



To maximize protection from the [Delta variant](#) and prevent possibly spreading it to others, get vaccinated as soon as you can and wear a mask indoors in public if you are in [an area of substantial or high transmission](#).

# Interim Guidance for SARS-CoV-2 Testing in Non-Healthcare Workplaces

Updated Oct. 7, 2021



[Print](#)

## COVID-19

### Summary of Recent Changes

Updates as of October 6, 2021



- Updated descriptions of test types.
- Updated to align with new antigen testing algorithms, one for [community settings](#)  and one for [congregate settings](#) .
- Updated testing recommendations for [fully vaccinated](#) workers who are close contacts of someone with COVID-19.
- Clarified that screening testing recommendations apply to asymptomatic, unvaccinated workers.

[View Previous Updates](#)

## Key Points

- Workplace-based testing for SARS-CoV-2, the virus that causes COVID-19, could identify workers with SARS-CoV-2 infection, and thus help prevent or reduce further transmission. The purpose of this guidance is to provide employers with considerations for incorporating testing for SARS-CoV-2 into a workplace COVID-19 preparedness, response, and control plan in non-healthcare workplaces.
- This guidance includes descriptions of different types of SARS-CoV-2 tests; scenarios where SARS-CoV-2 testing may be used; considerations for screening testing (testing asymptomatic and unvaccinated workers with no known or suspected exposure to SARS-CoV-2); and use of antigen tests for serial screening testing.
- Screening testing could be effective in helping to prevent transmission for workplace settings.
- These interim considerations on SARS-CoV-2 testing strategies for non-healthcare workplaces during the COVID-19 pandemic are based on what is currently known about the transmission and severity of COVID-19 and is subject to change as additional information becomes available.

**Note:** This document provides guidance on the appropriate use of testing and does not dictate the determination of payment decisions or insurance coverage of such testing, except as may be otherwise referenced (or prescribed) by another entity or federal or state agency.

# Introduction

The purpose of this document is to provide employers with strategies to consider for incorporating testing for SARS-CoV-2, the virus that causes COVID-19, into workplace preparedness, response, and control plans in non-healthcare workplaces. For workplaces with healthcare personnel, including those that work in nursing homes, please refer to [Interim Infection Prevention and Control Recommendations for Healthcare Personnel During the Coronavirus Disease 2019 \(COVID-19\) Pandemic](#) and [Interim Infection Prevention and Control Recommendations to Prevent SARS-CoV-2 Spread in Nursing Homes](#).

Employers are encouraged to collaborate with [state, territorial, tribal, and local health officials](#) to determine whether and how to implement the following testing strategies and which one(s) would be most appropriate for their circumstances. These considerations are meant to supplement, not replace, any federal, state, local, territorial, or tribal health and safety laws, rules, and regulations with which workplaces must comply. These strategies should be carried out in a manner consistent with existing laws and regulations, including laws protecting employee privacy and confidentiality. They should also be carried out consistent with [Equal Employment Opportunity Commission \(EEOC\) guidance](#) [regarding permissible testing policies and procedures](#). Employers providing testing of employees should put procedures in place for rapid notification of results and establish appropriate measures based on testing results, including instructions regarding [self-isolation](#) and restrictions on workplace access.

## Considerations when testing

SARS-CoV-2 testing may be incorporated as part of a comprehensive approach to reducing transmission in non-healthcare workplaces. [Testing](#) identifies workers infected with SARS-CoV-2, the virus that causes COVID-19, so that actions can be taken to slow and stop the spread of the virus. For guidance on quarantine and testing of fully vaccinated people for COVID-19, please visit [Interim Public Health Recommendations for Fully Vaccinated People](#).

Employees undergoing testing should [receive clear information](#) on:

- the manufacturer and name of the test, the type of test, the purpose of the test, the performance specifications of the test, any limitations associated with the test, who will pay for the test, how the test will be performed, how and when they will receive test results, and;
- how to understand what the results mean, actions associated with negative or positive results, the difference between testing for workplace screening versus for medical diagnosis, who will receive the results, how the results may be used, and any consequences for declining to be tested.

