

# Key Steps and Considerations for Building a COVID-19 Contact Tracing Workforce

## A Primer for Governors

JUNE 2020

### *Executive Summary*

**A**s outlined in the National Governors Association’s [Roadmap to Recovery](#), as states gradually reopen economic and social activities, they must build a robust public health infrastructure with the capacity to rapidly detect outbreaks, test and isolate individuals who may be exposed to COVID-19, and quickly trace and quarantine all contacts of positive cases. With the increased risk of transmission that comes from individuals and businesses beginning to resume normal activities, the ability to quickly identify and isolate individuals who may have been exposed to COVID-19 will be crucial to [“Box In”](#) the spread of disease.

Contact tracing is an effective public health strategy that has been used successfully for decades to limit the spread of diseases like HIV, TB, sexually transmitted infections, measles, and Ebola. However, increasing these efforts to the degree needed to limit the spread of COVID-19 will require an unprecedented scaling of workforce, technology, and infrastructure to support those with COVID-19 and warning all possible contacts of potential exposure to break the chain of transmission. With the urgent need to rapidly hire and train the contact tracing workforce, governors, state health officials, and state workforce boards have the opportunity to collaborate and align efforts by retraining and reemploying dislocated workers as contact tracers, potentially providing on-ramps into longer-term education and career pathways in public health.

### **Considerations for Governors to Rapidly Scale the COVID-19 Contact Tracing Workforce**

In light of the need for states to support an unprecedented and rapid scaling of the public health workforce to limit the spread of the disease, the following are six key steps for building and supporting a contact tracing workforce to respond to the challenges of COVID-19.

- 1. Build on existing state and local public health contact tracing workforce and capacity*
- 2. Determine contact tracing workforce needs*
- 3. Leverage and secure state, federal, and philanthropic funding*
- 4. Address administrative barriers to timely hiring*
- 5. Develop a recruiting and hiring strategy*
- 6. Train the contact tracing workforce*

# Key Steps and Considerations for Building a COVID-19 Contact Tracing Workforce

Successfully breaking the chain of COVID-19 transmission and reopening state economies will require governors and senior health officials to develop a data-driven approach to contact tracing that builds on existing public health capabilities, leverages the buy-in and cooperation of the public as key players in the effort, supports coordination of stakeholders and resources, and effectively engages public and private partners to scale the workforce necessary to support these efforts in the near and long-term. The following are six key steps for building and supporting a contact tracing workforce to respond to the challenges of COVID-19.<sup>1</sup>

## ► 1. *Build on Existing State and Local Public Health Contact Tracing Workforce and Capacity*

### KEY TAKEAWAYS

- Assess current local health department workforce and capacity to identify and track positive cases
- Establish clear processes for communication, coordination, and feedback between public health entities and across jurisdictions
- Identify how state health agencies can best support local efforts through coordination, technology, resources, and surge capacity

Local and state health departments are the nation's frontline of defense to prevent the rapid spread of highly transmissible diseases in communities by [routinely conducting contact tracing as a core strategy](#) of disease control and outbreak investigation. To meet the pressing demands of COVID-19, state and local health departments will need to work together to coordinate and assess workforce capacities, determine the additional staffing and infrastructure needed to contact all positive cases and follow-up with their contacts, and ensure adequate isolation and quarantine support services are provided.

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<sup>1</sup> State contact tracing workforce examples have been derived from publicly-available materials, the National Academy of State Health Policy's (NASHP) ["State Approaches to Contact Tracing During the COVID-19 Pandemic,"](#) and interviews with selected states.

The relationship between state and local health agencies varies across states, with differing degrees of centralization and governance. “Home rule” statutes afford local jurisdictions the authority to address public health resource allocation and implementation via local laws and policies. Regardless of a state’s public health authority structure, coordination and buy-in of local public health with a state’s contact tracing strategy will be essential. State health agencies will need to play a vital role in assessing state-wide needs, developing a shared strategy and vision, supporting coordination and linkages across systems, centralizing and leveraging technology to enable sharing of information, and implementing as well as deploying and surging resources as necessary.

As state authorities develop contact tracing strategies, an essential step is coordinating with local health departments to determine baseline capacity, technological support needs, opportunities to minimize duplication of efforts and existing organizational structures. States may also consider local community needs, demographics, culture and language, as well as epidemiological trends to inform implementation strategies. States with less centralized state health agency authorities have employed a variety of strategies to support baseline assessments, gap analysis and coordination. Several states employed surveys of local health departments to determine current workforce capacity and engaged local health departments and other key stakeholders in planning and ongoing coordination through entities like the Massachusetts and North Carolina Community Tracing Collaboratives.

