Goodwater Montessori Public Charter School

Goodwater Montessori Board Meeting Agenda

DATE: Tue March 9th, 2021

TIME: 6:30pm - 7:30pm   CST

LOCATION: https://us02web.zoom.us/j/3338246708

GROUPS: Board, Board Support Staff

THIS MEETING WILL BE CONDUCTED BY TELEPHONE CONFERENCE AND/OR VIDEO CONFERENCE IN ACCORDANCE WITH THE GOVERNOR'S AUTHORIZATION CONCERNING SUSPENSION OF CERTAIN OPEN MEETING LAW REQUIREMENTS FOR COVID-19 (CORONAVIRUS) DISASTER.

Items will not necessarily be discussed or considered in the order they are printed on the agenda below. If, during the course of the meeting, discussion of any item on the agenda should be held in an executive or closed session, the Board will convene in such executive or closed session as permitted by and in accordance with the Texas Open Meetings Act, Texas Government Code Chapter 551.

1. **Call to order**   CARL ILLIG

   1. Expected to be in attendance: Carl Illig, Mary Evelyn Bowling, Kimber Fuccello, Christopher Hinds, Montique Chance, and Jan MacWatters, and Suzanne Robinson. The following staff is expected to be in attendance: Dr. Bruce Tabor, Marcy Steward, Kim Hodges, Emily Arciba, Jenny Wilson, Heather Pencil, Alma Lahmon, and Kristi Lee.

   2.

   a.

2. **Public Comments**   CARL ILLIG

   Speakers will be allocated 2 minutes for public comments on matters of public concern.

   a. **Speakers will be allocated 2 minutes for public comments on matters of public concern.**

3. **Discussion and Action Items**   CARL ILLIG

   a. **Consideration of Mask Requirements**

      What the data say about wearing face masks.pdf

      SY-20-21-Public-Health-Guidance.pdf

      EO-GA-34-opening-Texas-response-to-COVID-disaster-IMAGE-03-02-2021.pdf

      Operational Strategy for K-12 Schools through Phased Mitigation _ CDC.pdf

4. **Closed Session**

    a. **Per Texas Government Code section §551.074 to discuss Personnel matters and/or Per Texas Government Code section §551.071 for a consultation with the school attorney and/or Per Texas Government Code section 551.072 to discuss Real Property.**

5. **Set Date and Time for Governance Training**

6. **Announce time and date of next board meeting**

7. **Adjourn**

WHAT THE DATA SAY ABOUT WEARING FACE MASKS

The science supports that face coverings save lives, and yet they're still endlessly debated. How much evidence is enough?
By Lynne Peeples

When her Danish colleagues first suggested distributing protective cloth face masks to people in Guinea-Bissau to stem the spread of the coronavirus, Christine Benn wasn't so sure.

"I said, 'Yeah, that might be good, but there's limited data on whether face masks are actually effective,'" says Benn, a global-health researcher at the University of Southern Denmark in Copenhagen, who for decades has co-led public-health campaigns in the West African country, one of the world's poorest.

That was in March. But by July, Benn and her team had worked out how to possibly provide some needed data on masks, and hopefully help people in Guinea-Bissau. They distributed thousands of locally produced cloth face coverings to people as part of a randomized controlled trial that might be the world's largest test of masks' effectiveness against the spread of COVID-19.

Face masks are the ubiquitous symbol of a pandemic that has sickened 35 million people and killed more than 1 million. In hospitals and other health-care facilities, the use of medical-grade masks clearly cuts down transmission of the SARS-CoV-2 virus. But for the variety of masks in use by the public, the data are messy, disparate and often hastily assembled. Add to that a divisive political discourse that included a US president disparaging their use, just days before being diagnosed with COVID-19 himself (see page 190). "People looking at the evidence are understanding it differently," says Baruch Fischhoff, a psychologist at Carnegie Mellon University in Pittsburgh, Pennsylvania, who specializes in public policy. "It's legitimately confusing."

To be clear, the science supports using masks, with recent studies suggesting that they could save lives in different ways: research shows that they cut down the chances of both transmitting and catching the coronavirus, and some studies hint that masks might reduce the severity of infection if people do contract the disease.

But being more definitive about how well they work or when to use them gets complicated. There are many types of mask, worn in a variety of environments. There are questions about people's willingness to wear them, or wear them properly. Even the question of what kinds of study would provide definitive proof that they work is hard to answer.

"How good does the evidence need to be?" asks Fischhoff. "It's a vital question."

Beyond gold standards

At the beginning of the pandemic, medical experts lacked good evidence on how SARS-CoV-2 spreads, and they didn't know enough to make strong public-health recommendations about masks.

The standard mask for use in health-care settings is the N95 respirator, which is designed to protect the wearer by filtering out 95% of airborne particles that measure 0.3 micrometres (μm) and larger. As the pandemic ramped up, these respirators quickly fell into short supply. That raised the now contentious question: should members of the public bother wearing basic surgical masks or cloth masks? If so, under what conditions? "Those are the things we normally [sort out] in clinical trials," says Kate Grabowski, an infectious-disease epidemiologist at Johns Hopkins School of Medicine in Baltimore, Maryland. "But we just didn't have time for that."

So, scientists have relied on observational and laboratory studies. There is also indirect evidence from other infectious diseases. "If you look at any one paper — it's not a slam dunk. But, taken all together, I'm convinced that they are working," says Grabowski.

Confidence in masks grew in June with news about two hair stylists in Missouri who tested positive for COVID-19 (ref. 1). Both wore a double-layered cotton face covering or surgical mask while working. And although they passed on the infection to members of their households, their clients seem to have been spared (more than half reportedly declined free tests). Other hints of effectiveness emerged from mass gatherings. At Black Lives Matter protests in US cities, most attendees wore masks. The events did not seem to trigger spikes in infections[2], yet the virus ran rampant in late June at a Georgia summer camp, where children who attended were not required to wear face coverings[3]. Caveats abound: the protests were outdoors, which poses a lower risk of COVID-19 spread, whereas the campers shared cabins at night, for example. And because many

non-protesters stayed in their homes during the gatherings, that might have reduced virus transmission in the community. Nevertheless, the anecdotal evidence "builds up the picture", says Theo Vos, a health-policy researcher at the University of Washington in Seattle.

More-rigorous analyses added direct evidence. A preprint study[4] posted in early August (and not yet peer reviewed), found that weekly increases in per-capita mortality were four times lower in places where masks were the norm or recommended by the government, compared with other regions. Researchers looked at 200 countries, including Mongolia, which adopted mask use in January and, as of May, had recorded no deaths related to COVID-19. Another study[5] looked at the effects of US state-government mandates for mask use in April and May. Researchers estimated that those reduced the growth of COVID-19 cases by up to 2 percentage points per day. They cautiously suggest that mandates might have averted as many as 450,000 cases, after controlling for other mitigation measures, such as physical distancing.

"You don't have to do much math to say this is obviously a good idea," says Jeremy Howard, a research scientist at the University of San Francisco in California, who is part of a team that reviewed the evidence for wearing face masks in a preprint article that has been widely circulated[6].

But such studies do rely on assumptions that mask mandates are being enforced and that people are wearing them correctly. Furthermore, mask use often coincides with other changes, such as limits on gatherings. As restrictions lift, further observational studies might begin to separate the impact of masks from those of other interventions, suggests Grabowski. "It will become easier to see what is doing what," she says.

Although scientists can't control many confounding variables in human populations, they can in animal studies. Researchers led by microbiologist Kwok-Yung Yuen at the University of Hong Kong housed infected and healthy hamsters in adjoining cages, with surgical-mask partitions separating some of the animals. Without a barrier, about two-thirds of the uninfected animals caught SARS-CoV-2, according to the paper[7] published in May. But only about 25% of the animals protected by mask material got infected, and those that did were less sick than their mask-free neighbours (as measured by clinical scores and tissue changes).

The findings provide justification for the emerging consensus that mask use protects the wearer as well as other people. The work also points to another potentially game-changing idea: "Masking may not only protect you from infection but also from severe illness," says Monica Gandhi, an infectious-disease physician at the University of California, San Francisco.

Gandhi co-authored a paper[8] published in

late July suggesting that masking reduces the dose of virus a wearer might receive, resulting in infections that are milder or even asymptomatic. A larger viral dose results in a more aggressive inflammatory response, she suggests.

She and her colleagues are currently analysing hospitalization rates for COVID-19 before and after mask mandates in 1,000 US counties, to determine whether the severity of disease decreased after public masking guidelines were brought in.

The idea that exposure to more virus results in a worse infection makes "absolute sense",

> **"**
> **You don't have to do much math to say this is obviously a good idea."**

says Paul Digard, a virologist at the University of Edinburgh, UK, who was not involved in the research. "It's another argument for masks."

Gandhi suggests another possible benefit: if more people get mild cases, that might help to enhance immunity at the population level without increasing the burden of severe illness and death. "As we're awaiting a vaccine, could driving up rates of asymptomatic infection do good for population-level immunity?" she asks.

Back to ballistics

The masks debate is closely linked to another divisive question: how does the virus travel through the air and spread infection?

The moment a person breathes or talks, sneezes or coughs, a fine spray of liquid particles takes flight. Some are large — visible, even — and referred to as droplets; others are microscopic, and categorized as aerosols. Viruses including SARS-CoV-2 hitch rides on these particles; their size dictates their behaviour.

Droplets can shoot through the air and land on a nearby person's eyes, nose or mouth to cause infection. But gravity quickly pulls them down. Aerosols, by contrast, can float in the air for minutes to hours, spreading through an unventilated room like cigarette smoke.

What does this imply for the ability of masks to impede COVID-19 transmission? The virus itself is only about 0.1 μm in diameter. But because viruses don't leave the body on their own, a mask doesn't need to block particles that small to be effective. More relevant are the pathogen-transporting droplets and aerosols, which range from about 0.2 μm to hundreds of micrometres across. (An average human hair has a diameter of about 80 μm.) The majority are 1–10 μm in diameter and can linger in the air a long time, says Jose-Luis Jimenez, an
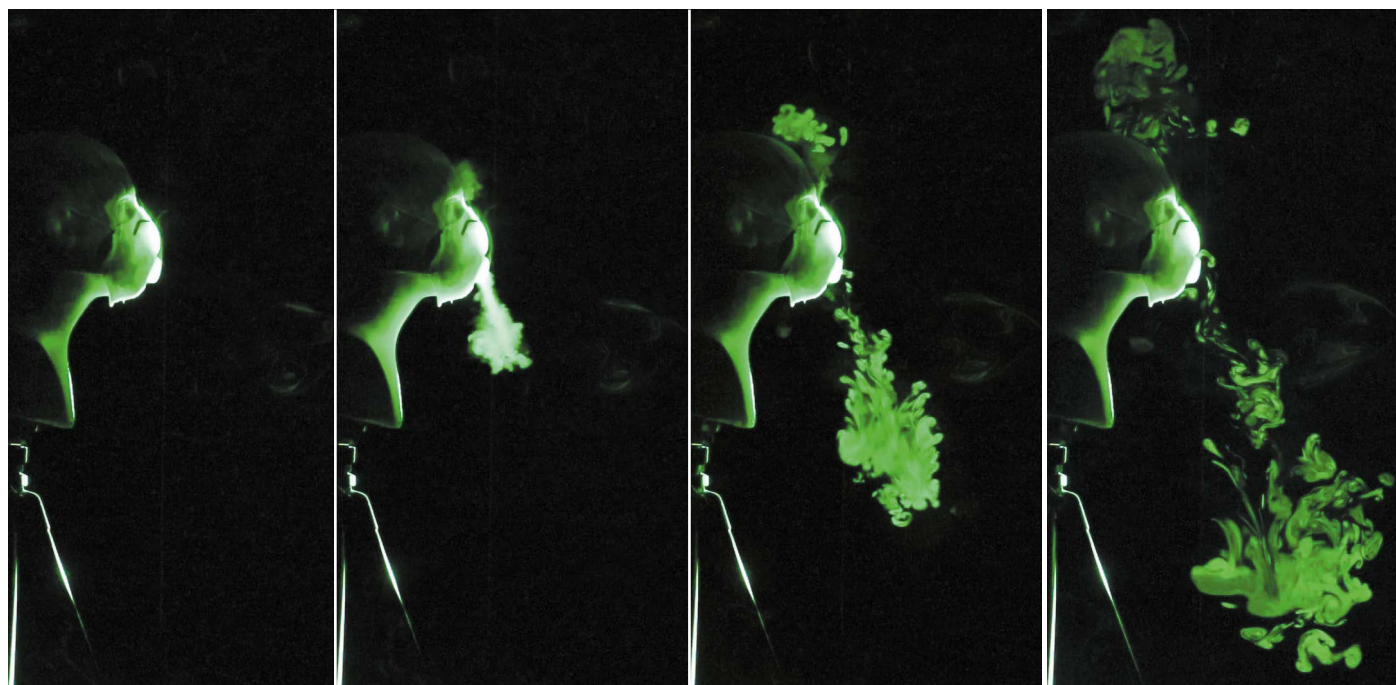
Time-lapse images show how cough droplets spread from a person wearing an N95 mask that has a valve to expel exhaled air.

environmental chemist at the University of Colorado Boulder. "That is where the action is."

Scientists are still unsure which size of particle is most important in COVID-19 transmission. Some can't even agree on the cut-off that should define aerosols. For the same reasons, scientists still don't know the major form of transmission for influenza, which has been studied for much longer.

Many believe that asymptomatic transmission is driving much of the COVID-19 pandemic, which would suggest that viruses aren't typically riding out on coughs or sneezes. By this reasoning, aerosols could prove to be the most important transmission vehicle. So, it is worth looking at which masks can stop aerosols.

