention (CDC) and state and local public health officials. ⁷¹ Supported by the CDC Foundation, the de Beaumont Foundation, and Trust for America's Health, the Collaborative aims to: 1) support science-based decision-making during the COVID-19 response, 2) establish public health leaders as credible, unbiased experts, 3) correct misinformation, and 4) build support for sustained investment in public health.

REFERENCES

- 1. Drucker Institute. (2017, August 18). Citizenship and Courage. https://www.drucker.institute/news-post/citizenship-and-courage/
- 2. Fry, Erica. (2020, July 8). Is it time for your business to hire a chief public health officer? *Fortune*. https://fortune-com.cdn.ampproject.org/c/s/fortune.com/2020/07/08/chief-public-health-officer-business-coronavirus-amc-movie-theaters/amp/
- 3. Ryssdal, Kai, and Wiles, Katherine. (2020, March 23). Ben Bernanke on COVID-19 downturn: "With help from the Federal Reserve and from the Treasury, I'm not really expecting a major financial crisis." *Marketplace*. https://www.marketplace.org/2020/03/23/former-fed-chair-bernanke-covid19-downturn/
- 4. Van Dam, Andrew. (2020, April 15). The U.S. has thrown more than \$6 trillion at the coronavirus: that number could grow. *The Washington Post*. https://www.washingtonpost.com/business/2020/04/15/coronavirus-economy-6-trillion/
- 5. Whoriskey, P., MacMillan, D., and O'Connell, J. (2020, October 5). Doomed to fail: Why a \$4 trillion bailout couldn't revive the American economy. *The Washington Post*. https://www.washingtonpost.com/graphics/2020/business/coronavirus-bailout-spending/
- 6. DeSalvo, K., Parekh, A., Hoagland, G. W., Dilley, A., Kaiman, S., Hines, M., & Levi, J. (2019). Developing a financing system to support public health infrastructure. *American Journal of Public Health*, 109(10), 1358-1361.
- 7. US Senate Committee on Health, Education, Labor & Pensions. (2020, October 1). Murray Introduces Legislation to Build and Maintain Core Public Health Infrastructure Needed to Save Lives, Fight Threats Like COVID-19. https://www.help.senate.gov/ranking/newsroom/press/murray-introduces-legislation-to-build-and-maintain-core-public-health-infrastructure-needed-to-save-lives-fight-threats-like-covid-19-">https://www.help.senate.gov/ranking/newsroom/press/murray-introduces-legislation-to-build-and-maintain-core-public-health-infrastructure-needed-to-save-lives-fight-threats-like-covid-19-">https://www.help.senate.gov/ranking/newsroom/press/murray-introduces-legislation-to-build-and-maintain-core-public-health-infrastructure-needed-to-save-lives-fight-threats-like-covid-19-">https://www.help.senate.gov/ranking/newsroom/press/murray-introduces-legislation-to-build-and-maintain-core-public-health-infrastructure-needed-to-save-lives-fight-threats-like-covid-19-">https://www.help.senate.gov/ranking/newsroom/press/murray-introduces-legislation-to-build-and-maintain-core-public-health-infrastructure-needed-to-save-lives-fight-threats-like-covid-19-">https://www.help.senate-needed-to-save-lives-fight-threats-like-covid-19-
- 8. U-S-History.com. Works Progress Administration (WPA). https://u-s-history.com/pages/h1599.html
- 9. American Public Health Association. What is Public Health? https://www.apha.org/what-is-public-health
- 10. American Public Health Association. 10 Essential Public Health Services. https://www.apha.org/what-is-public-health/10-essential-public-health-services
- 11. Galuppo, Mia. (2016, March 7). "You're Gonna Need a Bigger Boat": 'Jaws' Writer Reveals Origins of Movie's Famous Line. https://www.hollywoodreporter.com/news/jaws-bigger-boat-quote-writer-872226
- 12. Bipartisan Policy Center (BPC) and the de Beaumont Foundation (2019, June 28). Good Health is Good Business. The Value Proposition of Partnerships Between Businesses and Governmental Public Health Agencies to Improve Community Health. Report prepared by the BPC and the de Beaumont Foundation. https://bipartisanpolicy.org/report/good-health-is-good-business/
- 13. Linzer, K, Remes, J, Singhal, S. (2020, October 5). How prioritizing health is a prescription for US prosperity. McKinsey Global Institute. <a href="https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity?cid=other-eml-alt-mip-insights/how-prioritizing-health-is-a-prescription-for-us-prosperity-health-is-a-prescription-for-us-prosperity-health-is-a-prescription-for-us-prosperity-health-is-a-prescription-for-us-prosperity-health-is-a-prescription-for-us-prosperity-health-is-a-prescription-for-us-prosperity-health-is-a-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-prescription-for-us-pr