Individuals tested are required to receive patient fact sheets as part of the test's [emergency use authorization](#) [\(EUA\)](#).

According to the Americans with Disabilities Act (ADA), when employers implement any mandatory testing of employees, it must be "job related and consistent with business necessity." In the context of the COVID-19 pandemic, the U.S. [EEOC](#) [notes](#) that testing to determine if an employee has SARS-CoV-2 infection with an "accurate and reliable test" is permissible as a condition to enter the workplace because an employee with the virus will "pose a direct threat to the health of others." EEOC notes that testing administered by employers that is consistent with current CDC guidance will meet the ADA's business necessity standard. Employers who mandate workplace testing for SARS-CoV-2 infection should discuss further with employees who decline testing and consider providing alternatives as feasible and appropriate, such as reassignment to tasks that can be performed via telework.

Under OSHA's recordkeeping requirements in [29 CFR Part 1904](#) [, COVID-19 can be a \[recordable illness\]\(#\)](#) [. Thus, employers are responsible for recording cases of COVID-19, if the case meets certain requirements. Employers are encouraged to frequently check \[OSHA's webpage\]\(#\)  \[for updates.\]\(#\)](#)

## Test types

### Viral tests

**Viral tests**, including [nucleic acid amplification tests \(NAATs\)](#) and [antigen tests](#), are used as diagnostic tests to **detect infection** with SARS-CoV-2 and to inform an individual's medical care. Viral tests can also be used as screening tests to reduce the transmission of SARS-CoV-2 by identifying infected persons who need to [isolate](#) from others. See FDA's list of [In Vitro Diagnostics Emergency Use Authorizations](#)  [for more information about the performance of specific authorized tests](#)

[Diagnostics Emergency Use Authorizations](#) for more information about the performance of specific authorized tests.

- **NAATs**, such as real-time reverse transcription-polymerase chain reaction (RT-PCR), are high-sensitivity, high-specificity tests for diagnosing SARS-CoV-2 infection. NAATs detect genetic material (nucleic acids). NAATs for SARS-CoV-2 specifically identify the ribonucleic acid (RNA) sequences that comprise the genetic material of the virus. Most NAATs need to be processed in a laboratory and time to results can vary (~1–3 days), but some NAATs are [point-of-care \(POC\) tests](#) with results available in about 15–45 minutes. Because laboratory-based NAATs are considered the most sensitive tests for detecting SARS-CoV-2, they can also be used to confirm the results of lower sensitivity tests, such as POC NAATs or antigen tests.
- **Antigen tests** are immunoassays that detect the presence of a specific viral antigen. Antigen tests generally have similar specificity but are less sensitive than most NAATs. Most can be processed at the point of care with results available in minutes and thus can be used in screening programs to quickly identify those who are likely to be contagious. Because of the performance characteristics of antigen tests, it may be necessary to confirm some antigen test results (e.g., a negative test in persons with symptoms or a positive test in persons without symptoms) with a laboratory-based NAAT. Furthermore, based on the [authorization from FDA](#), some point-of-care NAATs cannot be used for confirmatory testing. Use of the appropriate [antigen testing algorithm](#) is recommended to determine when confirmatory testing is needed.

## Antibody tests

**Antibody (or serology) tests** are used to detect previous infection with SARS-CoV-2 and can aid in the diagnosis of [multisystem inflammatory syndrome](#) in children (MIS-C) and in adults (MIS-A). CDC does not recommend using antibody testing to diagnose current infection. Depending on the time when someone was infected and the timing of the test, the test might not detect antibodies in someone with a current infection. In addition, it is not currently known whether a positive antibody test result indicates protective immunity against SARS-CoV-2; therefore, at this time, antibody tests should not be used to determine if an individual is immune against reinfection. Antibody testing is being used for public health surveillance and epidemiologic purposes. Because antibody tests can have different targets on the virus, specific tests might be needed to assess for antibodies originating from past infection versus those from vaccination. For more information about COVID-19 vaccines and antibody test results, refer to [Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States](#).