All in the fabric

Even well-fitting N95 respirators fall slightly short of their 95% rating in real-world use, actually filtering out around 90% of incoming aerosols down to 0.3 µm. And, according to unpublished research, N95 masks that don't have exhalation valves — which expel unfiltered exhaled air — block a similar proportion of outgoing aerosols. Much less is known about surgical and cloth masks, says Kevin Fennelly, a pulmonologist at the US National Heart, Lung, and Blood Institute in Bethesda, Maryland.

In a review[9] of observational studies, an international research team estimates that surgical and comparable cloth masks are 67% effective in protecting the wearer.

In unpublished work, Linsey Marr, an environmental engineer at Virginia Tech in Blacksburg, and her colleagues found that even a cotton T-shirt can block half of inhaled aerosols and almost 80% of exhaled aerosols measuring 2 µm across. Once you get to aerosols of 4–5 µm, almost any fabric can block more than 80% in both directions, she says.

Multiple layers of fabric, she adds, are more effective, and the tighter the weave, the better. Another study[10] found that masks with layers of different materials — such as cotton and silk — could catch aerosols more efficiently than those made from a single material.

Benn worked with Danish engineers at her university to test their two-layered cloth mask design using the same criteria as for medical-grade ventilators. They found that their mask blocked only 11–19% of aerosols down to the 0.3 µm mark, according to Benn. But because most transmission is probably occurring through particles of at least 1 µm, according to Marr and Jimenez, the actual difference in effectiveness between N95 and other masks might not be huge.

Eric Westman, a clinical researcher at Duke University School of Medicine in Durham, North Carolina, co-authored an August study[11] that demonstrated a method for testing mask effectiveness. His team used lasers and smartphone cameras to compare how well 14 different cloth and surgical face coverings stopped droplets while a person spoke. "I was reassured that a lot of the masks we use did work," he says, referring to the performance of cloth and surgical masks. But thin polyester-and-spandex neck gaiters — stretchable scarves that can be pulled up over the mouth and nose — seemed to actually reduce the size of droplets being released. "That could be worse than wearing nothing at all," Westman says.

Some scientists advise not making too much of the finding, which was based on just one person talking. Marr and her team were among the scientists who responded with experiments of their own, finding that neck gaiters blocked most large droplets. Marr says she is writing up her results for publication.

"There's a lot of information out there, but it's confusing to put all the lines of evidence together," says Angela Rasmussen, a virologist at Columbia University's Mailman School of Public Health in New York City. "When it comes down to it, we still don't know a lot."

Minding human minds

Questions about masks go beyond biology, epidemiology and physics. Human behaviour is core to how well masks work in the real world. "I don't want someone who is infected in a crowded area being confident while wearing one of these cloth coverings," says Michael Osterholm, director of the Center for Infectious Disease Research and Policy at the University of Minnesota in Minneapolis.

Perhaps fortunately, some evidence[12] suggests that donning a face mask might drive the wearer and those around them to adhere better to other measures, such as social distancing. The masks remind them of shared responsibility, perhaps. But that requires that people wear them.

Across the United States, mask use has held steady around 50% since late July. This is a substantial increase from the 20% usage seen in March and April, according to data from the Institute for Health Metrics and Evaluation at the University of Washington in Seattle (see go.nature.com/30n6kxv). The institute's models also predicted that, as of 23 September, increasing US mask use to 95% — a level observed in Singapore and some other

countries – could save nearly 100,000 lives in the period up to 1 January 2021.

"There's a lot more we would like to know," says Vos, who contributed to the analysis. "But given that it is such a simple, low-cost intervention with potentially such a large impact, who would not want to use it?"

Further confusing the public are controversial studies and mixed messages. One study[13] in April found masks to be ineffective, but was retracted in July. Another, published in June[14], supported the use of masks before dozens of scientists wrote a letter attacking its methods (see go.nature.com/3jpvxpt). The authors are pushing back against calls for a retraction. Meanwhile, the World Health Organization (WHO) and the US Centers for Disease Control and Prevention (CDC) initially refrained from recommending widespread mask usage, in part because of some hesitancy about depleting supplies for health-care workers. In April, the CDC recommended that masks be worn when physical distancing isn't an option; the WHO followed suit in June.

There's been a lack of consistency among political leaders, too. US President Donald Trump voiced support for masks, but rarely wore one. He even ridiculed political rival Joe Biden for consistently using a mask – just days before Trump himself tested positive for the coronavirus, on 2 October. Other world leaders, including the president and prime minister of Slovakia, Zuzana Čaputová and Igor Matovič, sported masks early in the pandemic, reportedly to set an example for their country.

Denmark was one of the last nations to mandate face masks – requiring their use on public transport from 22 August. It has maintained generally good control of the virus through early stay-at-home orders, testing and contact tracing. It is also at the forefront of COVID-19 face-mask research, in the form of two large, randomly controlled trials. A research group in Denmark enrolled some 6,000 participants,

"You can't do randomized trials for everything – and you shouldn't."

asking half to use surgical face masks when going to a workplace. Although the study is completed, Thomas Benfield, a clinical researcher at the University of Copenhagen and one of the principal investigators on the trial, says that his team is not ready to share any results.

Benn's team, working independently of Benfield's group, is in the process of enrolling around 40,000 people in Guinea-Bissau, randomly selecting half of the households to receive bilayer cloth masks – two for each family member aged ten or over. The team will then follow everyone over several months to compare rates of mask use with rates of COVID-like illness. She notes that each household will receive advice on how to protect themselves from COVID-19 — except that those in the control group will not get information on the use of masks. The team expects to complete enrolment in November.

Several scientists say that they are excited to see the results. But others worry that such experiments are wasteful and potentially exploit a vulnerable population. "If this was a gentler pathogen, it would be great," says Eric Topol, director of the Scripps Research Translational Institute in La Jolla, California. "You can't do randomized trials for everything – and you shouldn't." As clinical researchers are sometimes fond of saying, parachutes have never been tested in a randomized controlled trial, either.

But Benn defends her work, explaining that people in the control group will still benefit from information about COVID-19, and they will get masks at the end of the study. Given the challenge of manufacturing and distributing the masks, "under no circumstances", she says, could her team have handed out enough for everyone at the study's outset. In fact, they had to scale back their original plans to enrol 70,000 people. She is hopeful that the trial will provide some benefits for everyone involved. "But no one in the community should be worse off than if we hadn't done this trial," she says. The resulting data, she adds, should inform the global scientific debate.

For now, Osterholm, in Minnesota, wears a mask. Yet he laments the "lack of scientific rigour" that has so far been brought to the topic. "We criticize people all the time in the science world for making statements without any data," he says. "We're doing a lot of the same thing here."

Nevertheless, most scientists are confident that they can say something prescriptive about wearing masks. It's not the only solution, says Gandhi, "but I think it is a profoundly important pillar of pandemic control". As Digard puts it: "Masks work, but they are not infallible. And, therefore, keep your distance."

Lynne Peeples is a science journalist in Seattle, Washington.

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2. Dave, D. M., Friedson, A. I., Matsuzawa, K., Sabia, J. J. & Safford, S. *Black Lives Matter Protests, Social Distancing, and COVID-19* NBER Working Paper 27408 (National Bureau of Economic Research, 2020).
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4. Leffler, C. T. et al. Preprint at medRxiv https://doi.org/10.1101/2020.05.22.20109231 (2020).
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8. Gandhi, M., Beyrer, C. & Goosby, E. *J. Gen. Intern. Med.* https://doi.org/10.1007/s11606-020-06067-8 (2020).
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10. Konda, A. et al. *ACS Nano* **14**, 6339–6347 (2020).
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12. Marchiori, M. Preprint at https://arxiv.org/abs/2005.12446 (2020).
13. Bae, S. et al. *Ann. Intern. Med.* **173**, W22–W23 (2020); retraction **173**, 79 (2020).
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US baseball players wore masks while playing during the 1918 influenza epidemic.

This guidance document is being provided based on the public health situation as we understand it today and takes effect immediately, regardless of whether a school system starts at the date currently planned or the local school board votes to change the school system's calendar to delay the start of the school year. Changes to the public health situation in the coming months may necessitate changes to this guidance.

The guidance in this document is authorized by Executive Order GA-34, which has the effect of state law under Section 418.012 of the Texas Government Code. Executive Order GA-34 provides TEA with the legal authority to publish requirements for the operation of public school systems during the COVID-19 pandemic. TEA recommends that public school systems consult with their local public health authorities and local legal counsel before making final decisions regarding the implementation of this guidance.

This guidance addresses:
- On campus and virtual instruction
- Administrative activities by teachers, staff, or students that occur on school campuses or virtually
- Non-UIL extracurricular sports and activities
- Any other activities that teachers, staff, or students must complete that cannot be accomplished virtually
- Visits by parents and the general public

It is recommended that after-school providers and other programs that operate in conjunction with campuses follow this guidance in coordination with the campus(es) they serve.

Public Health Considerations

The virus that causes COVID-19 can infect people of all ages, and school system leaders should do everything feasible to keep students, teachers, staff, and our communities safe. That said, research from the Centers for Disease Control (CDC), among others, has found that while children do get infected by COVID-19 and some severe outcomes have been reported in children, relatively few children with COVID-19 are hospitalized or have severe symptoms. Furthermore, the American Academy of Pediatrics notes that COVID-19 risks must be balanced with the need for children to attend school in person, given that lack of physical access to school leads to a number of negative consequences, placing "children and adolescents at considerable risk of morbidity, and in some case, mortality."[i]

While it is not possible to eliminate all risk of furthering the spread of COVID-19, the current science suggests there are many steps schools can take to reduce the risks to students, teachers, staff, and

their families significantly. This guidance document contains information on four sets of practices that minimize the likelihood of viral spread, including some that are requirements for all schools and others that are recommendations:[ii]

1. PROVIDE NOTICE: Requirements for parental and public notices
2. PREVENT: Required practices to prevent the virus from entering the school
3. RESPOND: Required practices to respond to a test-confirmed case in the school
4. MITIGATE: Recommended and required practices to reduce likely spread inside the school

The prevention and mitigation practices outlined in this document are designed to significantly reduce the likelihood that a coronavirus outbreak occurs on campus. Consistently implementing recommendations to the extent feasible is the best way to reduce the potential negative impact of infection on students' educational experiences. Additionally, systems should consider stringently applying recommended practices to adults on campuses, even when it might not be feasible to do so for students, to more fully protect adult teachers and staff who are generally at greater risk from COVID-19 than students.

There will almost certainly be situations that necessitate temporary school closure due to positive COVID-19 cases in schools. Parents, educators, and school administrators should be prepared for this in the event that it occurs, while actively working to prevent it through prevention and mitigation practices.

PROVIDE NOTICE: Parental and Public Notices

Developing a Plan for On-Campus Activities and Instruction

School systems must post for parents and the general public, one week prior to the start of on-campus activities and instruction, a summary of the plan they will follow to mitigate COVID-19 spread in their schools based on the requirements and recommendations outlined here. This summary document can follow any format the school system deems appropriate to communicate the information, should broadly address the major points in this guidance, and must be posted on the school system homepage or another easily found area on the system website. The document should be developed in consultation with teachers, staff, and parents to ensure the plan provides for the safety of teachers, staff, and students. Neither this summary document nor any local school systems' reopening plans are subject to approval by any government entity.

It is recommended that, within this summary, school systems designate a staff person or group that is responsible for responding to COVID-19 concerns and clearly communicate for all school staff and families who this person or group is and how to contact them.

Attendance and Enrollment

- o Per Texas Education Code (TEC), §25.092, students must attend 90% of the days a course is offered (with some exceptions) in order to be awarded credit for the course and/or to be promoted to the next grade. This requirement remains in force during the 2020-21 school year.

- Given the public health situation, student attendance may be earned through the delivery of virtual instruction.
- Any parent may request that their student be offered virtual instruction from any school system that offers such instruction. If a parent who chooses virtual instruction wants their child to switch to an on-campus instructional setting, they can do so, but school systems are permitted to limit these transitions to occur only at the end of a grading period, if it will be beneficial to the student's instructional quality. If a parent requests virtual instruction and the school does not offer it, the parent may enroll in another school that does offer it for transfer students.
- School systems must provide on-campus attendance as an option for students otherwise entitled to attend school who follow this document's required public health procedures and whose parents wish them to attend on campus, subject to school closure and the exceptions listed in this document. In high school, school systems may offer a less than daily on campus instructional experience if there is a need to reduce the total count of people on campus at any one time to maintain social distancing.
- In order to facilitate a safe, effective back-to-school transition process, during a period up to the first four weeks of school, which can be extended by an additional four weeks by vote of the school board, school systems may temporarily limit access to on-campus instruction. As a result, some parents opting for their student(s) to attend on campus may be required to start with remote instruction temporarily, although any family who does not have Internet access and/or devices for distance learning at home is still entitled to have their student receive on-campus instruction each day during this transition period, as they are during the rest of the year. School systems must clearly describe this transition process in their posted summary of their plans to operate campuses safely, as required above.
- School systems are required to provide parents a notice of their public education enrollment and attendance rights and responsibilities during the COVID-19 pandemic using a document published by TEA. This information should be supplied at time of enrollment, or at the earliest practical time after enrollment. This notice is posted at https://tea.texas.gov/coronavirus and can be found in English & Spanish.

PREVENT: Practices to Prevent the Virus from Entering the School

Stay-at-Home Period for Close Contacts of Individuals Who Tested Positive
For individuals who are close contacts to individuals who tested positive, a 14-day stay-at-home period was previously advised by the CDC based on the incubation period of the virus.

As of December 2, 2020, the CDC amended their guidance to allow two shorter options for the stay-at-home period. Based on current CDC guidance, the stay-at-home period can end for individuals experiencing no symptoms:

- On Day 10 after close contact exposure without testing,
- On Day 7 after close contact exposure and after receiving a negative test result.

If individuals return to school from these shorter stay-at-home windows, they should regularly monitor themselves for symptoms to ensure they remain symptom-free and take appropriate precautions (e.g., more consistent mask usage) for the duration of the 14-day incubation period.

