

Recommendations for the Biden-Harris Transition and the 117th Congress

November 2020

Public health in the United States and globally has been in an unprecedented spotlight in 2020. Now, more than ever, the public's health—and the role of our governmental public health system—is critical to the overall functioning of all facets of American life.

In 2021 and likely for several years into the future, the United States will find itself grappling with several public health crises simultaneously. The novel coronavirus (COVID-19) pandemic has ravaged countries across the globe, cost hundreds of thousands of lives in the U.S., and caused immense pain and suffering to many more. The pandemic has also had a significant fiscal impact, both through the trillions of dollars needed to support the response and the effect on the economy that has hurt small and large businesses, individual workers, and families. This translates to reduced tax revenue at the local and state level, impacting the budgets of the health departments tasked with keeping us safe.

The public health impacts have been wide reaching. As public health professionals have sought to stem the tide of the COVID-19 pandemic, other health needs have been put on hold. The National Association of County and City Health Officials (NACCHO) has documented how agencies have temporarily stopped or curtailed a wide range of other public health services, including providing HIV prevention services, routine immunizations, food safety inspections, and substance abuse prevention services. As a result, overdose numbers have already started to go up, immunization rates have dropped, and other health impacts are sure to follow. Many of these impacts may remain unknown until long after the pandemic ends.

The overall health of a nation is dependent on the physical, mental, and economic health of people who live there. This crisis has shown how the public health system is a critical component to these outcomes. However, it must be better supported, now and into the future. This is particularly important for local health departments, who have served on the front lines of this response since well before the first cases were diagnosed in the U.S. They will continue to be until the very last days of the pandemic and beyond.

NACCHO, representing the nation's nearly 3,000 local health departments, provides recommendations below for the incoming Biden-Harris Administration and the 117th Congress to help the U.S. emerge safely from the COVID-19 pandemic and strengthen the public health system that protects us in small towns, big cities, and all the communities in between each day.



Introduction

Local health departments are the unit of local government responsible for safeguarding the public, responding to routine health threats as well as emergencies. These health departments at the county and city level are at the forefront of protecting the public's health and ensuring their residents can live healthy lives. As noted in NACCHO's [National Profile of Local Health Departments](#), they range in size and geographic location, autonomy, and resources, but all have the shared goal of protecting and promoting the public health of their communities.

The nation's nearly 3,000 local health departments will continue to lead the COVID-19 response for the foreseeable future. However, they also work each day to prevent and address other public health problems that do not make the headlines by providing immunizations, education, data tracking and many programs and services that reduce the impact of other infectious diseases in their communities; monitor environmental threats to air, food, and water; and serve as chief community health strategists, working with community partners to promote wellness, identify disparities and their causes among vulnerable populations, and promote equity among all community members.

By leveraging evidence-based public health knowledge and tools, local health departments make a difference in people's lives and make the United States a stronger nation. Public health can save health care costs and strengthen the overall physical and economic health of our nation by using science-driven methods to address the underlying causes of disease.

Unfortunately, the work of governmental public health—and local public health in particular—has long been under resourced, and local health departments were hit particularly hard by the 2008 recession. In many communities they never recovered, and when COVID-19 emerged our local health departments network across the country was down 21% of their workforce capacity as a whole. We can and must learn from these long-term failures to invest as we continue to work through the pandemic and prepare for the next crisis.

Support Local Health Departments on the Frontlines of the COVID-19 Response

The governmental public health system, including local, state, and federal public health agencies, is the critical infrastructure our nation has to slow the spread of COVID-19, track our progress, protect particularly vulnerable populations, and preserve critical health care resources. This work is incredibly resource and time intensive, requiring strong funding, staffing, and infrastructure.

To protect their communities from COVID-19, local health departments provide testing and contact tracing services, monitor the health of those who may have been exposed, and support them to self-isolate. They use data derived from case investigations to locate not only who is developing COVID-19, but also to identify trends and hot spots that inform local policies and

actions related to the primary transmission routes in their communities. They are planning and ramping up as a key player in the largest mass vaccination campaign our nation has ever embarked on, while at the same time fighting flu. On top of all of this, they are working with their community partners to disseminate credible information, calm fears, dispel myths, and develop and implement plans to protect the highest at-risk groups including Black Americans, Latinx people, and the elderly of all races. This expertise is critical to inform national approaches to combatting the virus, as well as to inform future phases of the response, like eventual vaccine distribution.