For more information, please refer to [Overview of Testing for SARS-CoV-2 \(COVID-19\)](#).

## Overview of testing scenarios

**Diagnostic testing** is intended to identify current infection in individuals and is performed when a person has signs or symptoms consistent with COVID-19 or when a person is asymptomatic but has a recent known or suspected exposure to SARS-CoV-2.

Examples of diagnostic testing include:

- Testing people who have [symptoms](#) consistent with COVID-19 and who present to their healthcare provider
- Testing people as a result of contact tracing efforts
- Testing people who indicate that they were exposed to someone with a confirmed or suspected case of COVID-19.
- Testing people who attended an event where another attendee was later confirmed to have COVID-19

**Screening tests** are intended to identify infected people who are asymptomatic and do not have known, suspected, or reported exposure to SARS-CoV-2. Screening helps to identify unknown cases so that measures can be taken to prevent further transmission.

Examples of screening testing include:

- Testing unvaccinated employees in a workplace setting
- Testing unvaccinated students, faculty, and staff in a [K-12 school](#) or [institute of higher education](#) setting
- Testing an unvaccinated person before or after [travel](#)
- Testing at [home](#) for someone who does not have symptoms associated with COVID-19 and no known exposures to someone with COVID-19

# Choosing a test

When choosing which test to use, it is important to understand the purpose of the testing (e.g., diagnostic vs. screening), analytic performance of the test within the context of the [level of community transmission](#), need for rapid results, and other considerations (See Table 1). The [COVID-19 Viral Testing Tool](#) helps healthcare providers and individuals understand their COVID-19 testing options. After test results are in, the tool can help interpret results and guide next steps.


Table 1 summarizes some characteristics of NAATs and antigen tests to consider. Most antigen tests that have received [EUA from FDA](#) are authorized for testing symptomatic persons within the first 5, 6, 7, 12, or 14 days of symptom onset. Accumulation of data on the performance of antigen tests in different situations has helped guide the use of these tests as screening tests in asymptomatic people to detect or exclude SARS-CoV-2 infection. See FDA's [recommendations for healthcare providers using SARS-CoV-2 diagnostic tests for screening asymptomatic individuals for COVID-19](#). Also see information from the Centers for Medicare & Medicaid Services (CMS) on [Updated CLIA SARS-CoV-2 Molecular and Antigen Point of Care Test Enforcement Discretion](#). Laboratories that perform screening or diagnostic testing for SARS-CoV-2 must have a Clinical Laboratory Improvement Amendments (CLIA) certificate and meet regulatory requirements. Tests that have received an EUA from FDA for [point of care \(POC\)](#) use can be performed with a CLIA certificate of waiver.

**Table 1. NAAT and Antigen Test Differences to Consider When Planning for Diagnostic or Screening Use**

	<b>NAATs</b>	<b>Antigen Tests</b>
<b>Intended Use</b>	Detect <i>current</i> infection	Detect <i>current</i> infection
<b>Analyte Detected</b>	Viral Ribonucleic Acid (RNA)	Viral Antigens
<b>Specimen Type(s)</b>	Nasal, Nasopharyngeal, Oropharyngeal, Sputum, Saliva	Nasal, Nasopharyngeal
<b>Sensitivity</b>	Varies by test, but generally high for laboratory-based tests and moderate-to-high for POC tests	Varies depending on the course of infection, but generally moderate-to-high at times of peak viral load*
<b>Specificity</b>	High	High
<b>Test Complexity</b>	Varies by test	Relatively easy to use
<b>Authorized for Use at the Point-of-Care</b>	Most are not, some are	Most are, some are not
<b>Turnaround Time</b>	Most 1-3 days. Some could be rapid in 15 minutes	Ranges from 15 minutes to 30 minutes
<b>Cost/Test<sup>^</sup></b>	Moderate (~\$75-\$100/test)	Low (~\$5-\$50/test)
<b>Advantages</b>	<p>Most sensitive test method available</p> <p>Short turnaround time for NAAT POC tests, but few available</p>	<p>Short turnaround time (approximately 15 minutes)<sup>+</sup></p> <p>When performed at or near POC, allows for rapid identification of infected people, thus preventing</p>