Finally, the CDC has also advised that critical infrastructure services—which includes schools—may permit close contact staff members who are asymptomatic to continue to work in select instances when it is necessary to preserve school operations. Per the CDC, this option should be used only in limited circumstances. When using this option, school systems may consider adding additional protocols to increase monitoring for these individuals, which might include the use of COVID-19 tests (e.g., on Day 3 and/or Day 7 after the close contact exposure).

Taking into account all of the above, school systems may apply any of the following stay-at-home periods to those individuals who are identified as close contacts, in the absence of specific control orders issued by their local health authority regarding the identified individuals. Specifically, the stay-at-home period can be:
- 10 days after the last close contact, so long as they continue to monitor themselves daily for symptoms and take appropriate precautions through day 14
- 7 days after the last close contact, after receiving a negative test result (administered at least 5 days after the last close contact), so long as they continue to monitor themselves daily for symptoms and take appropriate precautions through day 14
- For staff who are necessary to preserve school operations, school systems can choose not to require any stay-at-home period, so long as the affected staff continue to monitor themselves daily for symptoms and take appropriate precautions through day 14, and schools can consider the use of rapid tests for these individuals
- 14 days after the last close contact

Screening Questions for COVID-19 Before Campus Access
1. School systems must require teachers and staff to self-screen for COVID-19 symptoms before coming onto campus each day. Symptoms are listed at the end of this document. The self-screening should include teachers and staff taking their own temperature. Teachers and staff must report to the school system if they themselves have COVID-19 symptoms or are test-confirmed with COVID-19, and, if so, they must remain off campus until they meet the criteria for re-entry as noted below. Additionally, they must report to the school system if they have had close contact with an individual who is test-confirmed with COVID-19, as defined at the end of this document, and, if so, must follow school system policy for the stay-at-home period, aligned to guidance in this document.

2. Parents must ensure they do not send a child to school on campus if the child has COVID-19 symptoms (as listed in this document) or is test-confirmed with COVID-19, and instead should opt to receive remote instruction until the below conditions for re-entry are met. Parents may also opt to have their students receive remote instruction if their child has had close contact with an individual who is test-confirmed with COVID-19 until the end of the school system's stay-at-home period, if no symptoms have been reported. School systems may consider screening students for COVID-19 as well. Screening is accomplished by asking questions by phone or other electronic methods and/or in person. The screening questions should also be asked of a student's parent if that parent will be dropping off or picking up their child from inside the school. Regularly performing a forehead temperature check of otherwise asymptomatic students in school is not recommended, but the practice is also not prohibited by this guidance.

3. Excluding parental drop-off and pick-up as discussed above, before visitors are allowed onto campuses, school systems must screen all visitors to determine if the visitors have COVID-19 symptoms (as listed in this document) or are test-confirmed with COVID-19. When practical, screening questions could be supplemented with temperature checks of adults. If a visitor has symptoms of COVID-19, or is test-confirmed positive with COVID-19, they must remain off campus until they meet the criteria for re-entry as noted below. Additionally, school systems must screen to determine if visitors have had close contact with an individual who is test-confirmed with COVID-19, and, if so, the visitor must follow school system policy regarding the stay-at-home period, aligned to guidance in this document.

Individuals Confirmed or Suspected with COVID-19
1. Any individuals who **themselves** either: (a) are test-confirmed to have COVID-19; or (b) experience the symptoms of COVID-19 (listed below) must stay at home throughout the infection period, and cannot return to campus until the school system screens the individual to determine any of the below conditions for campus re-entry have been met:
   o In the case of an individual who is symptomatic and is diagnosed with COVID-19, the individual may return to school when all three of the following criteria are met:
      i. at least one day (24 hours) has passed since recovery (resolution of fever without the use of fever-reducing medications);
      ii. the individual has improvement in symptoms (e.g., cough, shortness of breath); and
      iii. at least ten days have passed since symptoms first appeared.
   o In the case of an individual that is asymptomatic but has received a positive COVID-19 test result, the individual may not return to the campus until ten days have passed since a positive test.
   o In the case of an individual who has symptoms that could be COVID-19 and who is not evaluated by a medical professional or tested for COVID-19, such individual is assumed to have COVID-19, and the individual may not return to the campus until the individual has completed the same three-step set of criteria listed above.

   o If the individual has symptoms that could be COVID-19 and wants to return to school before completing the above stay at home period, the individual must either (a) obtain a medical professional's note clearing the individual for return based on an alternative diagnosis, though for health privacy reasons the note does not need to indicate what the alternative diagnosis is, or (b) obtain an acute infection test (at a physician's office, approved testing location, or other site) that comes back negative for COVID-19.

   o If the individual has tested positive for COVID-19 and believes the test was a false positive, and wants to return to school before completing the above stay at home period, the individual must either (a) obtain a medical professional's note clearing the individual for return based on an alternative diagnosis, though for health privacy reasons the note does not need to indicate what the alternative diagnosis is, or (b) obtain two PCR acute infection tests (at a physician's office, approved testing location, or other site) at least 24 hours apart that come back negative for COVID-19.

Identifying Possible COVID-19 Cases on Campus
- o Schools must immediately separate any student who shows COVID-19 symptoms while at school until the student can be picked up by a parent or guardian.
- o Schools should clean the areas used by the individual who shows COVID-19 symptoms while at school (student, teacher, or staff) as soon as is feasible.
- o Students who report feeling feverish should be given an immediate temperature check to determine if they may be symptomatic for COVID-19.

RESPOND: Practices to Respond to a Test-Confirmed Case in the School

Required Actions if Individuals with Test-confirmed Cases Have Been in a School
1. If an individual who has been in a school is test-confirmed to have COVID-19, the school must notify its local health department, in accordance with applicable federal, state and local laws and regulations, including confidentiality requirements of the Americans with Disabilities Act (ADA) and Family Educational Rights and Privacy Act (FERPA).
2. Schools must close off areas that are heavily used by the individual with the test-confirmed case (student, teacher, or staff) until the non-porous surfaces in those areas can be disinfected, unless more than 7 days have already passed since that person was on campus.
3. Consistent with school notification requirements for other communicable diseases, and consistent with legal confidentiality requirements, schools must notify all teachers, staff, and families of all students in a school if a test-confirmed COVID-19 case is identified among students, teachers or staff who participate on any on campus activities.
4. Upon receipt of information that any teacher, staff member, student, or visitor at a school is test-confirmed to have COVID-19, the school must submit a report to the Texas Department of State Health Services via an online form. The report must be submitted each Monday for the prior seven days (Monday-Sunday).

MITIGATE: Practices to Mitigate the Likelihood of COVID-19 Spread Inside the School

Operational Considerations:

Health and Hygiene Practices: General
1. Schools should attempt to have hand sanitizer and/or hand washing stations with soap and water at each entrance. They should also attempt to provide hand sanitizer and/or hand washing stations with soap and water in every classroom.
2. Students, teachers, staff, and campus visitors should be encouraged to sanitize and/or wash hands frequently.
   - o School systems are encouraged to have students engage in supervised handwashing for at least 20 seconds at least two times each day, in addition to being encouraged to wash hands after using the restroom and before eating.
   - o School systems are encouraged to teach students good handwashing techniques.
   - o Students, teachers, staff, and campus visitors should be encouraged to cover coughs and sneezes with a tissue, and if not available, covered in their elbows. Used tissues should be thrown in the trash, hands should be washed immediately with soap and water for at least 20 seconds, or hand sanitizer should be used.

3. Increasingly, evidence suggests that COVID-19 does not easily spread on surfaces and that increased cleaning practices may not be beneficial in reducing spread. Given this, campuses may institute more frequent cleaning practices, including additional cleaning by janitorial staff, if they choose to do so.
   o The CDC has provided [guidance on cleaning community buildings](#) to prevent COVID-19 spread.
   o Schools should ensure these products are stored safely, including storing harmful products where children cannot access them, and ensuring that harmful cleaning products are not used near children.
4. Increasingly, evidence suggests that improved air circulation is beneficial in reducing the spread of COVID-19. Whenever possible, schools should open windows or otherwise work to improve air flow by allowing outside air to circulate in the building.
   o The CDC has provided [guidance on increasing ventilation](#) to prevent COVID-19 spread.
   o Additional information on the benefits of improved ventilation is available in this [overview](#).
5. If a building has remained dormant for an extended period, we recommend you review [CDC guidance on maintaining water system safety](#) when buildings are unused for extended periods of time, and apply this guidance as appropriate.
6. The CDC provides a range of [printed resources](#) such as posters that promote protective measures and can serve as helpful reminders of best practices. Schools may use these or may create their own reminders.
7. On the first day a student attends school on campus, school systems must provide instruction to students on appropriate hygiene practices and other mitigation practices adopted in the local school system.

Health and Hygiene Practices: Masks
1. For the purposes of this document, masks include non-medical and medical grade disposable face masks and cloth face coverings (over the nose and mouth). Full-face shields may be used in place of a mask to protect eyes, nose, and mouth whenever a mask is not feasible or whenever the education context may benefit from the ability to see an individual's full face.
2. Schools must comply with the following requirements:
   o Every student, teacher, or staff member shall wear a mask over the nose and mouth when inside a school building, school facility, facility used for school activities, or when in an outdoor space on school property or used for school activities, wherever it is not feasible to maintain six feet of social distancing from another person not in the same household; provided, however, that this mask requirement does not apply to the following:

     ▪ Any person younger than 10 years of age, except where a school system determines it is developmentally appropriate;

     ▪ Any person with a medical condition or disability that prevents wearing a mask;

     ▪ Any person while the person is consuming food or drink, or is seated in a dining area to eat or drink;

- Any person while the person is: (a) exercising outdoors or engaging in physical activity outdoors; and (b) maintaining a safe distance from other people not in the same household; or
- Any person while the person is giving a speech for a broadcast or to an audience.

  - The above mask-wearing requirements do not apply to any school system that was exempted from the face covering requirements of Executive Order GA-29 during its effect due to a county judge attestation filed with the Texas Division of Emergency Management.
  - The governing board of a school system may modify or eliminate by formal action the above mask-related requirements.

3. In addition to the mask-wearing requirements listed above, school systems may require the use of masks or face shields for adults or students for whom it is developmentally appropriate.
4. It may be impractical for students to wear masks or face shields while participating in some non-UIL athletic or other extracurricular activities. In situations where masks are required by this guidance and when it is impractical for students to wear masks or face shields during those activities, schools must require students, teachers, staff, and visitors to wear masks or face shields when entering and exiting facilities and practice areas and when not actively engaging in those activities. Schools may, for example, allow students who are actively exercising to remove masks or face shields, as long as they maintain at least six feet of distance from other students, teachers, and staff who are not wearing masks or face shields. However, schools must require students, teachers, and staff to wear masks or face shields as they arrange themselves in positions that will allow them to maintain safe distancing.

Student-Teacher Groupings
Where feasible without disrupting the educational experience, encourage students to practice social distancing.
1. In classroom spaces that allow it, consider placing student desks a minimum of six feet apart when possible.
2. In classrooms where students are regularly within six feet of one another, schools should plan for more frequent hand washing and/or hand sanitizing and should consider whether increased airflow from the outdoors is possible.

Use of Non-Classroom Spaces
1. When feasible and appropriate (for example, in physical education classes as weather permits), it is preferable for students to gather outside, rather than inside, because of likely reduced risk of virus spread outdoors.
2. Schools may continue to offer extracurricular activities, at their discretion and consistent with the guidance in this document, for non-UIL extracurricular activities and with the guidance found on the UIL website for all UIL activities.
3. As is the case in typical years, school systems with policies that allow it may open facilities to the public. Operation of the facilities should be done consistent with the governor's executive orders for similar activities.

4. Campuses must plan for entry, exit, and transition procedures that reduce large group gatherings (of students and/or adults) in close proximity. Consider staggering school start and end times, assigning students to entries to ensure even distribution of students entering/exiting at each door, providing guidance to students to enter one at a time and wait six feet apart outside the entrance, and, where appropriate, encouraging parents to remain outside during drop-off and pick-up.
5. Depending upon local conditions, school systems should consider eliminating assemblies and other activities that bring large groupings of students and/or teachers and staff together.
6. Consider adding dividers between bathroom sinks, especially when students cannot be at least six feet apart while using the sinks.
7. School systems should consider practices that reduce the likelihood that students meet the close contact definition (defined below) at lunch. This could include having students eat lunch at their desks or outside. It could include the use of seats that are spaced at least 6 feet apart. It could include the use of dividers on cafeteria tables if they can serve the purpose of shielding the students from respiratory droplets with which they might otherwise come into contact. For meal service itself, consider individually plated meals with disposable food service items for students who do not bring their own lunch.

Transportation Recommendations
1. School systems should consider requiring students and staff to use hand sanitizer upon boarding the bus.
2. When possible, schools should open windows to allow outside air to circulate in the bus.
3. School systems should encourage families to drop students off, or walk with their student to school to reduce possible virus exposure on buses.
4. Increasingly, evidence suggests that COVID-19 does not easily spread on surfaces and that increased cleaning practices may not be beneficial in reducing spread. Given this, school systems may at their discretion apply additional cleaning practices in sanitizing buses, such as thoroughly cleaning after each bus trip, focusing on high-touch surfaces such as bus seats, steering wheels, knobs, and door handles. During cleaning, it is recommended that windows be opened to allow for additional ventilation and air flow.

Visits to Schools
o Parents and other adults can visit schools, as permitted by local school system policies. During these visits, parents and other visitors must follow virus prevention and mitigation requirements of the school.
o Schools systems should restrict visits in schools to only those essential to school operations.

