

# Statewide Testing Plan for COVID-19 in the State of South Carolina



*Developed by*



## Executive Summary

Pursuant to a Continuing Budget Resolution signed into law May 18, 2020, the South Carolina General Assembly and Governor Henry McMaster have called upon the Department of Health and Environmental Control (DHEC), the Medical University of South Carolina (MUSC), and the South Carolina Hospital Association (SCHA) to develop and implement a statewide testing plan for the novel coronavirus designated as COVID-19. Since the virus was first identified in the Palmetto State, DHEC, MUSC and other organizations have screened and tested thousands of individuals, and the pace of testing continues to increase.

**Objectives of the Statewide Testing Plan.** Testing is critical to prevent spread of the virus by informing treatment protocols, addressing hotspots, and tracking progression of the virus. In order to transition safely back to our normal lifestyles, South Carolina needs to increase per capita testing to allow for more precise public health interventions. The federal government has committed to deliver testing supplies, provided DHEC and its partners test at least two percent (2%) of the state's population each month. That equates to 110,000 tests performed per month, and this statewide plan aims to meet or exceed that target.

**Central Coordination, Decentralized Implementation.** In order to better align statewide testing efforts, DHEC, MUSC and SCHA have established a coordination team to standardize specimen collection protocols, develop public education materials, coordinate test results, and establish a system to ensure follow-up care for individuals who do not have primary care homes. This coordination team will also monitor emerging hotspots and marshal resources to address them expeditiously.

DHEC, MUSC and SCHA will oversee the plan through the coordination team, but implementation will be decentralized in DHEC's four regions (Upstate, Midlands, Pee Dee and Lowcountry). The Department's four Regional Health Directors will serve as conveners for their regions of the state, and MUSC and SCHA will each assign regional contacts to work in partnership with those Regional Health Directors. All partners (hospitals, Rural Health Clinics, Community Health Centers, etc.) will work through the teams led by DHEC's Regional Health Directors to establish testing sites, schedules, supplies, and follow-up.

**What Type of Test Will Be Used?** Generally speaking, two approaches to testing are currently available: *diagnostic testing* and *antibody testing*. Diagnostic testing identifies the presence of COVID-19 and is used primarily for people who have symptoms commonly associated with the virus. Antibody testing helps determine if an individual has been exposed to COVID-19 in the past and might have developed immunity to the virus. Antibody testing is not reliable as a test for active disease, so the initial statewide testing plan will rely on diagnostic testing to identify active disease in the state. However, effective antibody tests may help determine the prevalence of previous COVID exposure in South Carolina so this plan will incorporate antibody testing as appropriate.

**Determining Whom and Where to Test.** The authorizing legislation specifically calls for testing in rural communities and communities with a high prevalence of COVID-19 and/or with demographic characteristics consistent with risk factors for COVID-19 including, but not limited to, communities with higher proportions of seniors, African Americans, or individuals with chronic lung disease, asthma, serious heart conditions, severe obesity, compromised immune systems, diabetes, liver disease, or who are on dialysis. In order to achieve these important testing goals, we have established the following principles to guide our work.

- **Congregate Living Facilities.** COVID-19 outbreaks at long term care and corrections facilities indicate ongoing transmission of virus within a community and require an intense focus on infection prevention practices. Nursing home populations are of particular concern because residents with chronic medical conditions are at highest risk for complications or death from infection. ***To help protect this vulnerable population, DHEC has already begun universal testing of all 40,000 South Carolina nursing home residents and staff.*** This initial focus on nursing homes will be complete by the end of May, and the effort to address congregate living facilities will continue with prisons, jails, assisted living facilities and group homes.
- **Under-Resourced Minority and Rural Communities.** African American, Hispanic, and Native American populations have been disproportionately impacted by COVID-19, with higher per capita rates of serious illness and death than in white populations. The Centers for Disease Control and Prevention (CDC) identified counties that could benefit from testing using indicators such as percentage of the population living in poverty, community testing rates, and rurality. DHEC regional staff prioritized additional communities for testing based on limited access to healthcare, elevated rates of chronic disease, and poor health outcomes. Testing will be increased in these communities using mobile specimen collection, community paramedicine testing, and fixed testing sites.
- **Urban Areas of the State.** Urban areas are at risk for ongoing transmission of COVID-19 due to their size, population density, and access to many social venues where people congregate. Urban centers also are centers of tourism and commerce, welcoming domestic and international visitors. DHEC is already working with partners to host pop-up testing events at multiple locations each month in Charleston, Columbia, and the Greenville/Spartanburg areas.