A side-by-side comparison of key components from eight state-wide contact tracing workforce strategies, including how states have approached centralization of efforts, funding, partnerships, and hiring and recruitment strategies is included in [Appendix A](#).

## Resources

- [Centers for Disease Control and Prevention \(CDC\) Health Departments: Interim Guidance on Developing a COVID-19 Case Investigation and Contact Tracing Plan](#)
- [Massachusetts Community Tracing Collaborative](#)
- [CDC Interim Contact Tracing Communications Toolkit for Health Departments](#)

## ► 2. Determine Contact Tracing Workforce Needs

### KEY TAKEAWAYS

- Determine essential contact tracing roles needed to support tracking of all positive cases, notification, and follow-up with all exposed contacts
- Project workforce need based on key factors such as disease transmission, contacts per case, and other factors
- Consider flexible workforce approaches that allow case investigation teams to flex between regions to rapidly assist with outbreak and cluster containment efforts

State contact tracing strategies should define the critical workforce roles required to meet the goals of reaching all positive cases within 24 hours, quickly following-up with contacts who may have been exposed, as well as monitoring and providing referrals to services for individuals in isolation and quarantine. While resources such as the CDC’s [Interim Guidance on Developing a COVID-19 Case Investigation and Contact Tracing Plan](#) outlines the full public health workforce of epidemiologists, clinical staff, and data managers needed to support the full contact tracing effort, resources such as [Resolve to Save Lives COVID-19 Contact Tracing Playbook](#) identify “core contact tracing staff” that states will need to scale:

Role	Responsibilities	Potential Workforce
<b>Case Investigator</b>	Interviewing cases, identifying contacts, providing instructions for isolation and referral to social or medical support*	Public health students and graduates, social workers, community health workers (CHWs), navigators/promotores
<b>Contact Tracer</b>	Notifying contacts of potential exposure, providing instructions on quarantine, referral to services,* follow up and symptom monitoring	CHWs, navigators/promotores, college students, volunteers, librarians and other service-oriented professionals
<b>Contact Tracing Team Leads</b>	Supervise teams of case investigators and contact tracers	Disease Investigation Specialists, Supervisory Public Health Nurses

\* Some states have identified separate cases manager or resource coordinator roles to support these responsibilities, particularly for complex cases

The estimated number of case investigators, contact tracers, disease investigation specialists, and other personnel needed to conduct robust contact tracing will vary by or within states and should be closely aligned with both disease transmission models and testing strategies. The National Association of City and County Health Officials [suggest](#) 30 professionals per 100,000 population will be needed (totaling roughly 98,000 workers). Some states, such as [New York](#), are using this estimate as a benchmark for contact tracing capacity in each region as part of the state's gating criteria to reopen the economy. Factors that need to be included in projections include estimated number of cases, contacts per case, interview time per case, and follow up frequency.

Two commonly-used tools available to help determine projected workforce needs include George Washington University's [Contact Tracing Workforce Estimator](#), developed in partnership with the Association of State and Territorial Health Officials (ASTHO) and the National Association of City and County Health Officials, and Resolve to Save Lives [Contact Tracing Staffing Calculator](#), which allow state health officials to continually monitor workforce needs and demands. To determine the workforce needed to support contact tracing efforts, the **Indiana** State Department of Health established a statewide call center to centralize its contact tracing efforts. On its first day, the state had roughly 200 workers staffing the call center, with an expectation of hiring 500 by May 31, with continual scale up efforts based on additional need over the long-term. The state determined this figure using what is known about its current testing capacity, together with the assumptions that on average each call will take 10 to 30 minutes and each positive case will have three close contacts for follow-up. Indiana will reassess its required call center workforce if it is unable to initiate outreach for individuals testing positive within 24 hours.

If the number of reported daily cases outpaces the ability to conduct case interviews within 24 hours, states may need to consider strategies for hiring additional staff, shifting the composition of the contact tracing workforce, providing temporary surge resources to support local public health, or considering other force-multiplying technology investments to automate or augment manual contact tracing. States and localities are using a range of technology platforms to complement their manual contact tracing workforce, ranging from app-based technologies leveraging Apple/Google's application programming interface for exposure notification to digital tools for contact tracing like [Sara Alert](#), which automates the process of monitoring individuals exposed to or infected with COVID-19. Because state and local governments are making different types of technology investments with varying degrees of automation and consumer-driven management, such decisions will likely play a role in strategic staffing or contracting plans for the contact tracing workforce.