Local health departments work to protect the public every day despite great policy and funding challenges that have impacted their capacity and ability to do what is needed to respond now and scale up for the next phases of the response. NACCHO research has found that more than 80% of local health department preparedness programs saw cuts in 2019, and 312 million Americans live in jurisdictions with stagnant or reduced emergency preparedness services.¹ Unfortunately, as this pandemic continues to grow and affect every corner of our nation, local health departments continue to struggle to find the resources to support their response efforts.

NACCHO appreciates that Congress has appropriated specific funding to support the COVID-19 response at state and local health departments, as well as the Centers for Disease Control and Prevention (CDC). However, the funding previously appropriated by Congress has had a variable reach into local public health agencies, and more must be done to ensure that a sufficient amount of funds reach the local level in a timely manner.² This is critical as all communities are either battling outbreaks of the virus or at risk for an outbreak; however, there are inconsistencies across the country with federal response dollars making it to local health departments to support this response.

- The federal government must provide substantial additional investments to the governmental public health system at all levels (federal, state, local, tribal and territorial), as well as at least \$3 billion in funding *designated* specifically for local health departments so that they can continue to lead on the response in the short term, as well as over the long-term response and through recovery.
- The federal government must publicly track any disbursement of federal COVID-19 response funds down to the local health department level to identify best practices as well as better understand the challenges of getting money to the front lines of the response.
- Federal grants and funding announcements should ensure that local health department expertise and perspective are included in state-level grantee policy and budget planning.

Strengthen the Governmental Public Health Partnership to Harness Expertise from the Local Level in National Planning

Local health departments serve as the chief health strategist in their communities, where they work to prevent death, disease, and disability; address emerging threats to health, security, and equity; and eliminate the social and structural injustices that result in health disparities. They provide sustained leadership at the community level to bring together community stakeholders to prioritize the needs of the community and to leverage resources to build integrated systems to achieve health equity. Local health departments are uniquely positioned to fill this role through their experience in providing essential services and leadership; engaging communities to identify and support policy solutions; and collecting, analyzing, and sharing data.

The COVID-19 response has solidified the importance of this role. Even before a single case of the virus was detected on American soil, local health departments began to mobilize and engage their community and health care partners. They know the assets and barriers to care in their communities, the industries and living situations that pose particular challenges, and community-level partners and organizations that must be included to successfully address them. They also field the first line of questions from families, local decision makers, and health care providers, allowing them keen insight into not only the concerns of the community, but also emerging issues. This ground level expertise is critical to ensure that national and state plans and policies to fight the pandemic can be successful. However, to date there has been varied engagement of local health department expertise in this work.

Historically, there has been a mutually beneficial and extremely supportive relationship between all sectors of the governmental public health system, collaboratively working on issues from HIV to tuberculosis to Ebola. That relationship would mean including local and state health official partners to help inform the revision process and pre-communicating significant shifts or changes in guideline or policy plans. However, over the course of this response, local health officials have not been tapped to share their expertise, and in some cases, they have learned of significant policy shifts after the fact via the media instead of from their federal public health partners.

A lack of communication has also occurred with the deployment of federal workers to hot spots via “craft teams,” where local health officials have not been involved in, nor are they aware of the deployment to their jurisdictions before (and often even after) they have already visited their community. This is a significant and important missed opportunity for federal officials to actively engage with the community public health leader often responsible for the pandemic response in their unique jurisdictions. The types of inputs they can provide include insight into outbreak situations, deep understanding of local populations (e.g. special populations including homeless, incarcerated, long-term care residents, and other vulnerable groups) and local impacts from COVID-19, mitigation efforts, services provided, community sentiment, and sector

partnerships already in place. In addition, often, they never see or hear about any of the recommendations that eventually come back to the Governor related to the visit.

It is important to distinguish outreach to elected officials from critical inclusion of public health department perspective in this response moving forward. The nation's local health departments operate under a variety of governance structures. The majority of local health departments across the country operate under home rule and are independent governing units from the state health department. There are also a significant number of local health departments that have mixed models of governance. Fewer health departments are units of state government where the flow of information and resources occur naturally from the state. Ignoring jurisdictional engagement with local health departments now and in the future will continue to result in lost opportunities to leverage already existing deep knowledge, understanding, and structures in place in communities that can help move our country more rapidly towards ending the pandemic.

We need to assure that federal, state, local, and tribal health departments all have a seat at the table in developing plans, actions, and guidance. And we need to improve communication to individual local health departments when specific actions impact their specific communities. We need to strengthen communication and consultation at all levels of the governmental public health system to be successful.