Staffing
1. Employees of school systems, like employees of any organization, must continue to meet the work expectations set by their employers, subject to any applicable employment contract terms or legal requirements. However, school systems should work with teachers and other staff to ensure the safety of students, teachers, and staff. This could include allowing those staff, including teachers, who may fulfill their work duties remotely to do so. It could include modification of schedules to ensure, where feasible, that staff members, including teachers, interact with smaller and/or more consistent cohorts of individuals to further mitigate risk. In

addition, teachers and staff who are in high risk categories may be entitled to paid leave under the federal Families First Coronavirus Response Act (FFCRA) in addition to leave already accrued.

2. School teachers and staff should be trained specifically on the protocols outlined in this document and the practices adopted by their school system. Additionally, while not developed with this exact guidance in mind, Texas Agri-Life Extension offers a free online course on Special Considerations for Infection Control During COVID-19 (2hrs). This course is intended for frontline childcare workers, but the principles of the course apply equally to those working in school settings.

3. School systems should attempt to reduce in-person staff meetings or other opportunities for adults to congregate in close settings. When those meetings are necessary and cannot be done via electronic means, everyone must follow the mask protocols, as required by this guidance, remain at least 6 feet apart where feasible, consider the use of dividers, and consider whether increased airflow from the outdoors is possible in those settings.

COVID-19 Symptoms

In evaluating whether an individual has symptoms consistent with COVID-19, consider the following question:

Have they recently begun experiencing any of the following in a way that is not normal for them?
   o Feeling feverish or a measured temperature greater than or equal to 100.0 degrees Fahrenheit
   o Loss of taste or smell
   o Cough
   o Difficulty breathing
   o Shortness of breath
   o Fatigue
   o Headache
   o Chills
   o Sore throat
   o Congestion or runny nose
   o Shaking or exaggerated shivering
   o Significant muscle pain or ache
   o Diarrhea
   o Nausea or vomiting

Close Contact

This document refers to "close contact" with an individual who is test-confirmed to have COVID-19. The definition of close contact is evolving with our understanding of COVID-19, and individual scenarios should be determined by an appropriate public health agency. In general, close contact is defined as:
   a. being directly exposed to infectious secretions (e.g., being coughed on); or

b. being within 6 feet for a total of approximately 15 minutes throughout the course of a day; however, additional factors like case/contact masking (i.e., both the infectious individual and the potential close contact have been consistently and properly masked), ventilation, presence of dividers, and case symptomology may affect this determination.

Either (a) or (b) defines close contact if it occurred during the infectious period of the case, defined as two days prior to symptom onset to 10 days after symptom onset. In the case of asymptomatic individuals who are test-confirmed with COVID-19, the infectious period is defined as two days prior to the confirming test and continuing for 10 days following the confirming test.

Screening Questionnaire Information
4. When asking individuals if they have symptoms for COVID-19, school systems must only require the individual to provide a "Yes" or "No" to the overall statement that they are symptomatic for COVID-19, as opposed to asking the individual for specific symptom confirmation. School systems are not entitled to collect information during screening on the specific health information of an individual beyond that they are symptomatic.
5. Once it is determined that individuals who responded "Yes" to either of these questions have met the criteria for re-entry, school systems must destroy those individuals' responses.

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[i] https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/
[ii] Within sections that primarily contain requirements, there are some recommended practices (indicated with "should"). Likewise, within sections that primarily contain recommendations, there are some required practices (indicated with "must").

GOVERNOR GREG ABBOTT

March 2, 2021

The Honorable Ruth R. Hughs
Secretary of State
State Capitol Room 1E.8
Austin, Texas 78701

Dear Secretary Hughs:

Pursuant to his powers as Governor of the State of Texas, Greg Abbott has issued the following:

Executive Order No. GA-34 relating to the opening of Texas in response to the COVID-19 disaster.

The original executive order is attached to this letter of transmittal.

Respectfully submitted,

Gregory S. Davidson
Executive Clerk to the Governor

GSD/gsd

Attachment

𝕱xecutive 𝕺rder

BY THE
GOVERNOR OF THE STATE OF TEXAS

Executive Department
Austin, Texas
March 2, 2021

EXECUTIVE ORDER
GA 34

Relating to the opening of Texas in response to the COVID-19 disaster.

WHEREAS, I, Greg Abbott, Governor of Texas, issued a disaster proclamation on March 13, 2020, certifying under Section 418.014 of the Texas Government Code that the novel coronavirus (COVID-19) poses an imminent threat of disaster for all counties in the State of Texas; and

WHEREAS, in each subsequent month effective through today, I have renewed the disaster declaration for all Texas counties; and

WHEREAS, I have issued executive orders and suspensions of Texas laws in response to COVID-19, aimed at protecting the health and safety of Texans and ensuring an effective response to this disaster; and

WHEREAS, I issued Executive Order GA-08 on March 19, 2020, mandating social-distancing restrictions in accordance with guidelines promulgated by President Donald J. Trump and the Centers for Disease Control and Prevention (CDC); and

WHEREAS, I subsequently issued a series of superseding executive orders aiming to achieve the least restrictive means of combatting the evolving threat to public health by adjusting social-distancing restrictions while implementing a safe, strategic plan to reopen Texas; and

WHEREAS, under Executive Order GA-32, in effect since October 14, 2020, most establishments have been able to operate up to at least 75 percent of total occupancy, except in some areas with high hospitalizations as defined in that order, where most establishments have been able to operate up to at least 50 percent of total occupancy; and

WHEREAS, I also issued Executive Order GA-29, regarding the use of face coverings to control the spread of COVID-19, and a series of executive orders, most recently GA-31, limiting certain medical surgeries and procedures; and

WHEREAS, COVID-19 hospitalizations and the rate of new COVID-19 cases have steadily declined due to the millions of Texans who have voluntarily been vaccinated, many more who are otherwise immune, improved medical treatments for COVID-19 patients, abundant supplies of testing and personal protective equipment, and Texans' adherence to safe practices like social distancing, hand sanitizing, and use of face coverings; and

WHEREAS, in the Texas Disaster Act of 1975, the legislature charged the governor with the responsibility "for meeting ... the dangers to the state and people presented by

disasters" under Section 418.011 of the Texas Government Code, and expressly granted the governor broad authority to fulfill that responsibility; and

WHEREAS, under Section 418.012, the "governor may issue executive orders ... hav[ing] the force and effect of law;"

NOW, THEREFORE, I, Greg Abbott, Governor of Texas, by virtue of the power and authority vested in me by the Constitution and laws of the State of Texas, and in accordance with guidance from medical advisors, do hereby order the following on a statewide basis effective at 12:01 a.m. on March 10, 2021:

1. In all counties not in an area with high hospitalizations as defined below:
   a. there are no COVID-19-related operating limits for any business or other establishment; and
   b. individuals are strongly encouraged to wear face coverings over the nose and mouth wherever it is not feasible to maintain six feet of social distancing from another person not in the same household, but no person may be required by any jurisdiction to wear or to mandate the wearing of a face covering.

   "Area with high hospitalizations" means any Trauma Service Area that has had seven consecutive days in which the number of COVID-19 hospitalized patients as a percentage of total hospital capacity exceeds 15 percent, until such time as the Trauma Service Area has seven consecutive days in which the number of COVID-19 hospitalized patients as a percentage of total hospital capacity is 15 percent or less. A current list of areas with high hospitalizations will be maintained at www.dshs.texas.gov/ga3031.

2. In any county located in an area with high hospitalizations as defined above:
   a. there are no state-imposed COVID-19-related operating limits for any business or other establishment;
   b. there is no state-imposed requirement to wear a face covering; and
   c. the county judge may use COVID-19-related mitigation strategies; *provided, however, that*:
      i. business and other establishments may not be required to operate at less than 50 percent of total occupancy, with no operating limits allowed to be imposed for religious services (including those conducted in churches, congregations, and houses of worship), public and private schools and institutions of higher education, and child-care services;
      ii. no jurisdiction may impose confinement in jail as a penalty for violating any order issued in response to COVID-19; and
      iii. no jurisdiction may impose a penalty of any kind for failure to wear a face covering or failure to mandate that customers or employees wear face coverings, except that a legally authorized official may act to enforce trespassing laws and remove violators at the request of a business establishment or other property owner.

3. In providing or obtaining services, every person (including individuals, businesses, and other legal entities) is strongly encouraged to use good-faith efforts and available resources to follow the Texas Department of State Health Services (DSHS) health recommendations, found at www.dshs.texas.gov/coronavirus.

4. Nothing in this executive order precludes businesses or other establishments from requiring employees or customers to follow additional hygiene measures, including the wearing of a face covering.

5. Nursing homes, state supported living centers, assisted living facilities, and long-

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SECRETARY OF STATE
1:15 pm O'CLOCK

MAR 0 2 2021

term care facilities should follow guidance from the Texas Health and Human Services Commission (HHSC) regarding visitations, and should follow infection control policies and practices set forth by HHSC, including minimizing the movement of staff between facilities whenever possible.

6. Public schools may operate as provided by, and under the minimum standard health protocols found in, guidance issued by the Texas Education Agency. Private schools and institutions of higher education are encouraged to establish similar standards.

7. County and municipal jails should follow guidance from the Texas Commission on Jail Standards regarding visitations.

8. Executive Orders GA-17, GA-25, GA-29, and GA-31 are rescinded in their entirety.

9. This executive order shall supersede any conflicting order issued by local officials in response to the COVID-19 disaster, but only to the extent that such a local order restricts services allowed by this executive order or allows gatherings restricted by this executive order. Pursuant to Section 418.016(a) of the Texas Government Code, I hereby suspend Sections 418.1015(b) and 418.108 of the Texas Government Code, Chapter 81, Subchapter E of the Texas Health and Safety Code, and any other relevant statutes, to the extent necessary to ensure that local officials do not impose restrictions in response to the COVID-19 disaster that are inconsistent with this executive order, provided that local officials may enforce this executive order as well as local restrictions that are consistent with this executive order.

10. All existing state executive orders relating to COVID-19 are amended to eliminate confinement in jail as an available penalty for violating the executive orders. To the extent any order issued by local officials in response to the COVID-19 disaster would allow confinement in jail as an available penalty for violating a COVID-19-related order, that order allowing confinement in jail is superseded, and I hereby suspend all relevant laws to the extent necessary to ensure that local officials do not confine people in jail for violating any executive order or local order issued in response to the COVID-19 disaster.

This executive order supersedes Executive Orders GA-17, GA-25, GA-29, GA-31, and GA-32, but does not supersede Executive Orders GA-10 or GA-13. This executive order shall remain in effect and in full force unless it is modified, amended, rescinded, or superseded by the governor. This executive order may also be amended by proclamation of the governor.

Given under my hand this the 2nd day of March, 2021.

GREG ABBOTT
Governor

ATTESTED BY:

RUTH R. HUGHS
Secretary of State

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SECRETARY OF STATE
1:15PM O'CLOCK

MAR 0 2 2021

Operational Strategy for K-12 Schools through Phased Mitigation

Updated Feb. 26, 2021   Print

Summary of Recent Changes

Updates as of February 26, 2021 ⌃

- **February 26, 2021** – Link added to resource summarizing how to use CDC building ventilation recommendations in schools and child care programs
- **February 24, 2021** – Broken hyperlinks fixed in guidance

Executive Summary

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 safely 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. 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 the broader community.

This operational strategy presents recommendations based on the best-available evidence at the time of release. As science and data on COVID-19 continue to evolve, guidance and recommendations will be updated to reflect new evidence. This document is intended 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). This document is intended to complement the U.S. Department of Education's Handbook on Strategies for Safely Reopening Elementary and Secondary Schools 📄 ⧉ . It reflects 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. This 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.

Evidence suggests that many K-12 schools that have strictly implemented mitigation strategies have been able to safely open for in-person instruction and remain open.[1] This document provides an operational strategy to support K-12 schools in opening for in-person instruction and remaining open through an integrated package of mitigation components. These essential elements include:

1. Consistent implementation of layered mitigation strategies to reduce transmission of SARS-CoV-2 in schools
2. Indicators of community transmission to reflect level of community risk
3. Phased mitigation and learning modes based on levels of community transmission

The following public health efforts provide additional layers of COVID-19 prevention in schools:

- Testing to identify individuals with SARS-CoV-2 infection to limit transmission and outbreaks
- Vaccination for teachers and school staff, and in communities, as soon as supply allows

Health Equity Considerations

The absence of in-person educational options may disadvantage children from low-resourced communities, which may include large representation of racial and ethnic minority groups, English learners, and students with disabilities. Plans for safe delivery of in-person instruction in K-12 schools must consider efforts to promote fair access to healthy educational environments for students and staff. Thus, essential elements of school reopening plans should take into account the communities and groups that have been disproportionately affected by COVID-19 infections and severe outcomes. Schools play a critical role in promoting equity in education and health for groups disproportionately affected by COVID-19.

Essential Elements of Safe K-12 School In-person Instruction

1. Mitigation strategies to reduce transmission of SARS-CoV-2 in schools

   Regardless of the level of community transmission, all schools should use and layer mitigation strategies. Five key mitigation strategies are essential to safe delivery of in-person instruction and help to mitigate COVID-19 transmission in schools:

   - Universal and correct use of masks
   - Physical distancing
   - Handwashing and respiratory etiquette
   - Cleaning and maintaining healthy facilities
   - Contact tracing in combination with isolation and quarantine, in collaboration with the health department

   Schools providing in-person instruction should prioritize two mitigation strategies:

   1. Universal and correct use of masks should be required, at all levels of community transmission. Require consistent and correct use of face masks, by all students, teachers, and staff to prevent SARS-CoV-2 transmission through respiratory droplets.
   2. Physical distancing (at least 6 feet) should be maximized to the greatest extent possible. To ensure physical distancing, schools should establish policies and implement structural interventions to promote physical distance of at least 6 feet between people. Cohorting or podding is recommended to minimize exposure across the school environment.