Strategies may also need to shift workforce strategies to respond to outbreaks, local disease transmission trends, testing capacity and changes in social distancing practices, which will all have an impact on the number of positive cases and the number of contacts that case investigators will need to respond. For instance, as states progress through phases of reopening and social interaction increases, the number of contacts per case may also increase, thus

requiring more contact tracers for every positive case in order to meet increased need. Due to these shifting needs, states will need flexibility to surge workforce to adapt to changing patterns and address spikes in transmission. To address the potential need for surge capacity, the **Ohio** Department of Health has supported the contact tracing capacity of its 113 local health jurisdictions by connecting local health departments with volunteers, supporting onboarding and training, and developing a statewide pool that can be deployed to support flare ups that may exceed local capacity. Local health departments can request support via an online application at no cost to the local jurisdiction. **North Dakota** started with eight contact tracers and increased to 309 by mid-May by leveraging partnerships and existing contracts with local universities. The state blended the roles of case investigators and contact tracers to maximize the effectiveness of a smaller workforce serving a state with a relatively small per capita population.

## Resources

- [Resolve to Save Lives COVID-19 Contact Tracing Playbook](#)
- [Contact Tracing Workforce Estimator](#) – George Washington University Fitzhugh Mullan Institute for Health Workforce Equity
- [Contact Tracing Staffing Calculator](#) – Resolve to Save Lives

### ► 3. *Leverage and Secure State, Federal, and Philanthropic Funding Sources*

#### KEY TAKEAWAYS

- Leverage federal funding to support hiring additional staff and procuring technological solutions to complement manual contact tracing activities
- Establish routine communications between the workforce and public health agency leads managing the contact tracing strategy to blend and braid federal funding
- Consider philanthropic funding sources and partnerships

States have used a variety of state, federal, and philanthropic funding sources to finance contact tracing efforts. States can fund efforts through state emergency funding, as **Massachusetts** did. Many other states are leveraging Federal funding under the Coronavirus Aid, Relief, and Economic Security (CARES) Act. As part of the CARES Act, the CDC [awarded](#) \$631 million dollars to 64 jurisdictions under the existing Emerging Infectious Diseases (ELC) cooperative agreement, which can support contact tracing in addition to a variety of other testing, surveillance and containment activities. Pennsylvania and Montana both leveraged Federal ELC grants to support contact tracing. **Pennsylvania** [used](#) a portion of its \$18.7 million CDC grant to support regional contact tracing capacity, enhance technology and data approaches, partner with regional health systems, and invest in surveillance to limit outbreaks in congregate settings. **Montana** Governor Steve Bullock [established](#) a \$5 million grant program using funds from the CARES Act to local health departments, tribal public health, and urban Indian clinics to enhance existing contact tracing programs.

Also, through the CARES Act, the United States Department of Labor (DOL) [awarded emergency](#) Dislocated Worker Grants (DWGs) in the amount of \$161 million to 31 states and territories as of May 1, 2020, with additional state applications pending approval. Following the passage of the CARES Act, DOL [issued](#) guidance confirming that this DWG funding can be used by states to fund disaster-relief employment activities related to the coronavirus, including training for contact tracers. So far, several states are or have applied to use DWG funding toward training up a contact tracing workforce, including **Colorado, Illinois, Oregon, Massachusetts, Pennsylvania, and Virginia**.

Lastly, a handful of states have leveraged philanthropic funding to scale contact tracing efforts. In April, **New York** [announced](#) a partnership with the Johns Hopkins Bloomberg School of Public Health, Resolve to Save Lives, and Bloomberg Philanthropies to scale New York's contact tracing

efforts and develop replicable models that could be leveraged by other states. **California** [leveraged](#) \$5.1 million in funding and in-kind resources from partners like Ending Pandemics, the California Health Care Foundation, Twitter, and Facebook to support a public awareness campaign to educate Californians, particularly in underserved communities, about the importance of contact tracing.