- It is critical to include the local health department perspective in national planning, including on the Biden-Harris Transition Team and COVID-19 Advisory Board. The local health department perspective is critical to ensure that our national response to COVID-19 is informed by current practitioners and workable for implementation at the community level, as well as that it considers the varying geography, rurality, and experiences of local public health practice.
- Local health departments must be included in planning discussions to ensure federal and state policies and plans can be successful at the local level.
- Local health officials should be informed of and consulted with on federal COVID-19 response actions occurring within their jurisdictional borders.

Invest in COVID-19 Vaccine Deployment and Infrastructure

The federal government has made significant investments in the development of vaccines to potentially stop the spread of COVID-19 through Operation Warp Speed. However, to date, we lack investments in the governmental public health system to ensure rapid and effective deployment and tracking of any future available vaccine. The window to hire and train staff, upgrade data systems, and address vaccine confidence is rapidly closing, and resources are needed now to be ready to go on day one.

An eventual vaccine holds promise for protecting people from COVID-19 and local health departments are key to a successful vaccine rollout, which will take place over months, if not years. According to NACCHO's 2019 Profile of Local Health Departments, 88% of local health departments provide direct clinical immunization services to both adults and children.³ Any national or state plans for distribution of the COVID-19 vaccine must include local health departments as key stakeholders in the strategy and planning process—not simply as sites to distribute vaccinations.

In addition, local health departments have critical roles in working with health care providers and other vaccinators, community-based organizations, and other partners to leverage trusted relationships with the public and deliver accurate, culturally appropriate messages about the safety and importance of getting a COVID-19 vaccine. Moreover, investments are needed to ensure that we can build out this level of vaccine infrastructure and track all the necessary information about vaccine administration to identify any safety problems and ensure people receive the necessary doses of vaccine within the recommended timeline. Improved data systems at the federal and state level must be mirrored at the local level for the entire system to be effective.

- NACCHO recommends that at least \$8.4 billion in funding be appropriated for COVID-19 vaccine distribution and that a portion of the vaccine funding be designated specifically for local health departments to plan, prepare for, distribute, and track COVID-19 vaccinations. Without these funds, local health departments cannot fully staff up, train workers, educate the public, and be ready to track the vaccine(s) that are expected to become available over the next few months.
- Local health departments must be included in planning discussions to ensure federal and state policies and plans equip local health departments to successfully foster equitable COVID-19 vaccine uptake.
- The federal government must engage with public health and health care leaders to ensure clear, consistent messages about vaccine safety and efficacy and combat misinformation. Local health departments are particularly well positioned to inform and employ data-driven efforts that address vaccine hesitancy, combat misinformation, and increase confidence across all populations as they work closely with them at the local level.

Restore Support and Trust in Public Health

Local health officials have statutory authority and an obligation to protect the public's health. They carry out this role as the chief health strategist for their communities. Unfortunately, across the country, public health officials and staff have been physically threatened and politically scapegoated during the COVID-19 response. Too many have lost their jobs for trying to protect and defend the health of their community. Many others have stepped down, interrupting their careers, to protect themselves and their loved ones from actual or perceived

threats of violence. NACCHO has documented turnover of more than 90 local and state health officials since April 2020. Each of these vacancies represents lost expertise at a time when we need it most.

Beyond the threats to individual public health department leaders and staff, the vital work of public health departments is also being challenged. Some of it is subtle: At the federal, state, and local levels, taskforces have been created to guide COVID-19 decision-making, which lack the critical input of the public health system. In other places, it is much more overt: Public health departments are facing lawsuits over their authority to temporarily close businesses, schools, and places of worship in order to protect the community at large. Some state legislatures have attempted to limit public health's authority to act to keep us safe when the virus spikes. Even something as simple as guidance to wear a cloth mask has been weaponized, permitting the virus to go unchecked as a political pawn. As a result, when communities look to public health to protect them, some health departments are hamstrung.

Public health officials have been trusted in their community but now their advice often goes ignored or is seen as promoting a political agenda. Even perceived political interference with public health guidance and mixed messages at the federal level greatly impact the ability of our members to protect their communities.

In the COVID-19 response, there has been a lack of consistent federal guidance. Local communities and states vary widely in their guidance on public health measures and on their level of reopening, in many cases without regard to COVID-19 case counts. When the guidance and underlying message diverges in each jurisdiction and at the federal level, that only promotes confusion and skepticism among the public, hindering response efforts. A comprehensive, unified response is necessary, with federal, state, and local officials working together to mount a response to a worldwide pandemic.