	Usually does not need to be repeated to confirm results	further virus transmission in the community, workplace, etc.
		Comparable performance to NAATs in symptomatic persons and/or if culturable virus present, when the person is presumed to be infectious
<b>Disadvantages</b>	<p>Longer turnaround time for lab-based tests (1–3 days)</p> <p>Higher cost per test</p> <p>A positive NAAT diagnostic test should not be repeated within 90 days, because people may continue to have detectable RNA after risk of transmission has passed</p>	<p>May need <a href="#">confirmatory testing</a></p> <p>Less sensitive (more false negative results) compared to NAATs, especially among asymptomatic people</p>

\*The decreased sensitivity of antigen tests might be offset if the POC antigen tests are repeated more frequently (i.e., serial testing at least weekly).


^ Costs for: [NAATs](#) 

+Refers to point-of-care antigen tests only.

## Considerations for testing in different scenarios

### Diagnostic testing



#### Testing persons with signs or symptoms consistent with COVID-19

Employers may consider conducting daily in-person or virtual health checks (e.g., symptom and temperature screening) to identify employees with signs or symptoms consistent with COVID-19 before they enter a facility. Employers should follow guidance from the [EEOC](#)  regarding confidentiality of medical records from health checks.



[Vaccinated](#) and unvaccinated workers with [COVID-19 symptoms](#) should be immediately separated from other employees, customers, and visitors, and sent home or to a healthcare facility, depending on how severe their symptoms are, and follow [CDC guidance for caring for oneself](#). To prevent stigma and discrimination in the workplace, make employee health screenings as private as possible. CDC recommends that anyone with signs or symptoms of COVID-19 be tested and follow the advice of their healthcare provider. Waiting for test results prior to returning to work is recommended to keep potentially infected workers out of the workplace.

Employers are encouraged to implement flexible sick leave and supportive policies and practices as part of a comprehensive approach to prevent and reduce transmission among employees.

Positive test results using a viral test (NAAT or antigen) in persons with signs or symptoms consistent with COVID-19 indicate that the person has COVID-19 and should not come to work and should [isolate at home](#). Decisions to [discontinue isolation](#) for workers with COVID-19 and allow them to return to the workplace may follow either a [symptom-based, time-based, or a test-based strategy](#) (see [Testing to determine resolution of infection](#) below).

A negative antigen test in persons with signs or symptoms of COVID-19 should be confirmed by a laboratory-based NAAT, a more sensitive test. Results from NAATs are considered the definitive result when there is a discrepancy between the antigen and NAAT test. For more information, see the antigen test algorithms for [community settings](#)  and [congregate settings](#) .

### Testing asymptomatic persons with recent known or suspected exposure to SARS-CoV-2

[Case investigation](#) is typically initiated when a health department receives a report from a laboratory or testing site of a positive SARS-CoV-2 viral test result, or a report from a healthcare provider of a patient with a [confirmed or probable diagnosis of COVID-19](#)  .

Fully vaccinated people who have come into close contact with someone with COVID-19 should be tested 3–5 days following the date of their exposure and wear a mask in public indoor settings for 14 days or until they receive a negative test result. They should isolate if they test positive. For more guidance on quarantine and testing of fully vaccinated people, please visit [Interim Public Health Recommendations for Fully Vaccinated People](#).

[Viral testing](#) is recommended for all unvaccinated [close contacts](#). Because of the potential for asymptomatic (not having symptoms) or pre-symptomatic (not yet showing symptoms) transmission of SARS-CoV-2, it is important that unvaccinated individuals [exposed to people with known or suspected COVID-19](#) be quickly identified and quarantined. Viral testing with NAATs or antigen tests can detect if these individuals are currently infected.