## Resources

- [HHS Delivers Funding to Expand Testing Capacity for States, Territories, Tribes](#)

## ► 4. *Address Administrative Barriers to Timely Recruitment and Hiring*

### KEY TAKEAWAYS

- Determine whether an existing emergency declaration allows for state and local health departments to expedite hiring
- Identify options for fast-tracking hiring, contracting, or hiring on a temporary basis
- Assess costs and benefits of direct hiring vs. contracting with outside vendors with experience in workforce recruitment, hiring, and management

Traditional state civil service or public health hiring procedures may present a substantial barrier to rapidly scaling the contact tracing workforce. Under governors' emergency authorities, state and local health departments may have the option to temporarily modify normal hiring or contracting procedures to more quickly meet critical needs. For states that do not have or do not wish to exercise these authorities, states can determine mechanisms within existing authorities to augment internal hiring capacity or expedite hiring via external contracts and vendors, utilizing strategies such as independent agreements and compressed competitive bids. States such as **North Carolina** have [fast-tracked hiring](#) through state contracts, while **Ohio** worked with the Department of Hiring Services to support the Department of Health's screening and hiring capacity. States may also have the option for more flexibility in certain labor categories, such as temporary workers or contractors, with many states employing short-term or renewable contracts.

Whether hiring directly or working through a vendor, publicly listing available positions allows individuals to apply and reaches a base of available workers from local communities. To hire its contact tracing workforce, **Oregon** focused on [recruiting](#) individuals with cultural and linguistic competence for the populations they serve, and will deploy teams of public health workers to deploy within communities. For states with limitations on direct hiring or with limited capacity to conduct a hiring process on a sufficient scale, hiring a vendor or partnering with non-profits with experience in serving local communities may be an optimal choice.

### Resources

- [CDC Staffing Guidance for State, Tribal, Local and Territorial Health Departments](#)

## ► 5. *Develop a Recruiting and Hiring Strategy*

### KEY TAKEAWAYS

- Consider strategies to leverage contact tracing volunteers while building a skilled contact tracing workforce
- Recruit contact tracers with critical contact tracing skills and competencies and engage community health workers, local community health systems, Federally Qualified Health Centers, and non-profits to support care coordination and outreach to medically-underserved communities
- Engage with experienced public health non-profits with a demonstrated track record for recruiting and training personnel to conduct public health activities
- Partner with the state labor and workforce agency to identify individuals looking for long-term employment and opportunities to build skills in public health careers

States will need to balance the need to deploy contact tracers in the short-term with building out a workforce that can sustain COVID-19 contact tracing in the months or years ahead. This will require a two-pronged approach that trains and hires new contact tracers immediately and leverages the opportunity to feed into longer-term workforce development and employment priorities, such as using contact tracing as an on-ramp into a healthcare or public health career pathway. States have used a variety of strategies to mobilize the volunteer workforce, identify workers with critical skills and competencies, leverage public-private partnerships, and create pathways for careers in public health.

### **Mobilizing volunteers**

To support immediate contact tracing needs, many states took steps to recruit volunteers, reassign furloughed government workers, or mobilize the National Guard to serve as contact tracers. More than 40,000 National Guard members have been deployed for COVID-19 relief work across the country, with states such as [Iowa](#), [North Dakota](#), [Rhode Island](#), [Washington](#) and [West Virginia](#) activating the National Guard to conduct contact tracing. Several states have partnered with universities or medical schools to deploy volunteers with backgrounds in public health, social work, and medicine. Other states, such as [Alabama](#), have reassigned staff from within its health department to increase its capacity. [Arizona](#) has augmented its contact tracing capacity by partnering with universities to deploy students, faculty and staff from concentrations in medicine, public health, nursing, and social work and partnering with the CDC Foundation to support recruitment.

While volunteers and reassigned state employees have played an important role in supporting states' ability to quickly surge resources, such deployments are often time-limited and may pose challenges for management and accountability. Given these challenges, states will need to balance volunteers and temporary surge workforce with efforts to build and sustain a paid, skilled contact tracing workforce moving forward. Many states have developed a [hybrid approach](#)—**California** has leveraged volunteers from California Health Corps, California Conservation Corps, CalVolunteers, and AmericaCorps staff, while planning to hire and train up to 20,000 people to help support local health departments.

## Identifying workers with critical skills and competencies

Contract tracers [require](#) a distinct set of skills and competencies, including an understanding of privacy and confidentiality rules and regulations (both state and federal), medical terminology, cultural sensitivity, empathy, and crisis counseling. The CDC and other experts also recommend that case investigators and contact tracers demonstrate cultural competency and linkages to their local communities. Community Health Workers, or frontline public health workers with deep community expertise that serve as a link between communities and health and social services, may be well-positioned to serve in contact tracing or care coordination roles. Many states are partnering with local community health systems, Federally Qualified Health Centers, and non-profits serving medically-underserved communities to help build in-roads to hard-to-reach communities that would otherwise not be possible if relying on technology and remote workers alone.