mck&hdpid=99227d2b-1264-4db2-aee1-1dd2aacd3727&hctky=12446544&hlkid=9c9cef8c2d444d2f8568e5919df2cbad

- 14. Public Health Reaching Across Sectors: A Partnership of The de Beaumont Foundation and The Aspen Institute. 10 Framing Recommendations. https://www.phrases.org/framing-tools/framing-recommendations-2/
- 15. Chicago Public Library. Chicago Mayors. https://www.chipublib.org/chicago-mayors/
- 16. Edmond J. Safra Center For Ethics At Harvard University. (2020, April 20) Roadmap to Pandemic Resilience: Massive Scale Testing, Tracing, and Supported Isolation (TTSI) as the Path to Pandemic Resilience for a Free Society. https://ethics.harvard.edu/files/center-for-ethics/files/roadmaptopandemicresilience-updated-4.20.20-1.pdf
- 17. McCleary K, Goetzel RZ, Roemer EC, Berko J, Kent K, De La Torre H. (2017) Employer and consumer opinions about workplace health promotion (wellness) programs: results of the 2015 Harris Poll Nielsen Survey. *J Occup Environ Med.* 2017;59(3):256-263.
- 18. Saunders A. UNC researchers find only 17.1% of employers offer comprehensive health programs. *The Daily Tarheel.* April 24, 2019. https://www.dailytarheel.com/article/2019/04/unc-gillings-school-workplace-health-programs-study-0425.
- 19. Goetzel RZ, Henke RM, Tabrizi MJ, et al. Do workplace health promotion (wellness) programs work? *J Occup Environ Med.* 2014:56(9):927-934.
- 20. Mazzoni, Mary. (2020, November 19). BlackRock CEO Larry Fink On Business Leadership During the COVID-19 Pandemic. Triple Pundit. https://www.triplepundit.com/story/2020/blackrock-larry-fink-covid-leadership/708546
- 21. Grossmeier J and Johnson S. Factors driving exemplary health and well-being initiatives. *American Journal of Health Promotion*. 2020. 34(1) 105-118.
- 22. Centers for Disease Control and Prevention. CDC Worksite Health ScoreCard. https://www.cdc.gov/workplacehealthpromotion/initiatives/healthscorecard/index.html
- 23. CDC Workplace Health Resource Center. What is the CDC Workplace Health Resource Center? https://www.cdc.gov/workplacehealthpromotion/initiatives/resource-center/index.html
- 24. Health Enhancement Research Organization. HERO Health and Well-being Best Practices Scorecard in Collaboration with Mercer© (HERO Scorecard). https://hero-health.org/hero-scorecard/
- 25. American Heart Association. Workplace Health Achievement Index. https://www.heart.org/en/professional/workplace-health/workplace-health-achievement-index
- 26. APA Center for Organizational Excellence. Creating a Healthy Workplace. https://www.apa.org/applied-psychology/phwa-2019-winners
- 27. CEO Cancer Gold Standard. 5 Pillars of the Gold Standard. https://www.cancergoldstandard.org/

- 28. Business Group on Health. (2020, January 11). Recognizing Corporate Excellence in Global Health Promotion: Developing an Internal Award Program.