Other cities of concern for introduction and rapid transmission of virus are those that attract large numbers of tourists, such as Myrtle Beach. Cities bordering states that have not used a phased approach to reopening are also at risk for COVID-19 transmission, such as Aiken and North Augusta. Open testing events in these communities will help to identify asymptomatic infections and prevent ongoing spread of disease.

- **Symptomatic versus Asymptomatic Individuals.** Researchers estimate that as many as 50% of all persons infected with COVID-19 do not have any symptoms of illness. Nevertheless, because testing supplies were limited in the early months of the COVID-19 response the only individuals prioritized for testing were those with symptoms of the virus. Now that testing supplies are more plentiful, we want to make COVID-19 testing available to any person, whether or not they have symptoms.
- **Unexpected Deaths Investigated by a Coroner.** Reports of individuals with unknown COVID-19 infection status who died alone at home raise the concern for unrecognized and unreported deaths due to the virus. In order to fully understand the impact of this virus on the number of people dying in our state, DHEC has updated its guidance for coroners and medical examiners to encourage testing of individuals who died unexpectedly. DHEC will distribute test kits to coroners throughout the state to use in post-mortem testing of patients who die unexpectedly regardless of symptoms or with symptoms of COVID-19 without a positive test. Positive test results will be followed by contact tracing with family of the deceased.
- **Fixed Locations, Mobile Specimen Collection, and Pop-up Sites.** The best approach to testing sites will likely be a mix of fixed locations, mobile specimen collection, using pop-up sites, and rapid response teams to respond quickly to emerging hotspots. MUSC will work with DHEC Regional Health Directors to offer all types of specimen collection sites for deployment across the state. In addition, SCHA will assist MUSC and DHEC to recruit regional hospital partners to assist with testing.

**Critical Sectors of the South Carolina Economy.** As statewide testing accelerates, there are critical sectors of the state’s economy that need to be advised and supported so they can regain their pre-COVID strength. These include K-12 education, colleges and universities, manufacturing, tourism, and many other businesses that will likely have questions about testing their employees and customers. The CDC published [guidance](#) for state testing prioritizes public health testing of the healthcare workforce, individuals with symptoms, communities at high risk for serious complications or death from COVID-19 or surveillance testing in communities to understand disease transmission. CDC does not currently include a public health role for routine testing in academic or business settings. An [Interim Guidance for Businesses and Employers](#) document is also available and includes current best practices for returning to the workplace. The U.S. Chamber of Commerce addresses the issue of workforce testing in its document, [Implementing a National Return to Work Plan](#). In that document, they state:

“To the extent that return to work is based on the testing of employees either for the COVID-19 virus or antibodies to COVID-19, there will have to be sufficient testing capacity, as well as clear resolution on who is responsible for administering the tests, paying for the tests, and checking test results. Most employers are not well-positioned

to administer these medical tests, so there must be widely accessible third-party providers. There also will need to be standardization as to when employees need to be tested, the frequency of tests (especially important if testing for infection, rather than antibodies), and the documentation employees will provide to employers. Frequent testing could be especially costly, and it should be determined who will bear those costs.”

**Appropriate Follow-up.** One of the essential elements of this statewide testing plan is our commitment to provide timely follow-up care to all individuals who need it. First and foremost, persons who submit specimens for testing need to know how to get their test results. Individuals who test positive for COVID-19 need to know how and where to seek treatment for the virus, and they also need to know who will pay for their medical care. Individuals who do not currently have a primary care home will be offered a referral regardless of whether they test positive or negative for the virus. This is an important opportunity to help underserved South Carolinians establish a medical home and thereby improve their health.