Care managers or care resource coordinators will need strong local connections with community-based organizations to connect at-risk populations in need of self-isolation or quarantine services to existing resources. For some (e.g., homeless and transient populations), self-isolation and self-quarantine may be impossible and poses a unique challenge to breaking the chain of transmission. Without additional assistance, individuals may not be able to adhere to isolation and quarantine recommendations, undermining the process and risking additional community transmission. When developing protocols, states may consider developing a social support services package and begin identifying community-based organizations that can provide such services at no cost to the state or individual. **Delaware** is [partnering](#) with Healthy Communities Delaware to provide necessary support services, such as grocery delivery or alternative housing, to enable individuals in at-risk communities to safely self-isolate.

## Leveraging public-private partnerships

Numerous states have opted to expand hiring under public-private partnerships with entities with demonstrated competencies and experience in workforce hiring, recruitment, and workforce management. Such efforts can help improve efficiencies and bolster existing state and local public health capacity. As an example of this approach, **Maryland** contracted with NORC-Chicago to exponentially expand its contact tracing capabilities to track an estimated 1,000 new cases per day. Similarly, **Indiana** partnered with Maximus to centralize contact tracing and investigations of positive COVID-19 cases.

## Creating pathways for careers in public health

Recruiting dislocated or unemployed workers can also be a key opportunity to connect individuals to a long-term career in public health. State and local workforce development boards (WDBs) can assist health departments in recruiting, identifying, and training new hires into a contact tracing workforce. WDBs facilitate partnerships between local businesses and coordinate with the U.S. Department of Labor and American Job Centers in their states to provide services to jobseekers and employers. In the wake of mass unemployment, WDBs can match eligible job seekers with contact tracing job opportunities and connect them with required training. For example, state and workforce development boards are working with state and local departments of health to identify opportunities to connect dislocated workers to temporary contact tracing positions through DWG funding. In addition, **Virginia** is considering how contact tracing roles can act as an on-ramp to public health careers, what those pathways will look like, and approaches to integrate undergraduate and graduate students into the contact tracing effort.

## Resources

- [United States of Care State of COVID-19 Contact Tracing in the U.S.](#)
- [National Academy for State Health Policy State Approaches to Contact Tracing During the COVID-19 Pandemic](#)
- [CDC Self-Isolation and Self-Quarantine Home Assessment Checklist for COVID-19](#)

## ► 6. Train the Contact Tracing Workforce

### KEY TAKEAWAYS

- Consider leveraging publicly available trainings by customizing existing content and adapting new content related to jurisdiction systems, processes, forms and other factors
- Partner with local universities, community colleges, Area Health Education Centers (AHECs), and nonprofit organizations to support tailored training for contact tracers

Training newly hired contact tracers is a key component of building the contact tracing workforce. Training for new contact tracers often includes introductions to public health, COVID-19, and contact tracing principles. Additional skill development may include interview skills, crisis counseling, patient confidentiality, as well as any training on technical tools and processes required to support jurisdictional contact tracing efforts. Several contact tracing programs have been developed free-of charge for states to rapidly train individuals on a rolling basis. [Making Contact: A Training for COVID-19 Contact Tracers](#), developed by ASHTO and the National Coalition of STD Directors (NCSO), is an introductory online course that focuses on building knowledge for remote contact tracing to earn a certificate of completion for job and volunteer opportunities. **New York** is training its workforce using the John's Hopkins University-developed course [COVID-19 Contact Tracing](#) that is offered in multiple languages, entirely online, and takes approximately five hours to complete. A number of states have customized or adapted these available trainings to include jurisdiction-level specifics on local health systems and resources, processes, forms, and other information to support local contact tracing efforts.

States have also partnered local universities, community colleges, Area Health Education Centers (AHECs), and nonprofit organizations to support tailored training for contact tracers. California Governor Gavin Newsom's [California Connected](#) is a collaboration between the California Department of Health, local health departments, the University of California San Francisco and University of California Los Angeles to support training for a culturally competent and skilled workforce. **Hawaii** has [partnered](#) with the University of Hawaii to increase training programs for community health workers, as well as providing training for an additional 300 contact tracers. The university will develop separate training tracks for undergraduates with health sciences degrees and an accelerated track for clinical health professionals.