- Federal public health guidance needs to be clear, consistent, and science-based in order to slow the spread of COVID-19 and allow reopening of communities based on scientific measures, not political considerations.
- Federal, state, and local policymakers should support and protect the statutory authority of local health departments and officials to take actions to protect the public.
- Congress should ensure local (and state) health officials are minimally afforded the same protections as federal employees when carrying out their official duties as part of the COVID-19 response and as they work on behalf of our country to keep our communities safe and healthy during this pandemic.
- The Department of Health and Human Services (HHS) should also clarify that federal funds may be used to provide security and protect the safety of local public health officials and staff should those steps be necessary.

Long-term Investment is Needed to Protect the Public and Strengthen Health Equity

Public Health Infrastructure

While these COVID-19 specific funding needs are critical to our success in the short term, the pandemic has exposed the many cracks in our nation's public health infrastructure that have resulted from chronic underfunding. We must shore up our public health infrastructure in the long term to get us through this pandemic and build the community-level resilience needed to better respond and recover from the next public health crisis. This includes having dedicated resources to address the social and structural determinants of health that directly impact health inequities and poor health outcomes that vulnerable communities experience, particularly in the face of public health emergencies.

The importance of strong, predictable federal investment in the public health system is even more vital now as the economic and social impacts of the pandemic are felt nationwide, and as local and state budgets contend with lost tax revenue. The 2008 recession hit local public health department budgets hard, and they have not yet recovered. Since 2008, local health department spending per capita has been flat at best: while small local health departments have seen median per capita spending remain essentially flat in the last decade, after accounting for inflation, medium and large local health departments report 14% and 22% declines in median per capita spending, respectively. And last year, 175 million Americans were living in communities that experienced stagnant or reduced local health department funding in 2019, impacting over half of the U.S. population.⁴ We have already seen some local health departments furlough staff in the middle of the pandemic due to budget challenges related to the economic impact of COVID-19 on local and state budgets and we expect similar constraints as the pandemic continues.

This is why it is critical that we have sustained investments in the basic infrastructure of the governmental public health system. By building the core public health infrastructure of localities, states, tribal governments and territories, as well as the CDC, the nation will be better prepared for the next threat in ways that will more meaningfully address the health inequities magnified by such threats.

A baseline of public health support is essential so that all Americans can be confident that the public health system is strong no matter where they live. Investing in our governmental public health infrastructure now is also important to our overall future preparedness to effectively and efficiently address pandemic response and other threats to our nation's health.

Funding for public health programs has stagnated over the years. Large investments in public health usually chase a crisis, but disappear when the crisis leaves the headlines, despite the need to continue the work behind the scenes. CDC's budget fell by 10% from FY2010-19, after

adjusting for inflation. Public health threats, have increased, not decreased, over this time period.

The Prevention and Public Health Fund (PPHF), authorized by the Affordable Care Act, provides 12% of CDC's budget. The PPHF is a dedicated funding stream that supports immunizations, lead poisoning prevention, early and rapid detection of diseases and injury, and chronic disease grants to all states and some communities. The funding is available mainly to state and local health departments. This critical funding stream must remain viable to protect a wide array of public health programs at the local and state level.

- Congress should enact \$4.5 billion in additional annual funding for the CDC and state, local, tribal and territorial core public health infrastructure, with designated funding to adequately support the local health department level, to support essential activities such as disease surveillance, interoperable data exchange, epidemiology, laboratory capacity, all-hazards preparedness and response; policy development and support; communications; community partnership development; and organizational competencies.
- Regardless of the status of the Affordable Care Act, the PPHF must be preserved to ensure that there is sustainable funding for public health programs at CDC.
- We must break the cycle of boom-and-bust funding for governmental public health, where investments during a crisis are quickly eroded when the crisis fades. Investments in CDC should be maintained and grow over time to support its important work at the federal level and the support it provides to local and state health departments.

Workforce

Workforce is a critical piece of the public health enterprise because public health is a discipline that relies on people. Local health departments lost 20% of their jobs (37,000) nationwide after the 2008 recession, and although they have finally started to rebuild, adding 3% of that lost workforce back (6,000 jobs) between 2016 and 2019, the increases have not kept up with demand.⁷ Over the same period, the nation's population increased by 8%.⁵ As a result, local health departments have actually lost 21% of workforce capacity since 2008, with the number of full-time equivalent employees dropping from 5.2 per 10,000 people in 2008 to 4.1 per 10,000 people in 2019.⁷

The results of this disinvestment are seen in the COVID-19 response, as local health departments are stretched thin and staff are pulled away from other essential areas in order to respond to the pandemic. We need a comprehensive approach to increasing available jobs to grow local public health workforce, recruiting key professionals, and retaining them for the long term.

