



COVID-19

Transitioning from CDC's Indicators for Dynamic School Decision-Making (released September 15, 2020) to CDC's Operational Strategy for K-12 Schools through Phased Mitigation (released February 12, 2021) to Reduce COVID-19

Updated Feb. 12, 2021

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The Centers for Disease Control and Prevention (CDC) has released a new [Operational Strategy for K-12 Schools](#) to incorporate the best available evidence at this time. The indicators and thresholds in the operational strategy replace the core indicators in the Indicators for Dynamic School Decision-Making. A comparison of the former and new indicators and thresholds is provided below.

As communities plan safe delivery of in-person instruction in K-12 schools, it is essential to decide when and under what conditions to help protect students, teachers, and staff, and slow the spread of SARS-CoV-2, the virus that causes COVID-19. It is critical for schools to open as safely and as soon as possible, and remain open, to achieve the benefits of in-person learning and key support services. To enable schools to open and remain open, it is important to adopt and consistently implement actions to slow the spread of SARS-CoV-2 [both in schools and in the community](#). If community transmission is high, students and staff are more likely to come to school while infectious, and COVID-19 can spread more easily in schools. The association between COVID-19 incidence and transmission in school settings and levels of community transmission underscores the importance of controlling disease spread in the community to protect teachers, staff, and students in schools. This means that all community members, students, families, teachers, and school staff should take actions to [protect themselves and others](#) where they live, work, learn, and play. In short, success in preventing the introduction and subsequent transmission of SARS-CoV-2 in schools is connected to and facilitated by preventing transmission in communities.

K-12 schools should be the last settings to close after all other mitigation measures in the community have been employed, and the first to reopen when they can do so safely. This implies that schools should be prioritized for reopening and remaining open for in-person instruction over nonessential businesses and activities.

Given the likely association between [levels of community transmission of SARS-CoV-2 and risk of SARS-CoV-2 exposure in schools](#), a **first step** in determining when and how to reopen safely involves assessing the level of community transmission. School administrators, working with local public health officials, should assess the level of risk in the community and the likelihood of a case in a school facility, the likelihood that a case would lead to an outbreak, and the consequences of in-school transmission.

Levels of community transmission are available on [state, tribal, local, and territorial \(STLT\) health department](#) websites and on CDC's [COVID Data Tracker County View](#).

Schools that are open for in-person instruction (either fully open or hybrid) may decide to remain open even at high (red) levels of community transmission. These decisions should be guided by information on school-specific factors such as mitigation strategies implemented, local needs, stakeholder input, the number of cases among students, teachers, and staff, and school experience. A decision to remain open should involve considerations for further strengthening mitigation strategies and continuing to monitor cases to reassess decisions. This should be driven by a "classroom-first" approach; in-person instruction should be prioritized over extracurricular activities including sports and school events, a common source of school transmission, to minimize risk of transmission in schools and protect in-person learning.

Recommendations for Phased Mitigation Strategies to Reduce COVID-19

Strengthening existing, and implementing new mitigation strategies are critical to controlling the COVID-19 pandemic. CDC created the [Operational Strategy for K-12 Schools through Phased Mitigation](#), which presents updated indicators and thresholds for assessing the level of COVID-19 community transmission and corresponding recommendations for mitigation strategies, learning modes, and testing. The Operational Strategy is meant to complement CDC's [guidance, tools, and resources for K-12 schools](#), including [guidance on operating schools during COVID-19](#) and [overview of testing for SARS-CoV-2 \(COVID-19\)](#). It reflects the growing body of evidence on COVID-19 among children and adolescents and what is known about SARS-CoV-2 transmission in schools, summarized in CDC's [Science Brief on Transmission of SARS-CoV-2 in K-12 Schools](#). The operational strategy presents a pathway to reopen schools and help them remain open through consistent use of mitigation strategies, especially universal and correct use of [masks](#) and physical distancing. The operational strategy makes recommendations for learning mode and extracurricular activities, including sports, based on level of community transmission.

The Operational Strategy for K-12 Schools through Phased Mitigation reflects current knowledge of COVID-19 in the United States and therefore replaces CDC's Indicators for Dynamic School Decision-Making. For those who used the Indicators for Dynamic School Decision-Making, the table below shows a comparison between the former Indicators for Dynamic School Decision-Making and the [Operational Strategy for K-12 Schools through Phased Mitigation](#), which contain new indicators and thresholds for community transmission of COVID-19.