The health department may ask the employer for assistance in identifying close contacts of the worker with SARS-CoV-2 infection. Employers are encouraged to work with public health departments investigating cases of COVID-19 and tracing contacts to help reduce the spread of SARS-CoV-2 in their workplaces and communities.



Because there may be a delay between the time a person is exposed to the virus and the time that virus can be detected by testing, early testing after exposure at a single time point may miss many infections. Testing that is repeated at different points in time, also referred to as serial testing, is more likely to detect infection among close contacts of a COVID-19 case than testing done at a single point in time. Viral testing is recommended for unvaccinated close contacts of persons with COVID-19 immediately after being identified, and if negative, again in 5–7 days after last exposure or immediately if symptoms develop during quarantine.

While CDC continues to recommend a 14-day quarantine for unvaccinated individuals who are close contacts of a person with COVID-19, viral testing may also be used as part of an option to [shorten the quarantine period](#). Local public health authorities determine and establish the quarantine options for their jurisdictions. Shortening quarantine may increase willingness to adhere to public health recommendations. However, shortened quarantines with continued symptom monitoring and masking until Day 14 may be less effective in preventing [transmission of COVID-19](#) than the currently recommended [14-day quarantine](#). In jurisdictions with shortened quarantine options, workplaces with higher risk of SARS-CoV-2 introduction or transmission, or with potential for greater negative impact if employees become infected SARS-CoV-2 (see [Types of workplaces](#) below), can consider restricting unvaccinated workers from entering the workplace until 14 days after their exposure.

Viral testing may also be considered for unvaccinated persons who might have been in [close contact](#) with persons diagnosed with COVID-19 in collaboration with the local health department if resources permit. A risk-based approach to testing possible contacts of a person with confirmed COVID-19 may be applied. Such an approach should take into consideration the likelihood of exposure, which is affected by the characteristics of the workplace and the results of contact investigations. In some settings, [expanded screening testing](#) (i.e., testing beyond individually identified close contacts to those who are possible close contacts), such as targeting workers who worked in the same area and during the same shift, may be considered as part of a strategy to control the transmission of SARS-CoV-2 in the workplace. Employers are encouraged to consult with [state, local, territorial, and tribal health departments](#) to help inform decision-making about expanded screening testing.

High-risk settings that have demonstrated potential for rapid and widespread dissemination of SARS-CoV-2 include:

- Workplaces where workers are in the workplace for long periods (e.g., for 8–12 hours per shift) and have prolonged [close contact](#) with coworkers
- Workplaces where employees live in [congregate settings](#)  (e.g., fishing vessels, offshore oil platforms, farmworker housing, or wildland firefighter camps)
- Workplaces with populations at [increased risk for severe illness](#) if they are infected, such as [homeless shelters](#) and workplaces with [older workers](#)

If employees are tested after close contact or suspected close contact with someone who has a confirmed or probable diagnosis of COVID-19, care should be taken to inform these employees of their possible exposure to SARS-CoV-2 in the workplace while maintaining confidentiality of the individual with COVID-19, as required by the [ADA](#)  and consistent with EEOC guidance regarding [What You Should Know About COVID-19 and the ADA, the Rehabilitation Act, and Other EEO Laws](#) .

## Testing to determine resolution of infection

The [decision to end isolation](#) and return to the workplace for employees with suspected or confirmed SARS-CoV-2 infection should be made in the context of clinical and local circumstances. NAATs have detected SARS-CoV-2 RNA in some recovered people's respiratory specimens for up to 3 months after illness onset but without direct evidence that virus that can replicate or cause disease. Consequently, [evidence](#) supports a [time-based and symptom-based strategy](#) to determine when to discontinue isolation or other precautions rather than a test-based strategy. For persons who are severely immunocompromised, a test-based strategy could be considered in consultation with infectious disease experts. For all others, a test-based strategy is no longer recommended.