 https://www.businessgrouphealth.org/resources/recognizing-corporate-excellence-in-global-health-promotion-developing-an-internal-award-program
- 29. National Institute for Occupational Safety and Health (NIOSH). (2020, July 28). https://www.cdc.gov/niosh/twh/default.html
- 30. Goetzel, R. Z., Roemer, E. C., Kent, K. B., & McCleary, K. (2019). Integration of workplace prevention programs and organizational effectiveness. In H. L. Hudson, J. A. S. Nigam, S. L. Sauter, L. C. Chosewood, A. L. Schill, & J. Howard (Eds.), <u>Total worker health</u> (pp. 279-294). Washington, DC, US: American Psychological Association.
- 31. Rivas, Kayla. (2020, August 10). Chief medical officers in high demand amid coronavirus pandemic, range of sectors seeking health expertise: report. Fox Business. https://www.foxbusiness.com/lifestyle/range-of-sectors-look-to-hire-chief-medical-officers-amid-pandemic-seek-health-expertise-report
- 32. Harvard T.H. Chan School of Public Health. (2020, December 9). When Public Health Means Business. https://www.hsph.harvard.edu/coronavirus/covid-19-news-and-resources/when-public-health-means-business/
- 33. Centers of Disease Control and Prevention. Community Health Assessment. https://www.cdc.gov/publichealthgateway/cha/index.html
- 34. Kent KB, Goetzel RZ, Roemer EC, McCleary K, Henke RM, Head MA, Fabius R. Developing Two Culture of Health Measurement Tools: Examining Employers' Efforts to Influence Population Health Inside and Outside Company Walls. <u>Journal of Occupational and Environmental Medicine</u>. 2018 Dec 1;60(12):1087-97.
- 35. Edelman. 2021 Edelman Trust Barometer Press Release. (2021, January 13). https://www.edelman.com/trust/2021-trust-barometer/press-release
- 36. The Yale-Griffin Prevention Research Center. https://yalegriffinprc.griffinhealth.org/
- 37. Katz, D. L. (2011). Facing the facelessness of public health: what's the public got to do with it?. American Journal of Health Promotion, 25(6), 361-362.
- 38. The de Beaumont Foundation. National Survey Reveals Strong Bipartisan Support for Public Health. https://www.debeaumont.org/news/2018/national-survey-reveals-strong-bipartisan-support-for-public-health/
- 39. Castrucci, B., Katz, R., Kendall-Taylor, N. (2020, October 8). Misunderstood: How Public Health's Inability To Communicate Keeps Communities Unhealthy. https://www.healthaffairs.org/do/10.1377/hblog20201006.514216/full/
- 40. City Health. Creating the New Gold Standard For Health And Well-Being In Cities. https://www.cityhealth.org/
- 41. DHEC. Food Safety & COVID-19. https://www.scdhec.gov/food-safety/food-safety-covid-19

- 42. The Public Health Communications Collaborative (PHCC). Communications Resources For Public Health Professionals. https://publichealthcollaborative.org/
- 43. Points of Lights. https://www.pointsoflight.org/
- 44. Hands on Connect. https://www.handsonconnect.org/
- 45. Taproot Foundation. We are Connectors.

 https://taprootfoundation.org/?gclid=EAIaIQobChMI3dXLw80b7QIVCUqGCh0RmAiCEAAYASAAEgJQT_D_Bw_E
- 46. Medical Reserve Corps. https://mrc.hhs.gov/pageviewfldr/About
- 47. Catchafire. https://www.catchafire.org/volunteer-discover/
- 48. Conscious Capitalism. https://www.consciouscapitalism.org/
- 49. U.S. Department of the Treasury. Community Development Financial Institutions Fund (CDFI Fund). https://www.cdfifund.gov/Pages/default.aspx
- 50. Frank, RH. (2020, August 19). Behavioral Contagion Could Spread the Benefits of a Carbon Tax, New York Times. https://www.nytimes.com/2020/08/19/business/behavioral-contagion-carbon-tax.html
- 51. Kassler W. (2020). Turning Barriers Into Benefits to Facilitate Public Health and Business Partnership. American Journal for Public Health. April 2020, Vol 110, No. 4
- 52. Centers for Disease Control and Prevention. Office of the Associate Director for Policy and Strategy. *Health in all Policies*. https://www.cdc.gov/policy/hiap/index.html
- 53. Johns Hopkins Bloomberg School of Public Health and Bloomberg American Health Initiative. Measuring Hospital Contributions to Community Health with a Focus on Equity. https://americanhealth.jhu.edu/hospitalmeasure
- 54. The Johns Hopkins Center for Health Equity. https://www.jhsph.edu/research/centers-and-institutes/johns-hopkins-center-for-health-equity/
- 55. Grossmeier, J., Serxner, S. A., Montalvo, T., Balfanz, D. R., Imboden, M. T., Goetzel, R. Z., & Schweppe, D. (2020). Guidance on Development of Employer Value Dashboards. https://journals.sagepub.com/doi/full/10.1177/0890117120915113b
- 56. Nashville Region Health Competitiveness Initiative. 2017 Report.