   All mitigation strategies provide some level of protection, and layered strategies implemented concurrently provide the greatest level of protection. CDC's K-12 Schools COVID-19 Mitigation Toolkit 🔴 includes resources, tools, and checklists to help school administrators and school officials prepare schools for in-person instruction. These tools and resources include aspects for addressing health equity considerations such as class sizes, internet connectivity, access to public transportation, and other topics.

2. Indicators of community transmission

   School administrators, working with local public health officials, should assess the level of risk in the community since the risk of introduction of a case in the school setting is dependent on the level of community transmission. CDC recommends the use of two measures of community burden to determine the level of risk of transmission: total number of new cases per 100,000 persons in the past 7 days; and percentage of nucleic acid amplification test (NAATs) results that are positive during the last 7 days. The two measures of community burden should be used to assess the incidence and spread of SARS-CoV-2 in the surrounding community (e.g., county). The transmission level for any given location will change over time and should be reassessed weekly for situational awareness and to continuously inform planning.

While risk of exposure to SARS-CoV-2 in a school may be lower when indicators of community spread are lower, this risk is also dependent upon the implementation of school and community mitigation strategies. If community transmission is low but school and community mitigation strategies are not implemented or inconsistently implemented, then the risk of exposure and subsequent transmission of SARS-CoV-2 in a school will increase. Alternately, if community transmission is high, but school and community mitigation strategies are implemented and strictly followed as recommended, then the risk of transmission of SARS-CoV-2 in a school will decrease.

3. **Phased mitigation, learning modes, and testing**

At any level of community transmission, all schools have options to provide in-person instruction (either full or hybrid), through strict adherence to mitigation strategies[1]. Recommended learning modes vary to minimize risk of SARS-CoV-2 transmission in school by emphasizing layered mitigation, including school policies requiring universal and correct mask use. The recommended learning modes (in-person, hybrid, virtual) depend on the level of community transmission and strict adherence to mitigation.

This document presents an operational plan for schools that emphasizes mitigation at all levels of community transmission.

- 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. Schools should be prioritized for reopening and remaining open for in-person instruction over nonessential businesses and activities.

- In-person instruction should be prioritized over extracurricular activities including sports and school events, to minimize risk of transmission in schools and protect in-person learning.

- Lower incidence of COVID-19 among younger children compared to teenagers[2] suggests that younger students (for example, elementary school students) are likely to have less risk of in-school transmission due to in-person learning than older students (middle school and high school).

- Families of students who are at increased risk of severe illness (including those with special healthcare needs) or who live with people at increased risk should be given the option of virtual instruction regardless of the mode of learning offered.

- Schools are encouraged to use cohorting or podding of students, especially in moderate (yellow), substantial (orange), and high (red) levels, to facilitate testing and contact tracing, and to minimize transmission across pods.

- Schools that serve populations at risk for learning loss during virtual instruction should be prioritized for reopening and be provided the needed resources to implement mitigation.

- When implementing phased mitigation in hybrid learning modes, schools should consider prioritizing in-person instruction for students with disabilities who may require special education and related services directly provided in school environments, as well as other students who may benefit from receiving essential instruction in a school setting.

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 with safely reopening. A decision to remain open should involve considerations for further strengthening mitigation strategies and continuing to monitor case incidence and test positivity to reassess decisions.

Despite careful planning and consistent implementation of mitigation, some situations may occur that lead school officials to consider temporarily closing schools or parts of a school (such as a class or grade level) to in-person instruction. These decisions should be made based on careful considerations of a variety of factors and with the emphasis on ensuring the health and wellness of students, their families, and teachers and staff. Such situations may include classrooms or schools experiencing an active outbreak and schools in areas experiencing rapid or persistent rises in case incidence or severe burden on health care capacity.

Multiple SARS-CoV-2 variants are circulating globally. Some variants seem to spread more easily and quickly than other variants, which may lead to more cases of COVID-19. Rigorous implementation of and adherence to mitigation strategies is essential to control the spread of variants of SARS-CoV-2. As more information becomes available, it is possible that due to increased levels of community transmission resulting from a variant of SARS-CoV-2, mitigation strategies and school guidance may need to be updated to account for new evidence on risk of transmission and effectiveness of mitigation.

Additional COVID-19 Prevention in Schools

Testing

When schools implement testing combined with key mitigation strategies, they can detect new cases to prevent outbreaks, reduce the risk of further transmission, and protect students, teachers, and staff from COVID-19.

Diagnostic Testing

At all levels of community transmission, schools should offer referrals to diagnostic testing to any student, teacher, or staff member who exhibits symptoms of COVID-19 at school. Schools should advise teachers, staff, and students to stay home if they are sick or if they have been exposed to SARS-CoV-2 and refer these individuals for testing. They should also refer for testing asymptomatic individuals who were exposed to someone with a confirmed or suspected case of COVID-19. In some schools, school-based healthcare professionals (e.g., school nurses) may perform SARS-CoV-2 diagnostic testing (including rapid, point-of-care testing, and antigen testing) if they are trained in specimen collection and obtain a Clinical Laboratory Improvement Amendments (CLIA) certificate of waiver ⧉ . It is important that school-based healthcare professionals have access to, and training on, the proper use of personal protective equipment (PPE). If a COVID-19 diagnosis is confirmed, schools can assist public health officials in determining which close contacts could be tested and either isolated or quarantined. Individuals should isolate or quarantine at home, not in school settings, and should stay home until it is safe for them to be around others.

Screening Testing

Some schools may also elect to use screening testing as a strategy to identify cases and prevent secondary transmission. Screening testing can be used as an additional layer of mitigation to complement mitigation strategies in schools. Screening testing is intended to identify infected individuals without symptoms (or prior to development of symptoms) who may be contagious so that measures can be taken to prevent further transmission. For schools that implement expanded screening testing, screening testing should be offered at moderate (yellow), substantial (orange), and high (red) levels of community transmission, to students, teachers, and staff and at low (blue) levels to teachers and staff who have no symptoms and no known exposures. Additional considerations in implementing screening testing:

- When determining which individuals should be selected for screening testing, schools and public health officials may consider prioritizing teachers and staff over students given the higher risk of severe disease outcomes among adults. In selecting among students, schools and public health officials may choose to prioritize high school students, then middle school students, then elementary school students, where applicable.

- Public health officials and school administrators may consider placing a higher priority for access to testing in schools that serve populations experiencing a disproportionate burden of COVID-19 cases or severe disease. These may include schools in communities with moderate or large proportions of racial and ethnic groups that have experienced disproportionately high rates of COVID-19 cases relative to population size, and schools in geographic areas with limited access to testing due to distance or lack of availability of testing.

- Every COVID-19 testing site is required to report to state or local health officials all testing performed. Schools that use testing must apply for and receive a Clinical Laboratory Improvement Amendments (CLIA) ⧉ certificate of waiver. Schools must report test results to state or local public health departments as mandated by the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

- Testing should be offered on a voluntary basis. Consent from a parent or legal guardian (for minor students) or from the individual (for adults, including adult students and teachers and staff) is required for school-based testing.

Vaccination for teachers and staff, and in communities as soon as supply allows

Teachers and school staff hold jobs critical to the continued functioning of society and are at potential occupational risk of exposure to SARS-CoV-2. State, territorial, local and tribal (STLT) officials should consider giving high priority to teachers in early phases of vaccine distribution. The Advisory Committee on Immunization Practices (ACIP) recommends that frontline essential workers, including those who work in the education sector (teachers and school staff), be prioritized for vaccine allocation in phase 1b, following health care personnel and residents of long-term care facilities (phase 1a). Vaccinating teachers and school staff can be considered one layer of mitigation and protection for staff and students. Strategies to minimize barriers to accessing vaccination for teachers and other frontline essential workers, such as vaccine clinics at or close to the place of work, are optimal. Access to vaccination should not be considered a condition for reopening schools for in-person instruction. Even after teachers and staff are vaccinated, schools need to continue mitigation measures for the foreseeable future, including requiring masks in schools and physical distancing.

Background

Schools are an important part of the infrastructure of communities, as they provide safe, supportive learning environments for students, employ teachers and other staff, and enable parents, guardians, and caregivers to work. Schools also help to mitigate health disparities by providing critical services including school meal programs and facilitate access to social, physical, behavioral, and mental health services. Many students are either missing or have had interruptions in these services due to school building closures and virtual and hybrid learning. The occurrence of SARS-CoV-2 infection in schools reflects transmission in the surrounding community.[1] When making decisions on when to open or reopen schools for in-person learning, it is important to understand SARS-CoV-2 transmission within the surrounding community to determine the possible risk of introduction and transmission of SARS-CoV-2 within the school.

There is evidence to suggest that K-12 in-person school attendance is not a primary driver of community transmission[2-5]. Although children can be infected with SARS-CoV-2, can get sick from COVID-19, and can spread the virus to others[3,6-7], evidence indicates that children are less susceptible than adults, and may be less infectious[8-9]. In addition, children are less likely than adults to have severe illness or die and are more likely to be asymptomatic[10-12]. Evidence from available studies suggests that the risk for SARS-CoV-2 introduction and transmission among elementary school-aged children might be lower than that for reopening middle schools and high schools[1,3,9,13]. As a result, evidence suggests a need to adjust mitigation strategies based on higher susceptibility and infectiousness among teens compared to younger children. Data suggest that it is possible for communities to bring down cases of COVID-19 while keeping schools open to in-person instruction[2]. Furthermore, models of consistent implementation of mitigation measures in schools have shown success in limiting outbreaks and infections in schools[14-18]. CDC's Science Brief on Transmission of SARS-CoV-2 in K-12 Schools summarizes evidence on COVID-19 among children and adolescents and what is known about SARS-CoV-2 transmission in schools.

International and domestic experiences have demonstrated that even when a school carefully coordinates, plans, and prepares for delivering in-person instruction, cases of COVID-19 may still occur[14,19]. Expecting and planning for the occurrence of one or more cases of COVID-19 in schools can help schools respond immediately to mitigate the impact, minimize spread within schools, and allow the school to remain open for in-person learning. When mitigation strategies are consistently and correctly used, the risk of spread within the school environment is decreased[1,14,17]. For schools to operate in-person learning safely, the association between levels of community transmission and risk of transmission in school must also be considered. Communities that fully implement and strictly adhere to multiple mitigation strategies, especially universal and proper masking, will reduce COVID-19 incidence within the community as well as within schools to protect students, teachers, and staff members.

Essential Elements of Safe K–12 School Operations for In-Person Learning

CDC has developed guidance for mitigation strategies that K-12 school administrators can use to help protect students, teachers, and staff and slow the spread of COVID-19. If mitigation strategies are strictly adhered to[2], K-12 schools can safely open for in-person instruction and remain open[20]. In addition, the association between COVID-19 incidence and outbreaks 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[1]. This document provides an operational strategy for safe delivery of in-person instruction in K-12 schools through the integration of a package of mitigation and control components.

1. Consistent implementation of layered mitigation strategies to reduce SARS-CoV-2 transmission in schools
2. Indicators of community transmission to reflect levels of community risk
3. Phased mitigation and learning modes based on levels of community transmission

The following public health efforts provide additional layers of COVID-19 prevention in schools.

- Testing to identify individuals with a SARS-CoV-2 infection to limit transmission and outbreaks
- Vaccination for teachers, staff, and in communities as soon as supply allows

Health Equity Considerations

Long-standing systemic health and social inequities have put many racial and ethnic minority groups at increased risk of getting sick and dying from COVID-19. People who identify as American Indian/Alaska Native, Black, and Hispanic are disproportionately affected by COVID-19; these disparities have also emerged among children[11]. Conditions in the places

where people live, learn, work, play, and gather affect a wide range of health risks and outcomes, such as SARS-CoV-2 exposure, infection, severe illness, and death.

The absence of in-person educational options may disadvantage children from all backgrounds, particularly children in low-resourced communities who may be at an educational disadvantage. These students may be less likely to have access to technology to facilitate virtual learning and more likely to rely on key school-supported resources like food programs, special education and related services, counseling, and after-school programs. Some parents and caregivers may have less-flexible jobs that do not permit staying at home to provide childcare and aid with virtual learning if schools are closed to in-person instruction. On the other hand, certain racial and ethnic groups have borne a disproportionate burden of illness and serious outcomes from COVID-19. These health disparities are evident even among school-aged children[11], suggesting that in-person instruction may pose a greater risk of COVID-19 to disproportionately affected populations. For these reasons, health equity considerations related to in-person instruction are an integral part of this complex decision-making. In order to enable in-person learning in schools that serve racial and ethnic groups disproportionately affected by COVID-19, school administrators and public health officials can work together to assist schools with planning and implementing comprehensive mitigation strategies, engage community partners, and assist with referrals to medical care. It is important that these schools have the resources and technical assistance needed to adopt and diligently implement actions to slow the spread of the virus that causes COVID-19 inside the school and out in the community. Studies have also highlighted racial and ethnic differences in parents' attitudes and concerns about school reopening during COVID-19. Compared with White parents, non-White parents may be less likely to feel that schools should reopen for all students and are more concerned about adherence to mitigation strategies, schools reopening safely, their child becoming ill with COVID-19, and their child bringing home COVID-19[21]. Understanding racial/ethnic differences in parental attitudes and concerns about school reopening can inform communication and mitigation strategies and highlights the importance of considering risks for severe COVID-19 and family resource needs when developing options for school attendance during the COVID-19 pandemic.

Plans for safely delivering in-person instruction in K-12 schools must consider efforts to promote fair access to healthy educational environments for students and staff. Thus, essential elements of school reopening plans should take into account the communities and groups that have been disproportionately affected by COVID-19 infections and severe outcomes. These considerations must extend to planning and implementation of phased mitigation, testing, and vaccination strategies to ensure equitable access to supports and services.

School administrators and public health officials can help ensure access to education and to health and other social support services. To prevent the spread of SARS-CoV-2 in schools, school administrators and staff, public health officials, and community leaders must work together to ensure that schools, students, and families have resources to be intentionally engaged in educational activities and opportunities to maintain and manage their health and wellness. Schools play a critical role in promoting equity in education and health for groups disproportionately affected by COVID-19.