Under the ADA, employers are permitted to [require a healthcare provider's note](#) [↗](#) to verify that employees are healthy and able to return to work. However, as a practical matter, employers should be aware that healthcare provider offices and medical facilities may be extremely busy during periods when community COVID-19 indicators are in the moderate to high categories (Table 2) and may not be able to provide such documentation in a timely manner. In such cases, employers should consider not requiring a healthcare provider's note for employees who are sick to validate their illness, qualify for sick leave, or to return to work. Most people with COVID-19 have mild illness, can recover at home without medical care, and can follow CDC recommendations to determine when to [discontinue isolation](#) and return to the workplace.

## Screening testing

### Testing asymptomatic persons without known or suspected exposure to SARS-CoV-2 for early identification, isolation, and disease prevention

#### When to consider screening testing

Screening testing in non-healthcare settings of unvaccinated workers without known or suspected exposure to SARS-CoV-2 may be useful to detect COVID-19 early and stop transmission quickly, particularly in areas with community COVID-19 indicators in the moderate to high categories (Table 2, Table 3). Screening testing can be used in addition to symptom and temperature checks, which will miss asymptomatic or pre-symptomatic contagious workers. Persons with asymptomatic or pre-symptomatic SARS-CoV-2 infection are significant contributors to SARS-CoV-2 transmission.

In general, fully vaccinated workers should continue to follow employer guidance on screening testing. Please see [Interim Public Health Recommendations for Fully Vaccinated People](#) for more information.

#### Types of workplaces

Workplace settings for which screening testing of unvaccinated, asymptomatic workers should be considered include:

- Large workplaces
- Workplaces at increased risk of introduction of SARS-CoV-2 (e.g., workplaces where workers are in [close contact](#) with the public, such as restaurants or salons, or workplaces in communities with moderate to high transmission)
- Workplaces where there is a higher risk of SARS-CoV-2 transmission (e.g., workplaces where physical distancing is difficult and workers might be in close contact, such as manufacturing or food processing plants, or workplaces that provide congregate housing for employees such as fishing vessels, offshore oil platforms, farmworker housing or wildland firefighter camps)
- Workplaces where SARS-CoV-2 infection among employees will lead to greater negative impact, such as
  - Workplaces in remote settings where medical evaluation or treatment may be delayed
  - Workplaces where continuity of operations is a high priority (e.g., [critical infrastructure sectors](#) [↗](#) )
  - Workplaces with a high proportion of employees at [increased risk for severe illness](#)

#### Frequency of screening testing

Approaches may include initial testing of all workers before entering a workplace, periodic testing of workers at regular intervals, targeted testing of new workers or those returning from a prolonged absence (such as medical leave or furlough), or some combination of approaches. Given the incubation period for COVID-19 (up to 14 days), CDC recommends conducting screening testing of unvaccinated, asymptomatic workers without known or suspected exposures at least weekly. Employers may find the following factors helpful to consider when determining the interval for periodic testing:

- The availability of testing, turnaround time, and cost
- The latency time period between exposure and development of a positive SARS-CoV-2 viral test
- [Type of workplace](#)
- Level of community transmission (Table 2, Table 3)
- Number of employees who tested positive during previous rounds of testing
- Relevant experience with outbreaks at the workplace

Serial testing used in a screening program could identify workers with SARS-CoV-2 infection, and thus help prevent or reduce further transmission, which is an occupational health measure of great importance in the types of workplaces mentioned above. Outbreak prevention and control is increasingly being thought to depend largely on the frequency of testing and the speed of reporting (an advantage of antigen tests) and is only marginally improved by the higher test sensitivity of NAATs. Serial testing, if implemented, should be integrated as a component of the comprehensive workplace program and not a substitute for other measures, such as [COVID-19 vaccination](#), physical [distancing](#), [mask wearing](#), [hand hygiene](#), and [cleaning and disinfection](#). Engineering controls and improved [ventilation](#) in settings such as office buildings and [schools](#) are also important.