 http://www.fticonsulting.com/~/media/Files/us-files/insights/reports/fti-nashville-area-chamber-healthcare-competitiveness-initiative-2017-report.pdf). Also see: SA2020. San Antonio Community Report Card (http://www.sa2020.org/wp-content/uploads/2016/04/SA2020 ReportCard Update 2016.pdf) and (https://report.sa2020.org/home/)
- 57. The National Health Security Preparedness Index, a program of the Robert Wood Johnson Foundation. https://nhspi.org/about/

- 58. Healthy Business Coalition. https://healthybusiness.bsr.org/toolkit/metrics-guide
- 59. Commissioned Corps of the U.S. Public Health Service. https://www.usphs.gov/
- 60. Chait, N., & Glied, S. (2018). Promoting prevention under the affordable care act. Annual review of public health, 39, 507-524. https://www.annualreviews.org/doi/pdf/10.1146/annurev-publhealth-040617-013534
- 61. Scheiber, Noam. (2020, October 9). The Private Sector Can't Pay for Everything. *The New York Times*. https://www.nytimes.com/2020/10/09/sunday-review/stimulus-congress-layoffs.html
- 62. Centers for Disease Control and Prevention (CDC). Prevention and Public Health Fund. https://www.cdc.gov/funding/pphf/index.html
- 63. Lushniak, B. D., Alley, D. E., Ulin, B., & Graffunder, C. (2015). The National Prevention Strategy: leveraging multiple sectors to improve population health. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4318310/
- 64. Murphy, K., Pollack Porter, K.M. (2020, September 22). Time For A Second Public Health Revolution: A Congressional Health Office To Score Federal Legislation. *Health Affairs Blog*. https://www.healthaffairs.org/do/10.1377/hblog20200915.68239/full/
- 65. Business Roundtable. (2019, Aug 19). Business Roundtable Redefines the Purpose of a Corporation to Promote 'An Economy That Serves All Americans'. https://www.businessroundtable.org/business-roundtable-redefines-the-purpose-of-a-corporation-to-promote-an-economy-that-serves-all-americans.
- 66. Milbank Memorial Fund. (2020, July 22). Beating the Coronavirus Will Require Inspiration—Not Just Charity, Guile, and Dreams. President's Blog. <a href="https://www.milbank.org/2020/07/beating-the-coronavirus-will-require-inspiration-not-just-charity-guile-and-dreams/?utm_medium=email&utm_campaign=Beating%20the%20Coronavirus%20Will%20Require%20Inspiration%20%20Not%20Just%20Charity%20Guile%20and%20Dreams&utm_content=Beating%20the%20Coronavirus%20Will%20Require%20Inspiration%20%20Not%20Just%20Charity%20Guile%20and%20Dreams+Cl_D_4b10ead2c3f9e2d9e3202b741eb14695&utm_source=Email%20Campaign%20Monitor&utm_term=Read%20more
- 67. Centers for Disease Control and Prevention (CDC). (2020, July 24). Health Equity Considerations & Racial & Ethnic Minority Groups. https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html
- 68. Lozada, C. (2020, Dec 20). The great acceleration. *The Washington Post*.

 https://www.washingtonpost.com/outlook/2020/12/18/coronavirus-great-acceleration-changes-society/?arc404=true
- 69. Johns Hopkins University & Medicine. Coronavirus Resource Center. https://coronavirus.jhu.edu/
- 70. Centers for Disease Control and Prevention (CDC). COVID-19. https://www.cdc.gov/coronavirus/2019-ncov/index.html
- 71. The Public Health Communications Collaborative (PHCC). Communications Resources For Public Health Professionals. https://publichealthcollaborative.org/