Engagement with educators, families, and the school community

A successful school reopening strategy requires engaging the entire school community to establish a safe environment for all educators, school staff, and students and promote trust and confidence. School reopening planning should include, at a minimum, administrators, teachers, student and parent representatives, and specialized instructional support personnel, including school counselors, school social workers, school psychologists, and nurses, as well as facilities managers and custodial staff, transportation personnel, food personnel, and family services representatives. School reopening planning should include student and parent representatives, and individuals and organizations that represent the interests of students, staff, and parents with disabilities or limited English proficiency, and others with access and functional needs, so that specific interests are included in the early stages of planning.

Consistent with health equity considerations, schools and school districts should conduct active and specific outreach to underserved families – including parents/guardians of students of color, students from low-income backgrounds, students with disabilities, English learners, students experiencing homelessness, and students in foster care. This communication should be conducted in families' home languages or mode of communication and in alternate formats as needed to facilitate effective communication for individuals with disabilities, and, where appropriate, in partnership with trusted community-based organizations.

1. Mitigation strategies to reduce transmission of SARS–CoV–2 in schools

Regardless of the level of community transmission, **it is critical that schools use and layer** mitigation strategies. Five key mitigation strategies are essential to safe delivery of in-person instruction and help to mitigate COVID-19 transmission in schools:

- Universal and correct use of masks
- Physical distancing
- Handwashing and respiratory etiquette
- Cleaning and maintaining healthy facilities
- Contact tracing in combination with isolation and quarantine, in collaboration with the health department

Schools providing in-person instruction should prioritize two mitigation strategies:

1. Universal and correct use of masks should be required, at all levels of community transmission.
2. Physical distancing (at least 6 feet) should be maximized to the greatest extent possible. In hybrid instruction, scheduling should be planned to ensure physical distancing.

All mitigation strategies provide some level of protection, and layered strategies implemented concurrently provide the greatest level of protection. When planning for in-person instruction, schools should place particular emphasis on universal and correct masking and physical distancing as top priorities for implementation. These strategies have the greatest potential for reducing transmission and can also be monitored for consistent and correct implementation.

Schools should adopt the key mitigation strategies to the largest extent practical —a layered approach is essential. Additional information about each of the mitigation strategies and options for implementation of the strategies are provided, along with core principles for how schools may consider each of these strategies.

Health equity considerations in mitigation strategies

- Federal disability laws require an individualized approach for students with disabilities consistent with the student's IEP or Section 504 plan, if applicable. These students include those who have limited mobility; have difficulty accessing information due to visual, hearing, or other disabilities; require close contact with direct service providers; have trouble understanding information; have difficulties with changes in routines; or have other concerns related to their disability. In these instances, educators and school leaders must remain aware of their obligations under Federal disability laws, and should also consider adaptations and alternatives to mitigation strategies, while maintaining efforts to protect students, teachers, and staff from COVID-19.
- CDC's K-12 Schools COVID-19 Mitigation Toolkit [PDF] includes resources, tools, and checklists to help school administrators and school officials prepare schools to open for in-person instruction and to manage ongoing operations. These tools and resources include aspects for addressing health equity considerations such as class sizes, internet connectivity, access to public transportation, etc.

Universal and correct use of masks

Core principle for masks: Require consistent and correct use of face masks, by all students, teachers, and staff to prevent SARS-CoV-2 transmission through respiratory droplets. Masks should be worn at all times, by all persons in school facilities, with exceptions for certain persons who, because of a disability, cannot wear a mask or wear a mask safely, or for certain settings such as while eating or drinking[3]. Masks should be required in all classroom and non-classroom settings, including hallways, school offices, restrooms, gyms, auditoriums, etc.

- **Mask policies** for all students, teachers, and staff set the expectation that individuals will use masks throughout the school.
- Most students, including those with disabilities, can tolerate and safely wear a mask. However, a narrow subset of students with disabilities may not be able to wear a mask or cannot safely wear a mask. Those who cannot safely wear a mask – for example, a person with a disability who, for reasons related to the disability, would be physically unable to remove a mask without assistance if breathing becomes obstructed – should not be required to wear one. For the remaining portion of the subset, schools should make individualized determinations as required by Federal disability laws in order to determine if an exception to the mask requirement is necessary and appropriate for a particular student. If a child with a disability cannot wear a mask, maintain physical distance, or adhere to other public health

requirements, the student is still entitled to an appropriate education, which in some circumstances may need to be provided virtually.

- If visitors are permitted in school, they should be required to wear masks at all times and should maintain at least 6 feet of distance from others.

- Schools should encourage modeling of correct and consistent mask use by school leaders, local leaders, and others respected in the community.

- The most effective fabrics for cloth masks are tightly woven such as cotton and cotton blends, breathable, and in two or three fabric layers. Masks with exhalation valves or vents, those that use loosely woven fabrics, and ones that do not fit properly are not recommended.

Physical distancing

Core principle for physical distancing: Establish school policies and implement structural interventions to promote physical distance of at least 6 feet between people. In areas with substantial and high community transmission, physical distancing is essential in providing protection, minimizing risk of exposure, and limiting the number of close contacts among cases. The interventions presented in this section provide examples of ways to promote physical distancing and alternatives when physical distancing is not always feasible.

- **Cohorting:** Cohorts (or "pods") are groups of students, and sometimes teachers or staff, that stay together throughout the school day to minimize exposure to other individuals across the school environment. Cohorts should remain as static as possible by having the same group of students stay with the same teachers or staff (all day for young children, and as much as possible for older children). If additional space is needed to support cohorting, consider all available safe spaces in school and community facilities. Limit mixing between cohorts.

- When developing cohorts it is important to consider services for students with disabilities, English language learners, and other students so that they may receive services within the cohort, but also ensuring equity, integration, and other requirements of civil rights laws, including Federal disability laws. If itinerant staff (e.g., speech language pathologists, Title I targeted assistance teachers) are required to provide services within existing cohorts, mitigation measures should be taken to limit the potential transmission of SARS-CoV-2 infection, including providing masks and any necessary PPE for staff and children who work with itinerant staff. Itinerant staff members should keep detailed contact tracing logs.

- **Staggered scheduling:** Stagger school arrival and drop-off times or locations by cohort, or put in place other protocols to limit contact between cohorts, as well as direct contact with parents.

- Alternate schedules **with fixed cohorts** of students and staff to decrease class size and promote physical distancing.

- Install physical barriers **and guides** such as sneeze guards and partitions particularly in areas where it is difficult for individuals to remain at least 6 feet apart (e.g., reception desks).

- **Visitors:** Limit any nonessential visitors, volunteers, and activities involving external groups or organizations as much as possible – especially with individuals who are not from the local geographic area (e.g., not from the same community, town, city, county). Exceptions should be made for students with disabilities who require related services administered by direct service providers (e.g., speech therapists who serve multiple schools). Require all visitors to wear masks and keep a 6-foot distance from others. Schools should permit visitors only in areas of low (blue) community transmission.

Handwashing and respiratory etiquette

Core principle for handwashing and respiratory etiquette: Through ongoing health education units and lessons, teach children proper handwashing and reinforce behaviors, and provide adequate supplies. Ensure that teachers and staff use proper handwashing and respiratory etiquette.

- Teach **and reinforce** handwashing with soap and water for at least 20 seconds and increase monitoring to ensure adherence among students, teachers, and staff. Schools can explore options for curricular integration, such as in health and science lessons.

- Encourage students and staff to cover coughs and sneezes with a tissue when not wearing a mask and immediately wash their hands after blowing their nose, coughing, or sneezing.

- Some students with disabilities may need assistance with handwashing and respiratory etiquette behaviors.

- **Adequate supplies:** Support healthy hygiene behaviors by providing adequate supplies, including soap, a way to dry hands, tissues, face masks (as feasible) and no-touch/foot-pedal trash cans. If soap and water are not readily available,

schools can provide alcohol-based hand sanitizer that contains at least 60% alcohol (for staff and older children who can safely use hand sanitizer).

Cleaning and maintaining healthy facilities

Core principle for cleaning and maintaining healthy facilities: Routinely and consistently clean high-touch surfaces (such as doorknobs and light switches). Make changes to physical spaces to maintain a healthy environment and facilities.

- **Cleaning:** Regularly clean frequently touched surfaces (e.g., playground equipment, door handles, sink handles, toilets, drinking fountains) within the school and on school buses at least daily or between use as much as possible.
- **Modified layouts:** adjust physical layouts in classrooms and other settings to maximize physical space, such as by turning desks to face in the same direction.
- **Physical barriers and guides:** Install physical barriers and provide guides such as tape on floors and arrows to promote physical distancing and minimize crowding.
- **Shared objects:** Discourage sharing items, particularly those that are difficult to clean.
- **Water systems:** Take steps to ensure that all water systems and features (e.g., sink faucets, decorative fountains) are safe to use after a prolonged facility shutdown.
- **Communal spaces:** Close communal use of shared spaces, such as dining halls, if possible; otherwise, stagger use and clean between use. Consider use of larger spaces such as dining halls for academic instruction, to maximize physical distancing.
- **Food service:** Avoid offering any self-serve food or drink options such as hot and cold food bars, salad or condiment bars, and drink stations.
- **Ventilation:** Improve ventilation to the extent possible such as by opening windows and doors to increase circulation of outdoor air to increase the delivery of clean air and dilute potential contaminants. Opening windows and doors should be consistent with school safety protocols and safety plans. Do not open windows and doors if doing so poses a safety risk or a health risk (e.g., risk of falling, triggering asthma symptoms) to anyone using the facility. Opening windows and doors should be consistent with school safety protocols and safety plans. More information on ventilation can be found here.

Contact tracing in combination with isolation and quarantine

Core principle for contact tracing: Schools should collaborate with the STLT health department, to the extent allowable by privacy laws and other applicable laws, to confidentially provide information about people diagnosed with or exposed to COVID-19. Persons with positive test results should isolate, and close contacts should quarantine. Individuals should isolate or quarantine at home, not in school settings, and should stay home until CDC recommendations for isolation or quarantine have been met.

- **Staying home when appropriate:** Educate teachers, staff and families about when they and their children should stay home and when they can return to school. Students, teachers, and staff who have symptoms should stay home and be referred to their healthcare provider for testing and care. Schools may need to consider flexible sick leave policies and practices that enable staff to stay home when they are sick, have been exposed, or are caring for someone who is sick. School systems should recruit and train sufficient substitute educators to ensure that teachers can stay home when they are sick or have been exposed to someone who is confirmed or suspected of having COVID-19.
- **Isolation** should be used to separate people diagnosed with COVID-19 from those who are not infected. Students, teachers, and staff who are in isolation should stay home and follow the direction of the local public health authority about when it is safe for them to be around others.
- **Contact tracing:** Schools should work with the state, territorial, local, or Tribal health department to facilitate, **to the extent allowable by applicable laws,** systematic contact tracing of infected students, teachers, and staff, and consistent implementation of isolation of cases and quarantine of contacts. Schools can prepare and provide information and records to aid in the identification of potential contacts, exposure sites and mitigation recommendations, consistent with applicable laws, including those related to privacy and confidentiality. Health department collaboration with K-12 school administration to obtain contact information of other individuals in shared rooms, class schedules, shared meals, or extracurricular activities will expedite contact tracing. For schools to remain open, health departments should ensure they have a sufficient number of contact tracers to complete case investigation and notify contacts within 48 hours of a positive test result.

- **Case investigation** and contact tracing are essential interventions in a successful, multipronged response to COVID-19, and should be implemented along with other mitigation strategies. As K-12 schools resume in-person learning, case investigation and contact tracing with staff, teachers and students should be anticipated as a crucial strategy to reduce further transmission once a case is identified. Prompt and coordinated actions, including case investigation and contact tracing, may inform decision-making about strengthening, focusing, and relaxing mitigation strategies. Case investigation and contact tracing help to prevent further transmission of disease by separating people who have (or may have) COVID-19 from people who do not. Prompt identification, voluntary self-quarantine, and monitoring of those contacts exposed to SARS-CoV-2 can effectively break the chain of transmission and prevent further spread of the virus in a community.

- **Quarantine** should be used for students, teachers, and staff who might have been exposed to COVID-19. Close contacts, identified through contact tracing, should quarantine. Students, teachers, and staff who are in quarantine should stay home and follow the direction of the local public health department about when it is safe for them to be around others. If a child with a disability is required to quarantine, the school is required to provide services consistent with Federal disability laws.

2. Indicators of Community Transmission

During the COVID-19 pandemic, states, tribes, localities, territories and school districts have asked CDC for guidance to inform decision-making about when and how to safely open schools.

Given the likely association between levels of community transmission of SARS-CoV-2 and risk of SARS-CoV-2 exposure in schools[1,16], a **first step** in determining when and how it is safe to reopen 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.

CDC recommends the use of two measures of community burden to determine the level of risk of transmission: total number of new cases per 100,000 persons in the past 7 days; and percentage of nucleic acid amplification tests (NAATs), including RT-PCR tests that are positive during the last 7 days. The two measures of community burden should be used to assess the incidence and spread of SARS-CoV-2 in the surrounding community (e.g., county) and not in the schools themselves. If the two indicators suggest different levels, the actions corresponding to the higher threshold (in Table 2) should be chosen. The transmission level for any given location will change over time and should be reassessed weekly for situational awareness and to continuously inform planning.

Table 1. CDC Indicators and Thresholds for Community Transmission of COVID-19[1]

Indicator	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
Total new cases per 100,000 persons in the past 7 days[2]	0-9	10-49	50-99	≥100
Percentage of NAATs that are positive during the past 7 days[3]	<5.0%	5.0%-7.9%	8.0%-9.9%	≥10.0%

[1]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.

[2]Total number of new cases per 100,000 persons within the last 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.