### Resources

- [ASTHO Making Contact: A Training for COVID-19 Contact Tracers](#)
- [CDC COVID-19 Contact Tracing Training: Guidance, Resources, and Sample Training Plan](#)
- [JHU Bloomberg School of Public Health COVID-19 Contact Tracing Course](#)

## Conclusion

While contact tracing is a well-established public health tool, states must deploy contact tracing strategies on an unprecedented scale and expedited timeline to meet the heightened demands of COVID-19. Although best practices and lessons learned are only preliminary for COVID-19, a state's ability to rapidly evaluate and recalibrate strategies will be essential to responding to this novel virus. The CDC [recommends](#) states consider setting targets for select process and outcome metrics (e.g., follow-up rate, adherence to isolation and quarantine recommendations, and average contacts per case) to guide adjustments to policies and protocols.

States will need to engage with local health departments and partners on an ongoing basis to overcome barriers and leverage existing resources when available. For example, early lessons learned from innovator states have included the importance of a broad contact tracing communications plan to encourage public participation, and the need to establish mutual trust and cooperation with local boards of health and other partners. While the state may play a central role in media campaigns and strategic outreach, leveraging local leaders, community providers, and community health workers are key strategies to conduct local outreach in a culturally competent manner that reflects the demographics of a given jurisdiction.

While scaling the public health capacity and workforce to meet the unprecedented challenges of COVID-19 poses significant obstacles, states are rising to the challenge of building a workforce that will suit the unique needs and conditions of their state. At a time of significant economic distress, building this workforce may also offer a unique opportunity to provide an on-ramp to careers in the field of public health. Intelligently investing in a flexible and scalable workforce can help states address the constantly evolving landscape of the COVID-19 pandemic.

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## APPENDIX A

*Examples of State Contact Tracing Workforce Strategies*

Below is a summary of the contact tracing workforce approaches from a select number of states. Information in this chart was derived from publicly available materials, interviews with selected states, and the National Academy for State Health Policy's [State Approaches to Contact Tracing during the COVID-19 Pandemic](#).

OVERALL STRATEGY AND GOALS	PUBLIC HEALTH INFRASTRUCTURE AND BASELINE CAPACITY	FUNDING SOURCES	PARTNERSHIPS	WORKFORCE RECRUITMENT STRATEGIES	TRAINING
<p><b>Indiana</b></p> <p>Indiana centralized contact tracing efforts among the 93 health jurisdictions. Local departments of health are responsible for connecting individuals with supportive services to maintain self-isolation or quarantine. Initial plans call for hiring at least 500 employees to be trained in contact tracing and investigations.</p>	<p>Building on a workforce of 200 FTEs, the state plans to hire 500 call center staff by the end of the first month. This number will increase and continue to scale up as needed, depending on the number of cases. Inability to contact all new cases within 24 hours is a signal to increase the workforce.</p>	<p>The state is contracting with Maximus to provide contact tracing for \$43 million per year. The state also pays licensing fees for the CRM platform for all call center users, Indiana State Department of Health users, and Local Department of Health users.</p>	<p>Maximus is providing hiring support, with the intent to train and employ healthcare workforce reserve, Indiana college and university students, and other in-state residents interested in working as contact tracers.</p>	<p>Maximus is initially hiring roughly 500 individuals to staff the state's call center. The workforce candidates to date have been provided to Maximus by the state, and include healthcare professionals, college graduates, graduate students, and undergraduate students.</p>	<p>Indiana's Department of Health is responsible for providing all training materials and all contact tracer and case investigator call center scripts. Maximus utilizes a robust call center training tool to assist with facilitating consistent interview processes for the state hosted customer relationship management platform.</p>