Over the past year, NACCHO has led over 100 stakeholders in a call to create a federal loan repayment program for public health professionals who agree to serve two years in a local, state, or tribal health department would help to fill these workforce gaps. This is particularly relevant now, as new staff and volunteers are being brought into the field for the COVID-19 response on a temporary basis. A public health loan repayment program, modelled after the successful National Health Service Corps, would provide an added incentive to retain them long term and help ensure that their experience is harnessed and available to address current as well as future public health emergencies. Beyond this, more must be done to support the local health department workforce over the course of their careers. Pay is very low, hours are long, and long-term retention can be a challenge. However, that expertise is critical to preserve in the governmental health system.

- Congress should enact and fund a public health loan repayment program, modelled on the National Health Service Corps, to aid in recruitment and retention for local and state health departments; for example, following the outline of the *Strengthening the Public Health Workforce Act* (S. 3737), introduced by Senators Smith (D-MN) and Booker (D-NJ) in the 116th Congress.
- Congress should increase investment in the Medical Reserve Corps (MRC). MRC units connect community members to health departments to help bolster preparedness and response activities with trained volunteers. While the current size of MRC units is not sufficient to fill the great need for the COVID-19 response, it is a mechanism that should be strengthened, resourced, and leveraged to facilitate volunteer support for public health activities now and in the future. Unfortunately, funding for MRC units has been reduced over time. Health departments will require additional resources to successfully recruit, leverage, train, and manage volunteers to support their activities, as well as establish new units in unserved communities.

Health in All Policies

COVID-19 has highlighted the interconnectedness of public health and all other sectors. Ultimately, many of the decisions that impact community-level health and resilience are determined by policies developed outside of the public health sector. By building local public health infrastructure and workforce capacity to establish cross-sector partnerships and better integrate health considerations into decision making across all sectors, local health departments can mitigate potential health inequities while increasing their community's ability to cope with and respond to the next threat.

- NACCHO recommends that all levels of government adopt and support a Health in All Policies (HiAP) approach to ensure that health considerations are included in policy and program development, as well as budget allocation decisions, outside of the traditional health sector and to foster more effective cross-sectoral collaborations to improve population health.

Data Modernization

The ability to access and analyze data from health care and other sectors is another long-standing issue that has been spotlighted in the COVID-19 response. Local health departments need access to data as granularly (i.e., zip code-level) and quickly as possible. When data from their communities (e.g., from healthcare facilities) are reported to systems that they do not have direct access to, such as HHS Protect, the lack of timely access to this information hinders their ability to have a complete picture of the spread of the virus and to make informed decisions on local public health measures.

There is also wide variability in local information technology systems. NACCHO has encouraging data from our 2019 [National Profile of Local Health Departments](#) showing that the majority of respondents indicated they had implemented immunization registries and electronic disease reporting systems. However, in many cases, those electronic disease reporting systems were not designed or equipped to handle the workflows or the volume of data resulting from the scale of this response for efforts like contact tracing.

Furthermore, in NACCHO's 2018 [Forces of Change](#) assessment, only 3% of local health departments surveyed reported that all of their information systems are interoperable and one-third of local health departments reported that none of their systems are interoperable. This lack of interoperability leads to substantial manual work (along with cost in local health department staff time and financial resources) to both report and exchange data, where they are required to do so. This slows down response time, with a negative impact on already high rates of illness and death from COVID-19.

NACCHO and more than 90 other institutions representing patients and consumers, public health professionals, health care providers, and health systems have been working to increase funding to bolster the seamless exchange of data for all diseases and conditions, to predict and prevent public health threats before they occur, and to allow rapid response during emergencies. A robust, interoperable public health data system is the key to responding to any public health emergency, particularly a pandemic of the magnitude of COVID-19. Between FY2020 funding and the Coronavirus Aid Relief and Economic Security (CARES) Act, Congress has provided \$550 million for the public health Data Modernization Initiative (DMI) at CDC. Congress and the administration must ensure that federal funding allocated to DMI is spent on DMI, not diverted to other needs, and that these funds are available to strengthen *all* levels of the governmental public health system, including local health departments.