[3]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 resulted 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.

[4]Previously, CDC provided guidance for schools through the Indicators for Dynamic School Decision-Making. The current indicators and thresholds are an update to that document that reflect a focus on the past 7 days, and four (rather than five) categories of community transmission.

While risk of exposure to SARS-CoV-2 in a school may be lower when indicators of community spread are lower, this risk is also dependent upon the implementation of school and community mitigation strategies, including requiring universal and correct use of masks, physical distancing handwashing and respiratory etiquette, cleaning and maintaining healthy facilities, and contact tracing in combination with isolation and quarantine. If community transmission is low but school and community mitigation strategies are not implemented, then the risk of exposure and subsequent transmission of SARS-CoV-2 in a school will increase. Alternately, if community transmission is high, but school and community mitigation strategies are implemented and strictly followed as recommended, then the risk of transmission of SARS-CoV-2 in a school will decrease.

Success in preventing COVID-19 in schools begins with and is connected to preventing transmission in communities. Schools and communities must implement a layered approach that adheres to multiple mitigation strategies and adjust them as needed to reduce COVID-19 risk for students, teachers, school staff, families, and the community. In areas of low or moderate community transmission, the spread of SARS-CoV-2 infection in schools is low when consistent use of layered mitigation strategies is in place.

When communities implement and strictly adhere to mitigation strategies, the level of community transmission is slowed. This will in turn enable schools that are open for in-person learning to stay open and help schools that have not yet reopened to return to in-person instruction. The application and utility of these indicators are inextricably linked to both schools and communities following recommended mitigation strategies.

3. Phased mitigation, learning modes, and testing

For schools to operate safely for in-person learning, communities should fully implement and adhere to mitigation strategies to reduce COVID-19 incidence and make decisions that prioritize safely opening schools for in-person learning over nonessential businesses and activities. Additionally, to reduce the risk of transmission in schools, schools should fully implement and strictly adhere to recommended layered mitigation strategies, especially universal and correct masking and physical distancing.

The phased mitigation recommendations are meant to assist school and STLT officials in making decisions, through regular monitoring of local indicators. As school officials monitor indicators and thresholds, they should take local trends and other factors into account when making decisions about in-person learning. For example, implementation of mitigation strategies should be intensified if indicators worsen (i.e., moving from low to moderate to substantial to high community transmission). Intensifying mitigation may also involve imposing restrictions on sports and extracurricular activities. If increasing trends persist in or plateau in substantial levels, school should transition to hybrid instruction. Similarly, mitigation strategies and transitions to full in-person instruction should only be relaxed or lifted after improvements are documented continuously for several weeks, such as decreasing to moderate from substantial levels. To make these decisions, school and STLT officials should take levels of community transmission, information on adherence to mitigation strategies, and data on COVID-19 cases and numbers of people in quarantine into account. CDC also provides secondary indicators that school and STLT officials can use to inform these decisions. Secondary indicators are available in CDC's prior Indicators for Dynamic School Decision Making.

Phased mitigation in schools that do not implement screening testing

Table 2 presents an operational plan for opening and remaining open for schools that do not offer screening testing either on premises or through a collaboration with a community service or department of public health. The mitigation plan emphasizes mitigation at all levels of community transmission, with particular emphasis on school policies that require universal and correct use of masks

Table 2. Recommended Implementation of Mitigation Strategies and K-12 School Learning Modes by Level of Community Transmission for Schools That Do Not Implement Expanded Screening Testing

Low Transmission[1] Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
All schools: Universal and correct use of masks is required; physical distancing; handwashing and respiratory etiquette; cleaning and maintaining healthy facilities; contact tracing in combination with isolation and quarantine. **Diagnostic testing[2]:** Symptomatic students, teachers, and staff and close contacts referred for diagnostic testing			
K-12 schools open for full in-person instruction Physical distancing of 6 feet or more to the greatest extent possible[3]		Elementary schools in hybrid learning mode or reduced attendance[4] Physical distancing of 6 feet or more is required	
		Middle and high schools in hybrid learning mode or reduced attendance Physical distancing of 6 feet or more is required	Middle and high schools in virtual only instruction unless they can strictly implement all mitigation strategies, and have few cases; schools that are already open for in-person instruction can remain open, but only if they strictly implement mitigation strategies and have few cases[5]
Sports and extracurricular activities occur; physical distancing of 6 feet or more to the greatest extent possible[6]	Sports and extracurricular activities occur with physical distancing of 6 feet or more required	Sports and extracurricular activities occur only if they can be held outdoors, with physical distancing of 6 feet or more required	Sports and extracurricular activities are virtual only

[1]Levels of community transmission defined as total new cases per 100,000 persons in the past 7 days (low, 0-9; moderate, 10-49; substantial, 50-99; high, ≥100) and percentage of positive tests in the past 7 days (low, <5%; moderate, 5-7.9%; substantial, 8-9.9%; high, ≥10%).

[2]Diagnostic testing for SARS-CoV-2 is intended to identify occurrence of SARS-CoV-2 infection at the individual level and is performed on individuals with or without suspected COVID-19 infection in accordance with the test's authorization and labeling.

[3]If physical distancing of at least 6 feet among all students, teachers, and staff within a class, cohort, or pod is not possible at all times, schools should ensure physical distancing between classes, cohorts, and pods.

[4]Hybrid learning or reduced attendance is intended to maximize physical distance between students. Schools may consider hybrid learning models or instructional modes where substantial percentages of students are in virtual only instruction. At all levels of community transmission, schools should provide families the option to participate in virtual learning if a student or family member is at risk of severe illness from COVID-19.

[5]Strict implementation of mitigation strategies refers to policies that require consistent and correct use of masks, physical distancing of at least 6 feet, all other key mitigation strategies.

[6]School officials should implement limits on spectators and attendees for sports, extracurricular activities, and school events as consistent with recommendations for masking and physical distancing for each phase.

Phased mitigation in schools that implement screening testing

Table 3 presents an operational plan for schools that offer screening testing either on premises or through a collaboration with a community service or department of public health. The phased plan integrates implementation of mitigation strategies and testing by level of community transmission. Similar to the plan for no testing, this plan emphasizes mitigation with particular emphasis on school policies that require universal and correct use of masks.

Table 3. Recommended Implementation of Mitigation Strategies, Testing, and Safe K-12 School Learning Modes by Level of Community Transmission for Schools that Implement Expanded Screening Testing

Low Transmission[1] Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
All schools implement 5 key mitigation strategies: Universal and correct use of masks required; physical distancing; handwashing and respiratory etiquette; cleaning and maintaining healthy facilities; contact tracing in combination with isolation and quarantine. **Diagnostic testing[2]:** Symptomatic students, teachers, and staff and close contacts referred for diagnostic testing			
Screening Testing[3]			
Routine screening testing of teachers and staff offered once per week			
No screening testing for students	Routine screening testing of students offered once per week[4]		
School Status			
K-12 schools open for full in-person instruction Physical distancing of 6 feet or more to the greatest extent possible[5]		K-12 schools in hybrid learning mode or reduced attendance[6] Physical distancing of 6 feet or more is required	
Sports and extracurricular activities occur; physical distancing of 6 feet or more to the greatest extent possible[7]	Sports and extracurricular activities occur with physical distancing of 6 feet or more required	Sports and extracurricular activities occur only if they can be held outdoors, with physical distancing of 6 feet or more required	Sports and extracurricular activities are virtual only

[1]Levels of community transmission defined as total new cases per 100,000 persons in the past 7 days (low, 0-9; moderate, 10-49; substantial, 50-99; high, ≥100) and percentage of positive tests in the past 7 days (low, <5%; moderate, 5-7.9%; substantial, 8-9.9%; high, ≥10%).

[2]Diagnostic testing for SARS-CoV-2 is intended to identify occurrence of SARS-CoV-2 infection at the individual level and is performed when there is a reason to suspect that an individual may be infected, such as having symptoms or suspected recent exposure.

[3]Screening testing is intended to identify infected asymptomatic individuals who may be contagious so that measures can be taken to prevent further transmission.

[4]Schools may consider testing a random sample of at least 10% of students or may conduct pooled testing of cohorts/pods for screening testing in areas of moderate and substantial community transmission.

[5]If physical distancing of at least 6 feet among all students, teachers, and staff within a class, cohort, or pod is not possible at all times, schools should ensure physical distancing between classes, cohorts, and pods.

[6]Hybrid learning or reduced attendance is intended to maximize physical distance between students. Schools may consider hybrid learning models or instructional modes where substantial percentages of students are in virtual only instruction. At all levels of community transmission, schools should provide families the option to participate in virtual learning if a student or family member is at risk of severe illness from COVID-19.

[7]School officials should implement limits on spectators and attendees for sports, extracurricular activities, and school events as consistent with recommendations for masking and physical distancing for each phase.

A phased mitigation approach to learning modes and testing for K-12 schools relies on several core concepts.

- **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 decision-makers and communities should prioritize schools for reopening and remaining open for in-person instruction over nonessential businesses and activities including indoor dining, bars, social gatherings, and close contact sports as community transmission is controlled.

- **In-person instruction should be prioritized over extracurricular activities including sports and school events, to minimize risk of transmission in schools and protect in-person learning**. Prolonged periods of remote or virtual learning can have negative effects on educational progress for students, potentially slowing or reversing academic gains. Students from low-resourced communities, English learners, and students with disabilities may disproportionately experience learning loss due to limited access to remote learning technology and fewer learning support systems and services outside of schools. Safe in-person schooling can also offset the negative social, emotional, and mental health impacts of prolonged virtual learning. Minimizing the risk of spread during extracurricular activities and social gatherings outside of school can help maintain in-person instruction. Some close-contact sports may not be able to be implemented at any level of community transmission given the risk of transmission and the inability to implement mitigation strategies[22].

- **Lower susceptibility and incidence among younger children compared to teenagers suggests that younger students (for example, elementary schools) are likely to have less risk of in-school transmission due to in-person learning than older students (middle schools and high schools).** In addition, younger children may benefit more from in-person instruction and are less independent than older students. For these reasons, a phased mitigation approach emphasizes in-person learning modes for younger students throughout all levels of community transmission.

- Families of students who are at increased risk of severe illness **(including those with special healthcare needs) or who live with people at high risk should be given the option of virtual instruction regardless of the mode of learning offered**.

- **Schools are encouraged to use cohorting or podding of students**, especially in moderate (yellow), substantial (orange), and high (red) levels, to facilitate testing and contact tracing, and to minimize transmission across pods.

Schools that **do not** implement expanded screening testing: Learning modes and phased mitigation

For schools that do not implement expanded screening testing, recommended learning modes vary to minimize risk of SARS-CoV-2 transmission in school by emphasizing layered mitigation, including school policies requiring universal and correct mask use.

- **Low (blue) and moderate (yellow) community transmission:** Elementary, middle, and high schools are open for full in-person learning with all 5 key mitigation strategies. Universal and correct use of masks is required. Physical distancing is maintained to the greatest extent possible. Schools may benefit from using pods or cohorts to facilitate testing protocols and contact tracing and minimizing risk of transmission. If physical distancing of at least 6 feet among all students, teachers, and staff within a class, cohort, or pod is not possible at all times, schools should ensure physical distancing between classes, cohorts, and pods.

- **Substantial (orange) community transmission:** Elementary, middle, and high schools transition to hybrid instruction to maximize physical distancing and reduce risk of transmission. Schools may consider hybrid learning models or instructional modes where substantial percentages of students are in virtual only instruction. All 5 key mitigation strategies are implemented. Universal and correct use of masks and physical distancing are required.
- **High (red) community transmission:** Elementary schools continue hybrid instruction with all 5 key mitigation strategies in place. Universal and correct use of masks and physical distancing are required. For middle schools and high schools, transition to virtual instruction is recommended. Some middle schools and high schools may consider opening or remaining open if mitigation strategies are consistently implemented, school policies requiring universal and correct use of masks are in place, and monitoring of cases in school suggests limited transmission. In communities with high levels of transmission, high prevalence of COVID-19 in the community could also result in many teacher and staff quarantines due to exposures in the community, limiting the ability of schools to remain safely open.

Schools should closely and regularly monitor the numbers of students, teachers, and staff with COVID-19, as well those in isolation and in quarantine. Schools may consider convening a team or committee with representation from local public health and members of the school community (e.g., students, parents, teachers, and staff) to review data regularly, share information, and discuss opportunities to support open communication with school stakeholders. In collaboration with the local health department, decisions should be guided by information on school-specific factors such as implementation of mitigation strategies, local needs, stakeholder input, school experience, and the number of cases among students, teachers, and staff. A decision to remain open should involve considerations for further strengthening mitigation strategies and continuing to monitor cases to reassess decisions.

Schools that implement expanded screening testing: Learning modes and phased mitigation

Relying on these core concepts, a phased approach takes into account levels of community transmission and presents options for learning modes and testing strategies based on the risk of SARS-CoV-2 transmission in school.

- **Low (blue) community transmission:** Elementary, middle, and high schools are open for full in-person learning with all 5 key mitigation strategies in place. Universal and correct use of masks is required. Schools may benefit from using pods or cohorts to facilitate testing protocols and contact tracing and minimizing risk of transmission.
- **Moderate (yellow) community transmission:** Elementary, middle, and high schools are open for full in-person learning with all 5 key mitigation strategies in place, using pods or cohorts. Universal and correct use of masks is required.
- **Substantial (orange) community transmission:** Elementary, middle, and high schools transition to hybrid instruction to maximize physical distancing and reduce risk of transmission. Schools may consider hybrid learning models or instructional modes where substantial percentages of students are in virtual only instruction. All 5 key mitigation strategies are implemented. Universal and correct use of masks is required; physical distancing is maintained.
- **High (red) community transmission:** Elementary, middle, and high schools continue hybrid instruction with all 5 key mitigation strategies in place. In communities with high levels of transmission, high prevalence of COVID-19 in the community could result in many teacher and staff quarantines due to exposures in the community, limiting the ability of schools to remain safely open. Universal and correct use of masks is required; physical distancing is maintained.