OVERALL STRATEGY AND GOALS	PUBLIC HEALTH INFRASTRUCTURE AND BASELINE CAPACITY	FUNDING SOURCES	PARTNERSHIPS	WORKFORCE RECRUITMENT STRATEGIES	TRAINING
<p><b>Massachusetts</b> The <a href="#">Community Tracing Collaborative</a> (CTC) includes existing contact tracing efforts managed by the Massachusetts Department of Health and executed by local boards of health. Partners in Health (PIH) manages a virtual support center that will include over 1,000 contact tracers and collaborate with local health departments for management of complex cases.</p>	<p>The workforce is a scalable, tech-enabled contact tracing corps that builds on traditional local boards of health and a strong volunteer public health community. Each contact tracing “pod” comprises one supervisor, 3 case investigators, 15 contact tracers, and one care resource coordinator.</p>	<p>Supported through Governor Baker’s \$1 billion supplemental budget, which allocated \$44 million for staffing.</p>	<p>General Contractor: Massachusetts Health Connector</p> <p>Workforce: Partners in Health</p> <p>Digital Automation: Buoy</p> <p>Technology: Accenture</p>	<p>Contact tracers, case investigators, and care resource coordinators are all hired by PIH. Contact tracers and case investigators should be highly communicative, empathetic, knowledgeable about the community and highly motivated. Care resource coordinators need a social work/nursing or equivalent degree.</p>	<p>Case investigators are trained by the Department of Public Health and PIH using standard protocols. The training takes three days to complete and is largely web-based. Care resource coordinators are trained by PIH and local boards of public health about community resources.</p>
<p><b>New York</b> New York’s <a href="#">contact tracing program</a> will operate through the next flu season and will be implemented in coordination with tristate neighbors New Jersey and Connecticut. The state is taking both a centralized and decentralized approach, with local departments of health conducting contact tracing with support from the New York State Department of Health.</p>	<p>The program will include a baseline of 30 contact tracers for every 100,000 individuals and will utilize additional tracers based on the projected number of cases in each region. The program is expected to have 6,400 to 17,000 tracers statewide depending on the projected number of cases.</p>	<p>Bloomberg Philanthropies committed \$10.5 million to help build and execute the contact tracing program.</p>	<p>Bloomberg Philanthropies and Resolve to Save Lives are providing operational and technical advising to New York State Health Department staff.</p>	<p>Individuals can apply directly online through the New York Department of Health’s <a href="#">website</a>.</p>	<p>Johns Hopkins is providing a training via a four-to-six-hour online training course that local health departments can utilize.</p>

OVERALL STRATEGY AND GOALS	PUBLIC HEALTH INFRASTRUCTURE AND BASELINE CAPACITY	FUNDING SOURCES	PARTNERSHIPS	WORKFORCE RECRUITMENT STRATEGIES	TRAINING
<p><b>North Carolina</b></p> <p>Through the <a href="#">Carolina Community Tracing Collaborative</a> (CCTC), 250 local staff will be hired and trained to support contact tracing efforts (with the possibility of more).</p> <p>The state is taking both a centralized and decentralized approach, building on the efforts of local health departments.</p>	<p>Through existing Local Health Department staffing (&gt;1,300) in addition to the Carolina Community Tracing Collaborative (250), local staff will be hired and trained to support contact tracing efforts (with the possibility of more).</p>	<p>Primarily funded through the CDC’s Epidemiology and Laboratory Capacity (ELC) Cooperative Agreement flowing to the Community Care of North Carolina through a contract with the state health department.</p>	<p>Local Health Departments and Community Care of North Carolina (CCNC) and the North Carolina Area Health Education Centers (NC AHEC) support recruitment, hiring, and management of contact tracers. Partners in Health providing technical assistance.</p>	<p>CCNC and ten regional Area Health Education Centers are supporting recruitment and hiring of linguistically and culturally competent individuals from the community. Applicants can apply through the CCTC website, with special consideration for those who are unemployed, have community engagement experience, and live in the communities where they work.</p>	<p>CCNC supports a <a href="#">onboarding training curriculum</a> for local health departments.</p>
<p><b>North Dakota</b></p> <p>Leverage technology and manual contact tracing efforts to reach all North Dakota residents who have testing positive or come into close contact with a COVID-19 infected individual.</p> <p>The state is taking both a centralized and decentralized approach, with the North Dakota Department of Health supporting local health departments.</p>	<p>North Dakota increased their contact tracing workforce from 8 to 309. The state’s Disease Control Division was all trained to conduct contact tracing and case investigation.</p> <p>Used <a href="#">ASTHO’s workforce estimator</a> to model how many tracers would be needed.</p>	<p>Contracted with state schools of public health using existing federal funds approved for COVID-19. The state is also leveraging its CDC COOP immunization contract. Additionally, the state entered formal contracts with local departments of health using funding provided through the ELC grant to support temporary hiring.</p>	<p>Partnered with ProudCrowd to launch Care19 (rebranded as Care19 Diary), a voluntary app to assist with contact tracing.</p> <p>Microsoft Dynamics – developing a case management solution.</p> <p>Apple and Google – launched Care19 exposure, the second contact tracing app developed for the state.</p>	<p>North Dakota received approval from its Emergency Commission to expend additional federal dollars to increase the contact tracing workforce by hiring temporary, full-time workers.</p> <p>North Dakota’s Workforce Coordination Center <a href="#">posted</a> available COVID-19 response job activities with hourly rates and allows individuals to self-apply online. The state is requiring a bachelor’s degree in community or public health, epidemiology, biology, nursing or a related field, and three years of related professional</p>	<p>The state trained the entire Disease Control Division to conduct contact training and case investigation. Trained all 29 local public health units to assist in contact tracing.</p> <p>Contact tracers undergo a six-hour training, including software programming, signing a nondisclosure agreement and</p>