Comparison of Former Indicators for Dynamic School Decision-Making and New Thresholds for Community Transmission of COVID-19 (from CDC's New [Operational Strategy for K-12 Schools through Phased Mitigation](#))

Former Indicators for Dynamic School Decision-Making (reported over 14 days)

Indicator	Lowest risk of transmission in schools	Lower risk of transmission in schools	Moderate risk of transmission in schools	Higher risk of transmission in schools	Highest risk of transmission in schools
New cases per 100,000 population in the last 14 days	<5	5 to <20	20 to <50	50 to ≤ 200	>200
(For comparison to new thresholds which show 7-day period, equivalent New cases per 100,000 in <i>7-day period shown in parentheses</i>)	(2-3 in 7 days)	(3-9 in 7 days)	(10-24 in 7 days)	(25-100 in 7 days)	(>100 in 7 days)
RT-PCR diagnostic test result positivity rate in the last 14 days	<3%	3% to <5%	5% to <8%	8% to ≤ 10%	>10%

Summary of changes from former indicators to new thresholds for community transmission (from CDC's new [Operational Strategy for K-12 Schools through Phased Mitigation](#)):

- **Number of Categories:** The former indicators had *five* levels of community transmission (lowest, lower, moderate, higher, and highest) while the new thresholds have *four* levels of community transmission (low, moderate, substantial, and high).
- **Time period used for the Indicators:** The former indicators used total new cases per 100,000 population in the last *14 days*, while the new thresholds use total new cases per 100,000 persons in the past *7 days*.
 - When translating to past-7-day cases, the **new** thresholds combine the “lowest” category with the low transmission (blue) category and provide new thresholds for blue, yellow, orange, and red categories.
 - The former indicators and new thresholds are comparable but appear different because the time periods are now different.

- **Test positivity:** The “lowest” and “lower” categories have been merged into one low transmission (blue) category. There are also very slight changes due to using exact decimal points rather than greater than/less than symbols. Otherwise, they are identical.
- **SARS-CoV-2 test type:** The former indicators called for use of RT-PCR (reverse transcriptase polymerase chain reaction) diagnostic tests, while the new thresholds for community transmission recommend using [nucleic acid amplification tests \(NAATs\)](#). (Note: This is an update in terminology. RT-PCR is a type of diagnostic test that tests for nucleic acid amplification).

New Indicators and Thresholds for Community Transmission of COVID-19* (reported over 7 days)(from CDC’s [New Operational Strategy for K-12 Schools through Phased Mitigation](#))

Indicator	“Lowest” category no longer exists. It has been merged into one low transmission (blue) category.	Low transmission Blue	Moderate transmission Yellow	Substantial transmission Orange	High transmission Red
Total new cases per 100,000 persons in the past 7 days**		0-9	10-49	50-99	≥100
Percentage of NAATs that are positive in the past 7 days***		<5.0%	5.0%-7.9%	8.0%-9.9%	≥10.0%

*If the two indicators suggest different levels, the actions corresponding to the higher threshold should be chosen. County-level data on total new cases in the past 7 days and test percent positivity are available on the County View tab in [CDC’s COVID Data Tracker](#).

**Total number of new cases per 100,000 persons in the past 7 days is calculated by adding the number of new cases in the county (or other community type) in the last 7 days divided by the population in the county (or other community type) and multiplying by 100,000.

***Percentage of positive diagnostic and screening NAATs during the last 7 days is calculated by dividing the number of positive tests in the county (or other administrative level) during the last 7 days by the total number of tests results over the last 7 days. Additional information can be found on the [Calculating Severe Acute Respiratory Syndrome Coronavirus 2 \(SARS-CoV-2\) Laboratory Test Percent Positivity: CDC Methods and Considerations for Comparisons and Interpretation](#) webpage.

The **new** thresholds for community transmission of COVID-19 that are in the [Operational Strategy for K-12 Schools through Phased Mitigation](#) can be used to assess the current level of community transmission (low, moderate, substantial, or high) and see which mitigation strategies, learning modes, and testing are recommended based on their level of community transmission.