**Case Management and Prevention of Ongoing Transmission (Contact Tracing).** In addition to a referral for follow-up medical care, guidance for staying well and preventing transmission to family and friends will be provided by DHEC for all persons who test positive for COVID-19.

Contact tracing is a standard disease control measure that has long been used by public health professionals to help people get the medical care they need and prevent further spread of disease within a community. The mission of contact tracing is to ensure that people who are unknowingly exposed to a contagious individual are provided education regarding the next steps and how to seek testing if indicated. Specifically, it is the process of talking to those who have tested positive for the virus, asking them about anyone who they have had close contact with and connecting with those close contacts to provide guidance to help them recognize the symptoms of COVID-19 so they can seek medical care, if needed, while educating them about the importance of quarantine to limit the spread of the disease to their family and friends. This extensive contact tracing process helps interrupt transmission of the disease within a community.

Contact tracing isn't new to South Carolina or to DHEC. During normal operations DHEC has approximately 20 contact tracers who perform this methodology to help limit the spread of diseases like HIV, tuberculosis, and hepatitis by educating people about the disease and how to prevent its spread and connecting them to the medical care they need. As part of the COVID-19 response, DHEC has surged its contact tracers from 20 to 400 and has identified more than 1,000 volunteer and contract staff ready to receive training. DHEC has been performing contact tracing throughout the pandemic response and will continue to perform contact tracing for each individual diagnosed with COVID-19 and all their close contacts.

It is critical that public health staff notify the exposed individuals of their potential exposure as rapidly and sensitively as possible. To protect patient privacy, contacts are only informed that they may have been exposed to a patient with the virus. DHEC staff do not share the identity of the patient who may have exposed the contact.

**Prioritization of Testing Supplies.** One of the greatest challenges in the early phases of our state’s response to COVID-19 was the shortage of testing supplies. Specimen collection kits, testing instruments, and laboratory supplies are all essential to perform COVID-19 testing, and each of these has been in short supply at one time or another. The CDC and DHEC wisely established a testing priority list to ensure hospital inpatients, symptomatic healthcare workers, and symptomatic first responders would have access to diagnostic testing as our state’s highest priorities. Other categories follow in priority order, and only recently has South Carolina enjoyed sufficient testing capacity to begin widespread testing of asymptomatic individuals. This statewide plan seeks to test as many South Carolinians as possible, but we will revert to the CDC/DHEC prioritization system in the event testing supplies once again become scarce.

**Community Outreach.** Communication is a critical but challenging component to reaching rural and underserved communities, given disparities in access to a reliable broadband connection and transportation. MUSC, DHEC and SCHA will work with other partners to identify gaps in existing outreach and deliver information and care directly to rural residents of the state. Notable examples include collaboration with Clemson University’s “Healthy Me–Healthy SC” partnership, the Hospital Association, Community Health Centers, the South Carolina Telehealth Alliance, and the South Carolina Office of Rural Health.

**Getting Involved.** Organizations that want to participate as partners in this testing plan are invited to do so by contacting one of the testing coordinators listed below.

DHEC Testing Coordinator:

MUSC Testing Coordinator:

SCHA Testing Coordinator:

### **Authorizing Legislation**

The Medical University of South Carolina, in consultation with the Department of Health and Environmental Control and the South Carolina Hospital Association, shall develop and deploy a statewide COVID-19 testing plan within ten days of the effective date of this act. The plan must emphasize testing in rural communities and communities with a high prevalence of COVID-19 and/or with demographic characteristics consistent with risk factors for COVID-19 including, but not limited to, communities with higher proportions of seniors, African Americans, or individuals with chronic lung disease, asthma, serious heart conditions, severe obesity, compromised immune systems, diabetes, liver disease, or who are on dialysis.

*Section 3(C)(1) of Act No. 135, Ratified May 12, 2020, and Signed by the Governor May 18, 2020.*