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				level work experience for the COVID Case Investigation and Contact Tracing Regional Manager role.	agreeing to adhere to federal health privacy laws.
<p><b>Ohio</b></p> <p>The state plans to assist local health jurisdictions increase the number of community tracers from a few hundred to nearly 2,000.</p> <p>The state is taking a decentralized approach, with local health departments leading with support from the Ohio Department of Health.</p>	<p>Conducted a survey of all 113 local health jurisdictions to determine the baseline workforce. Using a rate of 15/100,000 the state estimated 1,750 additional workers would be needed.</p>	<p>ELC grant and federal stimulus funds.</p> <p>The state’s Controlling Board – a mechanism for handling necessary adjustments to the state’s budget - approved use of \$12.4 million for local health departments to perform contact tracing.</p>	<p>Partners in Health is providing consultation and ad hoc technical assistance.</p>	<p>The state provided funding to all local health jurisdictions to support staffing.</p> <p>The state is hiring a pool of 100 contact tracers representative of the state to backfill for local health jurisdictions when they need it.</p> <p>The state is hiring the 100 workers as temporary workers for special projects to allow for fluctuating outbreak needs.</p>	<p>The state developed its own contact tracing training program. Over the course of a week, new hires will receive state onboarding, state health department onboarding, and training for contact tracing.</p>
<p><b>Pennsylvania</b></p> <p>The state is taking both a centralized and decentralized approach, with a majority of the contact tracing conducted by the Pennsylvania Department of Health (PA DOH). Goals of the contact tracing program include:</p> <ol style="list-style-type: none"> <li>1. Scale public health workforce infrastructure</li> <li>2. Invest in technology</li> </ol>	<p>Strategy builds on current 150 FTEs and ten county and municipal health departments and tailoring strategies to needs of regional districts.</p> <p>The contact tracing infrastructure expands on currently existing efforts by county</p>	<p>Supported through a \$18.7 million grant from the CDC with a portion earmarked.</p> <p>The state will use a portion of its \$6.99 million Disaster Recovery National Dislocated Worker Grant to connect dislocated workers impacted by COVID-</p>	<p>To ensure consistency and flexibility and efficient distribution of resources, the contact tracing program will be structured in alignment with the PA DOH regional health districts. Each region will develop coalitions that will be co-chaired by a public health leader and a community</p>	<p>Health districts will develop strategies and supplement workforce based on local needs and partnerships with entities like the Lehigh Valley Health Network, Penn State College of Medicine, PennServ/AmeriCorps and ServPA.</p>	

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<p>3. Partner with healthcare partners</p> <p>4. Focus on vulnerable communities</p>	<p>and municipal health departments and community health nurses.</p>	<p>19 to contact tracing employment opportunities.</p>	<p>mobilization leader and will include all partners in the area helping with testing and contact tracing efforts. The PA DOH will serve as a guide for regions as they create plans, and will provide technical assistance, staffing resources, and other support as necessary throughout the program.</p>		
<p><b>Virginia</b></p> <p>The state is leading the effort to rapidly hire a contact tracing workforce that would be assigned to work in local health departments.</p> <p>The state centralized contact tracing at the state level.</p>	<p>The Virginia Department of Health (VA DOH) is expanding the staff of case investigators and contact tracers from a few hundred to nearly 2,000.</p>	<p>The state is committing \$58 million to support COVID-19 contact tracing using federal dollars received through the CARES Act.</p>	<p>The VA DOH and the Medical Reserve Corps have been leading the contract tracing work.</p>	<p>Recruiting people with healthcare backgrounds to fill these roles but noting that the positions are not limited to individuals with health backgrounds. Interested in recruiting individuals who speak several languages and dislocated workers. Contract tracing is an on-ramp to other careers in the public health sector. The state is initially drawing on volunteers from the Medical Reserve Corps and reassigned existing staff to surge the contact tracing workforce during Phase 1 of reopening.</p>	<p>The VA DOH is providing training.</p>