Background

The purpose of this document is to explain the County’s strategy for testing to detect current COVID-19 infection. Note, it does not discuss the use of serology (antibody) tests as these blood tests should not be used alone to diagnose current infection.

COVID-19 Prevention

Testing for current infection is used to help healthcare providers diagnose COVID-19 in people who are sick. It is also used as a public health tool to identify and manage cases and outbreaks to help prevent further spread. Testing has a limited role in preventing infections.

The mainstays of COVID-19 prevention include:
- Physical (or social) distancing (staying at least 6 feet from people who are not in the same household)
- Wearing face coverings to protect others from infection
- Frequent and thorough hand washing
- Environmental cleaning and frequent disinfection of high-touch surfaces
- Checking employees, staff, patients, and visitors for symptoms before they enter facilities
- Staying home when sick*
- Immediately isolating people who are sick*
- Quarantining people who have been in close contact with people who are sick or diagnosed with COVID-19*

*These measures require non-punitive leave policies that allow employees to stay home when they are ill or exposed to someone who is ill, or if they need to care for sick household members

Expanded Testing Recommendations

The testing landscape is expanding and changing rapidly. There are now many ways for people to get tested for COVID-19 including in hospitals, doctors offices, drive through testing sites, and even at home. All healthcare providers and healthcare systems are expected to be able to provide their patients with access to diagnostic testing for COVID-19 (see Health Officer Order: Access to Diagnostic Testing Through Healthcare Facilities). The number and types of tests continue to increase too. Both antigen tests and molecular (e.g. PCR) tests are used to diagnose current COVID-19 infection. Antigen tests have the advantage of being cheaper, faster, and easier

Recent Updates:
10-6-20:
- Updated the priorities for COVID-19 diagnostic (viral) testing to align with California Department of Public Health Test Prioritization.
- All healthcare providers and healthcare systems are now expected to be able to provide their patients with access to diagnostic testing for COVID-19 as per the Health Officer Order-Access to Diagnostic Testing Through Healthcare Facilities.
to run but come with the drawback of missing more infections than PCR. Most COVID-19 tests are used on nasal swabs or saliva samples. Some tests can be run in the clinician’s office (point of care or POC tests). In addition, for some of the tests, specimens can be collected by the patient at home. This reduces the demand for personal protective equipment (PPE) and the risk of staff and others being exposed to infection. See the DPH COVID-19 Testing webpage for more information on the different test types, when they are recommended, and what results mean.

Laboratory PCR testing capacity and the turnaround time for results is improving locally and statewide. As a result of this, the California Department of Public Health (CDPH) has announced that that all four tiers in their Testing Prioritization Guidance will now have equal priority for testing. LAC DPH has updated the Priorities for COVID-19 Diagnostic (Viral) Testing to better align with state test priorities.

Individuals are encouraged to discuss COVID-19 testing with their healthcare provider. Learn more about COVID-19 testing basics here.

Priorities for COVID-19 Diagnostic (Viral) Testing

All four tiers currently have equal priority for testing due to adequate laboratory capacity. If testing resources are limited, these priorities should be followed.

Tier 1
- Hospitalized persons with symptoms of COVID-19
- Persons who are identified as part of outbreak detection and response or contact investigation as directed by local public health

Tier 2
- All other individuals with symptoms of COVID-19
- Persons who are close contacts to confirmed cases
- Persons who live or work in high risk settings such as congregate care facilities, healthcare, corrections, emergency services, and home care as outlined by CDPH
- Patients requiring pre-operative/pre-hospital admission screening
- Patients being discharged from hospitals to lower levels of care

Tier 3
- Asymptomatic workers who have frequent interaction with the public and/or work in an environment where safe distancing is not consistently feasible in the work sectors as outlined by CDPH

Tier 4
- Asymptomatic persons who believe they may be currently infected
- Asymptomatic persons that are part of a routine testing program operated by their employer
Facility-Wide Testing

Skilled nursing facilities (SNFs) have been the hardest hit in the County with the largest number of COVID-19 cases and high mortality rates. Infection control, universal source control (such as the use of masks and face coverings), and physical distancing remain the mainstays to reduce the risk of COVID-19 transmission in SNFs. It is now required that SNFs use facility-wide testing as a supplemental tool to prevent or reduce the size of outbreaks in their facilities. This approach is resource intensive and often requires weekly retesting of all negative residents and staff until no new cases are identified.

Public Health’s highest priority for facility-based testing is medically vulnerable persons in congregate settings, primarily SNFs and also in homeless shelters. The aim is to better manage facility outbreaks as well as to mitigate community transmission.

Targeted Testing

Public Health is encouraging targeted testing to prevent asymptomatic spread of COVID-19 within lower risk congregate settings such as residential and non-healthcare facilities and workplaces. This strategy is aimed to supplement infection control, universal source control, and physical distancing measures.

With the targeted testing strategy, when there is a known COVID-19 case, all of their close contacts are tested whether the contacts have symptoms or not. For every new case that is detected, a new contact investigation is started to identify, isolate, and test the close contacts of the new case.

Targeted testing can be a strategic, structured, manageable, and efficient approach for a facility. It should identify residents/clients and staff with previously unrecognized COVID-19 who may be associated with a COVID-19 case at the facility. In addition, it should help the agency and Public Health to understand the scope of COVID-19 spread at the facility and guide decisions about selecting residents/clients and staff for isolation and quarantine at a given point in time.

Limitations of Testing Strategies

- The molecular and antigen tests that are currently used to diagnose current COVID-19 infection are not perfect. PCR tests are the most accurate tests for COVID-19 and are more sensitive than antigen tests (they have fewer false negatives) but both tests can have false negative results – which means that a person infected with COVID-19 may have a negative test in error and their diagnosis may be missed.
  
  The accuracy of a test to diagnose COVID-19 depends on many factors including how well the specimen is collected, the timing of the test, which test is used, the patient’s clinical condition, and how likely it is that they are infected. In addition, how well these tests perform on asymptomatic people is unclear. People who are at low risk of having COVID-19 are more likely to get a false positive result (meaning that their test is positive but they don’t actually have COVID-19).

- Another concern is that a patient who has had COVID-19 may continue to have a positive molecular test for a long time after they have recovered because the test may detect part of the virus or dead
virus that cannot cause infection. For this reason, re-testing of asymptomatic persons is not recommended within 90 days of recovery from a previous laboratory-confirmed COVID-19 infection.

- A test can only tell if the person is infected at one point in time. With widespread community transmission, any person who interacts with others runs a daily risk of acquiring COVID-19. This daily risk increases in crowded places, in confined spaces (especially indoors), during close contact, and when protective actions are not taken.

- The turn around time for laboratory results have improved, but delays in COVID-19 test results do occur especially when demand for testing increases significantly.

Summary

With widespread community transmission of COVID-19, residents of LA County should assume everyone is possibly infected and take personal preventive measures including wearing face covers, practicing physical distancing, frequent handwashing, and avoiding crowded confined spaces when possible. Testing alone will not prevent the spread of COVID-19.

Relevant Resources

- COVID-19 Testing Basics
- Testing Recommendations for Asymptomatic Workers