Secondary Indicators

CDC’s Indicators for Dynamic School Decision-Making includes secondary indicators that can be used to support the decision-making process in communities. **These secondary indicators can continue to be used.** CDC continues to recommend that the secondary indicators should not be used as the main criteria for determining the risk of SARS-CoV-2 transmission in schools. They should be used to support decision-making derived from the new thresholds for community transmission of COVID-19 (low, moderate, substantial, or high) from CDC’s [Operational Strategy for K-12 Schools through Phased Mitigation](#).

It is critical for schools to open as safely and as quickly as possible for in-person learning. To enable schools to open and remain open, it is important to adopt and correctly and consistently implement actions to slow the spread of SARS-CoV-2, the virus that causes COVID-19, not only inside the school, but also in the community. This means that students, families,

teachers, school staff, and all community members should take actions to [protect themselves and others](#) where they [live, work, learn, and play](#). In short, success in preventing the introduction and subsequent transmission of SARS-CoV-2 in schools is connected to and dependent upon preventing transmission in communities.

Former CDC indicators and thresholds for risk of introduction and transmission of COVID-19 in schools

Indicators	Lowest risk of transmission in schools	Lower risk of transmission in schools	Moderate risk of transmission in schools	Higher risk of transmission in schools	Highest risk of transmission in schools
Core Indicators					
Number of new cases per 100,000 persons within the last 14 days*	<5	5 to <20	20 to <50	50 to ≤ 200	>200
Percentage of RT-PCR tests that are positive during the last 14 days**	<3%	3% to <5%	5% to <8%	8% to ≤ 10%	>10%
<p>Ability of the school to implement 5 key mitigation strategies:</p> <ul style="list-style-type: none"> Consistent and correct use of masks Social distancing to the largest extent possible Hand hygiene and respiratory etiquette Cleaning and disinfection Contact tracing in collaboration with local health department <p>Schools should adopt the additional mitigation measures outlined below to the extent possible, practical and feasible.</p>	Implemented all 5 strategies correctly and consistently	Implemented all 5 strategies correctly but inconsistently	Implemented 3-4 strategies correctly and consistently	Implemented 1-2 strategies correctly and consistently	Implemented no strategies
Secondary Indicators					
Percent change in new cases per 100,000 population during the last 7 days compared with the previous 7 days (negative values indicate improving trends)	<-10%	-10% to <-5%	-5% to <0%	0% to ≤ 10%	>10%
Percentage of hospital inpatient beds in the community that are occupied***	<80%	<80%	80 to 90%	>90%	>90%
Percentage of intensive care unit beds in the community that are occupied***	<80%	<80%	80 to 90%	>90%	>90%
Percentage of hospital inpatient beds in the community that are occupied by patients with COVID-19***	<5%	5% to <10%	10% to 15%	>15%	>15%

Indicators	Lowest risk of transmission in schools	Lower risk of transmission in schools	Moderate risk of transmission in schools	Higher risk of transmission in schools	Highest risk of transmission in schools
Existence of localized community/public setting COVID-19 outbreak****	No	No	Yes	Yes	Yes

*Number of new cases per 100,000 persons within the last 14 days is calculated by adding the number of new cases in the county (or other community type) in the last 14 days divided by the population in the county (or other community type) and multiplying by 100,000.

**Percentage of RT-PCR tests in the community (e.g., county) that are positive during the last 14 days is calculated by dividing the number of positive tests over the last 14 days by the total number of tests resulted over the last 14 days. Diagnostic tests are viral (RT-PCR) diagnostic and screening laboratory tests (excludes antibody testing and RT-PCR testing for surveillance purposes). Learn more on the [Calculating Severe Acute Respiratory Syndrome Coronavirus 2 \(SARS-CoV-2\) Laboratory Test Percent Positivity: CDC Methods and Considerations for Comparisons and Interpretation webpage](#).

***Hospital beds and ICU beds occupied: These indicators are proxies for underlying community burden and the ability of the local healthcare system to support additional people with severe illness, including those with COVID-19. A community can be defined at the city, county or metro area level; federal analyses of hospital utilization rates within a community are typically conducted at the core-based statistical area (e.g., by metropolitan or micropolitan status).

**** Sudden increase in the number of COVID-19 cases in a localized community or geographic area as determined by the local and state health department.

Other Resources

[Operational Strategy for Reopening Schools](#)
Considerations for returning to in-person learning

[Science Brief](#)
Transmission of SARS-CoV-2 in K-12 schools

Last Updated Feb. 12, 2021