UPDATED: CDC Guidance for COVID – 19 Testing
FREQUENTLY ASKED QUESTIONS

Who should (and should not) be tested for SARS-CoV-2 infection?
The most common scenarios in which to consider testing include:

- Patients with symptoms consistent with COVID-19

Testing should be considered with any of the following symptoms:

- Fever or chills
- Cough
- Congestion or runny nose
- Loss of taste or smell
- Shortness of breath or difficulty breathing
- Body aches
- Fatigue or headache
- Sore throat
- Nausea, vomiting, or diarrhea

The decision to test does not differ by the age of the child, although some symptoms such as body aches, shortness of breath, and loss of taste/smell are more prevalent in young adults than in school-aged children. See AAP Newborn Guidance for additional information about testing newborn infants. Co-infection: ***Testing for SARS-CoV-2 is recommended for other suspected or test-proven causes of acute illness that share symptoms consistent with COVID-19 (eg, influenza, RSV, etc).*** Testing for SARS-CoV-2 coinfection should be guided by clinician judgment in accordance with the prevalence of COVID-19 in a given community. ***Testing for SARS-CoV-2 infection is not recommended for other illnesses that lack shared symptoms (eg, cellulitis, urinary tract infection, etc).***

Patients in close contact with an individual with confirmed or probable SARS-CoV-2 infection
"Close contact" is defined as a distance of less than 6 feet for at least 15 minutes from a person with laboratory-confirmed or probable SARS-CoV-2 infection. Wearing a mask or cloth covering is presently not considered sufficient to alleviate the risk of transmission if close contact conditions are met. Testing should be considered for exposures of shorter duration or greater distance on a case-by-case basis. Testing is not necessary if there is exposure to a close contact of an individual with laboratory-confirmed SARS-CoV-2 infection and not the infected person himself/herself, unless the close contact is symptomatic or other criteria are met. Testing household contacts of newly infected persons can be considered but may be falsely reassuring, because continued contact may delay seroconversion.

Patients scheduled for an invasive medical procedure
Many hospitals are recommending that children receive testing prior to invasive medical procedures such as elective surgery. These decisions should be made on the basis of local recommendations and institutional policies.

What are the testing recommendations for school, sports, work, and travel "clearance"?
Recommendations for testing in these situations vary depending on the setting, and there is presently no uniform guidance. It is the role of the pediatrician to educate the community on what test results mean to help guide safe practices. When possible, pediatricians should partner with local groups to develop testing practices that are reasonable and in accordance with Centers for Disease Control and Prevention (CDC) and AAP guidelines. Asymptomatic patients without recent exposure to an infected person will have a low risk of positivity if randomly tested for return to public/community settings, and there is a risk of false-positive test results, depending on the platform used. However, because infected asymptomatic patients can spread disease, random testing before group activities can be considered on the basis of the specific setting and in conjunction with local health departments that survey disease prevalence. It is important for pediatricians to educate families that a negative test result decreases the risk of spreading disease but does not make it "safe" to return to activity and does not eliminate the need for masking, social distancing, and quarantining as appropriate per the recommendations of the CDC and local health authorities. Additionally, pediatricians should be guiding families about risks of false-negative test results as well as the importance of quarantining/testing for symptoms and close contact with possibly infected persons.

What is the optimal timing for testing? Are there reasons to defer or not to test?
Immediate testing
Patients with symptoms consistent with COVID-19 should be tested without delay using either polymerase chain reaction (PCR) or antigen tests (see below). Testing these patients in a timely fashion is important especially if participating in school, sports, or work so local groups can begin contact tracing, outlining school/work closures, and notifying families to begin home quarantines until test results are received.

Delayed testing
Asymptomatic patients with close contact exposure to infected persons should not be tested until at least 4 days after exposure. With faster diagnosis of infected persons using rapid antigen testing, there are pressures to have close contacts immediately tested. However, it is important for pediatricians to advise exposed patients to quarantine and wait to test until at least day 4 in order to limit false-negative results and to limit the need for sequential testing. The probability of a false-negative result in an infected person decreases substantially over the first 4 days after exposure. Because symptoms develop 2 to 14 days following exposure and most commonly between 5 and 6 days, further testing after a negative test result should be guided by symptomatology.

No testing
Testing is not generally recommended for indirect exposure such as exposure to a close contact and not directly with the infected person, unless the close contact subsequently tests positive or develops symptoms. ***Testing is also not recommended for asymptomatic patients who have previously tested positive within the past 3 months. A negative test should not be necessary for return to school/work clearance if the patient has recently tested positive. Patients may***

have low levels of virus in their bodies and can continue to test positive without risk of spreading the disease to others.

Which type of test should I use? How do I evaluate which test is best?
There are 3 main types of tests currently available for individuals who may have SARS-CoV-2 infection: PCR tests, antigen tests, and antibody tests. Each of these has advantages and disadvantages, and decisions about which test to use depend on the specific clinical situation, local availability of testing, and local health department guidance. At minimum, the AAP recommends tests that have received approval from the Food and Drug Administration (FDA) or Emergency Use Authorization (EUA).

A PCR test that has received FDA authorization or approval is the "gold standard" for testing an individual child for acute SARS-CoV-2 infection. These tests are generally performed on respiratory samples, most often nasopharyngeal swab specimens.

Antigen tests are generally performed on nasal or oral swab specimens. Some antigen tests are approved for point-of-care use and deliver rapid results, and others require shipment of samples to a central laboratory. Antigen tests generally have lower sensitivity than molecular tests, particularly in later stages of COVID-19, but positive test results are generally reliable. Despite their lower sensitivity, these tests may be useful when rapid results are required or when screening large numbers of individuals. For purposes of clearance for a specific setting such as return to school, however, a negative antigen test result will often not suffice. Backup with a PCR-based test is often required by local or state public health authorities.

Antibody (serology) tests can provide evidence of previous infection with SARS-CoV-2 but are not useful for the diagnosis of acute infection. A positive antibody test result does not confirm that a patient has protection against SARS-CoV-2. Thus, these tests should not be used to make decisions on grouping people in classrooms or other facilities at this time, and individuals with positive antibody tests should continue to adhere to guidelines about masking, social distancing, and other preventive measures.

Should I be testing in my office/practice?
A practice's choice to test in office, collect specimens in office, or refer all patients out for collection and testing depends on multiple factors:

What type of personal protective equipment (PPE) do I need to use when I conduct testing?
PPE is often necessary for testing but depends on the test being used (saliva vs nasal vs nasopharyngeal), the developmental age of the patient, and the potential to aerosolize during the testing process. At a minimum, the use of gloves, face mask, and eye protection is necessary for all specimen handling and collection. For tests that can be administered as self-swabs, no additional PPE is required, but a staff member should observe to ensure that the specimen is collected correctly. Self-swabs are discouraged in patients <10 years old. When collecting samples using nasopharyngeal swabs; for patients for whom crying, gagging, or coughing is likely; or for patients who are otherwise deemed as higher risk, such as high

suspicion of SARS-CoV-2 infection based on household contacts, the addition of gowns and N95 masks is encouraged. Gowns and gloves should be changed between each collection, per AAP interim guidance on PPE.

Should I additionally test for influenza during flu season?
Because the range of symptoms for influenza and COVID-19 are similar, it is not possible to differentiate these two viral syndromes on the basis of symptoms alone, and coinfection is entirely possible. Many school districts will not allow attendance for children with respiratory symptoms compatible with COVID-19 or other respiratory illnesses, including influenza. Those with influenza documented by testing may be treated with an influenza antiviral, with more rapid resolution of symptoms possible, allowing for earlier return to school, per AAP policy.