- Congress and the administration should provide an additional \$450 million to allow the DMI to be fully implemented, making vast improvements on the current situation regarding data sharing between health care and public health.
- To be most effective in protecting the public, investments must enhance both the state *and local* infrastructure for exchanging data in an interoperable manner. Infrastructure includes both upgrading systems and ensuring there is a skilled workforce that can navigate their agencies through the acquisition and modifications of such systems (including addressing data governance and legal considerations) to support interoperability.
- Further policy levers, similar to those implemented by the Centers for Medicare and Medicaid Services to encourage providers to use electronic health records, are needed now to incentivize the transmission of data from health care to public health in the form of electronic case reports.
- In order to maximize the appropriate use of technologies harnessed to combat COVID-19, as well as to provide other key public health services while maintaining social distancing, local health departments must be supported to implement necessary policies, procedures, training, and infrastructure, including broadband access.

Maintain and Grow COVID-19 Innovations and Investments

While COVID-19 has posed many challenges to the existing work of local health departments to keep their communities safe, the public health system has innovated and adapted existing service provision to address limited staffing and social distancing measures that have been successful and should be built upon as we move forward. There is also a substantial opportunity to implement other technologies and innovations to enhance the programs and services local health departments deliver.

Local health departments are already improving efficiency and expanding their reach through efforts such as video directly observed therapy for tuberculosis; technology-based sexually transmitted infection and HIV partner services; self-testing; telehealth and virtual check-ins for programs like the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); and virtual engagement with communities.

Similarly, the investments being made to support COVID-19 response can and should be leveraged long-term to improve our public health system as a whole. For example, investments in strengthening data management and monitoring to facilitate COVID-19 vaccination can and should be built upon for future immunization efforts, including annual flu campaigns and helping to more quickly identify and connect with children and adults who are not receiving their recommended vaccinations. This will take a concerted effort from all levels of government to break the boom and bust cycle of public health funding and really focus on how to build upon the investments made during COVID, to learn from this crisis, and to build out a stronger

governmental public health system that we can all benefit from, and be better prepared for whatever the next crisis is.

- The federal government should provide sufficient funding and regulatory flexibility to allow COVID-19-related innovations in public health practice to continue once the pandemic is over.
- Leverage and build upon COVID-19 investments in the public health system, like enhanced data systems, to improve future public health practice and service delivery after the pandemic is over.

Conclusion

The year 2020 demonstrated the importance of the safety-net provided by local health departments, and how difficult it is to respond when starting at a deficit. It is critical that we shore up the safety net and patch any gaps or holes in current protection of the public and maintain a stronger system in all communities across the country as we move through the pandemic and beyond.

The recommendations above, if implemented in a timely fashion, would help to support the public health professionals in local health departments who have been working around the clock to respond to COVID-19, in many cases, without the necessary resources, and set our system up for success into the future. NACCHO and local health departments look forward to working with the next administration and 117th Congress on these and other public health issues to ensure that our national goals are informed by and benefit local communities. Please contact Adriane Casalotti (acasalotti@naccho.org), NACCHO Chief of Government and Public Affairs, with any questions.

¹ NACCHO Infographic, The Role of Local Health Departments in Responding to a Pandemic. Retrieved October 9, 2020 from <https://www.naccho.org/uploads/downloadable-resources/NACCHO-LHD-COVID-Infographic-June-2020.pdf>.

² Currently, CDC sends funds directly to states, territories, and only 6 large cities (<https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/funding-update.pdf>). The rest of the nation's local health departments are reliant upon their state to decide, if, how much, and when to send money to the local level. That has led to vast inconsistencies across the country in the amount of funding and the speed that federal funds are making it to local health departments to support this response. For more information see:

<https://www.reuters.com/investigates/special-report/health-coronavirus-tracing/> and <https://khn.org/news/us-public-health-system-underfunded-under-threat-faces-more-cuts-amid-covid-pandemic/>

³ NACCHO. 2019 Profile of Local Health Departments. Retrieved September 29, 2020 from <https://www.naccho.org/resources/lhd-research/national-profile-of-local-health-departments>.

⁴ NACCHO's 2019 Profile Study: Changes in Local Health Department Workforce and Finance Capacity Since 2008. Retrieved October 30, 2020 from https://www.naccho.org/uploads/downloadable-resources/2019-Profile-Workforce-and-Finance-Capacity_final-May-2020.pdf

⁵ Population Reference Bureau, The U.S. Population Is Growing at the Slowest Rate Since the 1930s, <https://www.prb.org/the-u-s-population-is-growing-at-the-slowest-rate-since-the-1930s/>