## Interpretation of screening SARS-CoV-2 test results

For [screening testing](#), [some antigen test results should be considered presumptive \(preliminary results\)](#). A positive antigen screening test result should be considered presumptive when the [pretest probability](#) (likelihood that the person being tested actually has the infection) for COVID-19 is low for the purpose of making a clinical diagnosis (e.g., a worker who is asymptomatic and has no known exposures to COVID-19 within the last 14 days, is fully vaccinated, or has had a SARS-CoV-2 infection in the last 3 months). Please see [Evaluating the Results of Antigen Testing for SARS-CoV-2](#).

Asymptomatic employees who have a positive antigen screening test and need a confirmatory NAAT should not come to work and should quarantine during confirmatory testing. For confirmatory testing, CDC recommends using a laboratory-based NAAT that has been evaluated against the FDA reference panel for analytical sensitivity. See FDA's [SARS-CoV-2 Reference Panel Comparative Data](#) [↗](#).

NAATs that generate presumptive results are not appropriate for use in confirmatory testing.

Employees with a positive confirmatory NAAT result should [isolate](#) at home. A negative confirmatory NAAT result is interpreted as no evidence of SARS-CoV-2 infection at the time when the testing sample was collected. Employees who test negative should continue to take steps to [protect themselves and others](#).

[State, local, territorial, and tribal health departments](#) may be able to provide assistance on any local context or guidance impacting the workplace. Before testing a large proportion of asymptomatic workers without known or suspected exposure, employers are encouraged to have a plan in place for how they will ensure access to clinical evaluation and confirmatory testing when needed, ensure test results are reported to public health departments, modify operations based on test results, collaborate with public health departments in workplace case investigation and contact tracing, and manage a higher risk of false positive results in a low prevalence population.

**Table 2. Level of Community Transmission**

Indicator	Low Transmission	Moderate Transmission	Substantial Transmission	High Transmission
Cumulative number of new cases per 100,000 persons within the last 7 days*	<10	10-49	50-99	≥100



Indicator	Low Transmission	Moderate Transmission	Substantial Transmission	High Transmission
Percentage of NAATs that are positive during the last 7 days <sup>†</sup>	<5%	5%-7.9%	8%-9.9%	≥10.0%

Indicators should be calculated for counties or core based statistical areas, although in rural areas with low population density, multiple jurisdictions might need to be combined to make the indicators more useful for decision-making. The indicators listed can be found by county on CDC's [COVID-19 Integrated County View](#).

\* Number of new cases in the county (or other administrative level) in the last 7 days divided by the population in the county (or other administrative level) and multiplying by 100,000.

† Number of positive tests in the county (or other administrative level) during the last 7 days divided by the total number of tests resulted in the county (or other administrative level) during the last 7 days. [Calculating Severe Acute Respiratory Syndrome Coronavirus 2 \(SARS-CoV-2\) Laboratory Test Percent Positivity: CDC Methods and Considerations for Comparisons and Interpretation](#).


### Table 3. Potential Actions Based on Community Transmission Level

Prevention Strategy	Low Transmission (Blue)	Moderate Transmission (Yellow)	Substantial Transmission (Orange)	High Transmission (Red)
Facilitate diagnostic testing for symptomatic persons and all close contacts of cases				
Facilitate diagnostic testing for symptomatic persons and all close contacts of cases				
Implement screening testing of select groups at least weekly plus facilitate diagnostic testing of symptomatic persons and close contacts				
Implement screening testing of select groups at least weekly plus facilitate diagnostic testing of symptomatic persons and close contacts				

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## Previous Updates

### Updates from Previous Content

#### Updates as of March 17, 2021

- Added description of nucleic acid amplification tests (NAATs) and antigen tests as types of viral tests to align with the [Overview of Testing for SARS-CoV-2](#).
- Added considerations on incorporating testing of asymptomatic individuals without known or suspected exposure to SARS-CoV-2 (screening testing) in select workplace settings as part of a workplace COVID-19 prevention and control plan.
- Updated considerations on frequency of testing.

#### Updates as of October 21, 2020

- Added links to the updated close contact definition.
- Updated language to align with updated definition.

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