At all levels of community transmission, employers should provide reassignment, remote work, or other options for staff who have documented high-risk conditions or who are at increased risk for severe illness from COVID-19 to limit the risk of workplace exposure. When these conditions are disabilities under the Americans with Disabilities Act, employers must provide reasonable accommodation subject to undue hardship. Options for reassignment may include but are not limited to telework, virtual teaching opportunities, modified job responsibilities, environmental modifications, scheduling flexibility, or temporary reassignment to different job responsibilities. These options should likewise be extended to staff who have a household member with a high-risk condition or who are at increased risk for severe illness from COVID-19. Policies and procedures addressing issues related to teachers and other staff at higher risk of serious illness and the application of reassignment, remote work or other options for mitigation should be made in consultation with occupational medicine and human resource professionals with knowledge of the specific situation, keeping in mind Equal Employment Opportunity (EEO) and other potential legal concerns.

Unplanned school closures

Despite careful planning and consistent implementation of essential elements of safe in-person instruction in K-12 schools, some situations may occur that lead school officials to consider temporarily closing schools or parts of a school (such as a class or grade level) to in-person instruction, typically in consultation with the local public health department. These decisions should be made based on careful considerations of a variety of factors and with the emphasis on ensuring the health and wellness of students, their families, and teachers and staff. In such cases, schools should make efforts to provide continuity of instruction through synchronous remote learning or at-home activities.

Classrooms or schools experiencing an active outbreak may temporarily close for in-person learning. If the school is experiencing an outbreak, school leaders should immediately notify public health officials and collaborate to facilitate increased testing and contact tracing, as necessary. The local health department may facilitate testing for students, teachers, and staff who are in schools with an active outbreak. The health department may also conduct contact tracing in these situations. Schools can assist by providing information, to the extent allowable by privacy laws and other applicable laws, to identify close contacts (e.g., class rosters, seating charts, and student emergency contact information) that could be tested and either isolated or quarantined.

Schools in areas experiencing rapid or persistent rises in case incidence or severe burden on health care capacity. School leaders and public health officials should monitor indicators of community transmission (Table 1) and review trends over time. In communities that have rapid or persistent rises in case incidence or severe health care capacity burden, school leaders may decide to temporarily close schools to in-person instruction until levels of community transmission stabilize.

New COVID–19 variants and mitigation in schools

Multiple SARS-CoV-2 variants are circulating globally. This includes several new variants that have been detected in the United States in December 2020 and January 2021. Some of these variants are of concern as they seem to spread more easily and quickly than other variants, which may lead to more cases of COVID-19. Rigorous implementation of and adherence to mitigation strategies is essential to control the spread of variants of SARS-CoV-2. In the event of increased levels of community transmission resulting from a variant of SARS-CoV-2, updates to this guidance may be necessary.

Rigorous and increased compliance with public health mitigation strategies, such as vaccination, use of masks, physical distancing, hand hygiene, and isolation and quarantine, will be essential to limiting the spread of SARS-CoV-2 and protecting public health. CDC, in collaboration with other public health agencies, is monitoring the situation closely and studying these variants quickly to learn more to control their spread. As more information becomes available, it is possible that mitigation strategies and school guidance may need to be adjusted to new evidence on risk of transmission and effectiveness of mitigation.

Health equity considerations in phased mitigation

- Schools that serve student populations that are at greater risk for learning loss during virtual instruction (e.g., due to their more limited access to technology) should be prioritized for reopening and be provided the needed resources to implement mitigation and testing strategies.
- In implementing phased mitigation in hybrid learning modes, schools should consider prioritizing in-person instruction for students with disabilities who require special education and related services directly provided in school environments, as well as other students who may benefit from receiving essential instruction in a school setting.
- Schools should develop plans to continue meal service provision such as free breakfast and lunch to families for every phase and learning mode, including in-person, hybrid, and virtual.

Additional COVID–19 Prevention in Schools

Testing

Viral testing strategies in partnership with schools should be part of a comprehensive mitigation approach. Testing should not be used alone, but in combination with other mitigation components to reduce risk of transmission in schools. When schools implement testing combined with mitigation strategies, they can detect new cases to prevent outbreaks, reduce the risk of further transmission, and protect students, teachers, and staff from COVID-19.

Diagnostic Testing

At all levels of community transmission, schools should offer referrals to diagnostic testing to any student, teacher, or staff member who is exhibiting symptoms of COVID-19 at school. Diagnostic testing for SARS-CoV-2 is intended to identify occurrence of SARS-CoV-2 infection at the individual level and is performed when there is a reason to suspect that an individual may be infected, such as having symptoms or suspected recent exposure. Examples of diagnostic testing strategies include testing symptomatic teachers, students, and staff who develop symptoms in school, and testing asymptomatic individuals who were exposed to someone with a confirmed or suspected case of COVID-19. The U.S. Food and Drug Administration's (FDA) FAQs on Testing for SARS-CoV-2 ⧉ also address diagnostic testing for SARS-CoV-2. Additional considerations for diagnostic testing:

- Schools should advise teachers, staff, and students to stay home if they are sick or if they have been exposed to SARS-CoV-2. Schools can encourage these individuals to talk to their healthcare provider about getting testing for SARS-CoV-2 in a healthcare or public health facility.

- If a student, teacher, or staff member becomes sick at school or reports a new COVID-19 diagnosis, schools should follow the steps of the COVID-19 Diagnosis flowchart on what to do next. This includes appropriately notifying a student's parent or guardian and initiating testing strategies. Notifications must be accessible for all students, parents or guardians, including those with disabilities or limited English proficiency (e.g., through use of interpreters or translated materials).

- In some schools, school-based healthcare professionals (e.g., school nurses) may perform SARS-CoV-2 antigen testing in school-based health centers if they are trained in specimen collection, conducting the test per manufacturer's instructions, and obtain a Clinical Laboratory Improvement Amendments (CLIA) certificate of waiver ⧉ . Some school-based healthcare professionals may also be able to perform specimen collection to send to a lab for testing, if trained in specimen collection, without a CLIA certificate. It is important that school-based healthcare professionals have access to, and training on the proper use of personal protective equipment (PPE).

- Not every school or school-based healthcare professional will have the staff, resources or training to conduct testing. Public health officials should work with schools to help link students and their families, teachers, and staff to other opportunities for testing in their community. Testing could be offered by referral to community-based testing sites, through collaboration with local public health, or through a centralized test location offered by the school district.

The presence of any of the symptoms below generally suggests a student, teacher, or staff member has an infectious illness and should not attend school, regardless of whether the illness is COVID-19. For students, staff, and teachers with chronic conditions, symptom presence should represent a change from their typical health status to warrant exclusion from school. Occurrence of any of the symptoms below while a student, teacher, or staff member is at school suggests the person may be referred for diagnostic testing.

- Temperature ⧉ of 100.4 degrees Fahrenheit or higher
- Sore throat
- Cough (for students with chronic cough due to allergies or asthma, a change in their cough from baseline)
- Difficulty breathing (for students with asthma, a change from their baseline breathing)
- Diarrhea or vomiting
- New loss of taste or smell
- New onset of severe headache, especially with a fever

Students should not attend school in-person if they or their caregiver identifies new development of any of the symptoms above.

Schools can provide options to separate students with COVID-19 symptoms or suspected or confirmed COVID-19 diagnoses by, for example, placing students in isolation room/areas until transportation can be arranged to send them home or seek emergency medical attention.

If a COVID-19 diagnosis is confirmed, schools can support public health officials in determining which close contacts and other potentially exposed persons in the school setting could be tested and either isolated or quarantined (see Table 4). Schools can assist by providing information, where appropriate, to identify close contacts (e.g., class rosters, seating charts, and information to facilitate outreach to contacts).

Table 4. Tiered approach of diagnostic testing for SARS-CoV-2[1,2]

Students, teachers, and staff with symptoms of COVID-19 Refer for diagnostic testing	Students, teachers, or staff with symptoms of COVID-19 at school, at all levels of community transmission. • Individuals with positive test results should go to their home and isolate until they have met criteria for release from isolation. • People with symptoms should be isolated away from others as soon as symptoms appear and sent home. Those with positive test results should remain in isolation until they have met all three criteria for release: 10 days have passed since symptom onset; at least 24 hours have passed since resolution of fever without medication; and other symptoms have improved. CDC does not recommend that people be tested again before leaving isolation because people who have recovered can test positive for several weeks without being contagious. If an individual with symptoms tests negative, they should still stay home until their symptoms resolve to avoid spreading any infection – coronavirus or otherwise.
Close contacts Refer for diagnostic testing	Students, teachers, or staff who had contact with someone diagnosed with COVID-19, defined as those who were within 6 feet from an infected person for a cumulative total of 15 minutes or more for a 24-hour period starting from 2 days before illness onset (or, for asymptomatic persons, 2 days prior to date the person with COVID-19 was tested). The definition of a close contact applies regardless of whether either person was wearing a mask. • Regardless of the test result, close contacts should quarantine for 14 days. Based on local circumstances and resources, options to shorten quarantine provide acceptable alternatives of a 10-day quarantine or a 7-day quarantine combined with testing. • To minimize impact of quarantines on delivery of instruction, schools should limit the potential for exposures across pods and classrooms (e.g., teachers should limit close contacts with other teachers and with students not in their own classrooms).
Potential contacts Schools may consider screening testing to potential contacts	Students, teachers, and staff in the same classroom, cohort, or pod as the person with COVID-19 who always kept at least 6 feet distance between persons. For example, this includes individuals in the following scenarios: • Students in the same classroom but who were not within 6 feet for a total of 15 minutes or more. • Students, teachers, or staff in the same hallway, but not sharing a classroom or bathroom, as a person with COVID-19. • Students who took the same bus but were farther than 6 feet apart from other riders at the same time as a person with COVID-19.
Potentially exposed individuals Schools may consider screening testing to potentially exposed individuals	Students, teachers, and staff who shared a common space (e.g., teacher's lounge, library) and were not using the space at the same time as the person with COVID-19, but where short duration exposure (< 15 minutes) to those with confirmed COVID-19 cannot be definitively ruled out. • For example, this includes individuals who are in the school on a different schedule and in different rooms than the individual with confirmed COVID-19, but exposure cannot be definitively ruled out.

[1]The tiers above are intended to be applied to the Diagnostic Testing component across all levels of community transmission: low (blue), moderate (yellow), substantial (orange), and high (red).

[2] Information should be provided with appropriate safeguards to protect personally identifiable information and HIPPA-sensitive information from unlawful release.

For diagnostic testing, selection of tests should prioritize tests with highly accurate results with high sensitivity and specificity such as NAATs. Referral to diagnostic testing for students, teachers, and staff who have symptoms of COVID-19 at school and for close contacts is recommended for all levels of community transmission. Students, teachers, and staff who have diagnostic testing performed should be isolated away from others and quarantined at home until test results are received. Diagnostic testing turnaround times depend on the type of test. Local capacity in diagnostic tests should ensure that cases and contacts and be tested with result return within 48 hours. At low levels of community transmission (blue), schools should refer students, teachers, and staff with symptoms or recent history of close contact with a confirmed case for diagnostic testing to identify or rule out SARS-CoV-2 infection. At moderate (yellow), substantial (orange), and high (red) levels, and at low (blue) levels for teachers and staff, referral to diagnostic testing is combined with screening testing to monitor for increases in infection rates.

For students, teachers, and staff who had previously received positive test results and do not have symptoms of COVID-19, retesting is not recommended for up to 3 months from their last positive test result. Data currently suggest that some individuals test persistently positive due to residual virus material but are unlikely to be infectious. Parents or guardians may request documentation from their health care provider to indicate the date and type of the student's most recent COVID-19 test. Guidance on testing strategies for individuals who are fully vaccinated will be provided once more information is available.

Screening Testing

Some schools may also elect to use screening testing as a strategy to identify cases and prevent secondary transmission. Screening testing involves using SARS-CoV-2 viral tests (diagnostic tests used for screening purposes) intended to identify occurrence at the individual level even if there is no reason to suspect infection—i.e., there is no known exposure. This includes, but is not limited to, screening testing of asymptomatic individuals without known exposure with the intent of making decisions based on the test results. Screening testing is intended to identify infected individuals without symptoms (or prior to development of symptoms) who may be contagious so that measures can be taken to prevent further transmission. Examples of screening include weekly testing in a workplace to test employees, and testing plans developed by a school to test its students, teachers, and staff. In both examples, the intent is to use the screening testing results to determine who may return to in-person school or work and the protective measures that will be taken or to identify and isolate positive persons to prevent spread. FDA's FAQs on Testing for SARS-CoV-2 ⬏ also address screening testing for SARS-CoV-2.

Screening testing is particularly valuable in areas with moderate, substantial, and high levels of community transmission. Screening testing for K-12 schools may allow schools to move between different testing strategies as community prevalence (and therefore risk assessment) changes. As risk decreases but the likelihood of multiple infected individuals at the school remains high, frequent routine screening tests can be deployed to help identify and contain outbreaks.

For schools that implement expanded screening testing, screening testing should be offered at moderate (yellow), substantial (orange), and high (red) levels of community transmission, to students, teachers, and staff and at low (blue) levels to teachers and staff who have no symptoms and no known exposures. Screening testing can identify cases early and can minimize secondary transmission. Screening testing can be especially useful in areas with moderate to high community transmission. Achieving substantial reduction in transmission with testing requires more frequent testing and shorter lags between test administration and reporting of results, which may not be possible for every school district.

Schools may consider using pooled testing as a screening testing strategy for students. Pooled testing involves mixing several samples from different individuals together in a "batch" or pooled sample, then testing the pooled sample with a diagnostic test. This approach increases the number of individuals that can be tested and reduces the need for testing resources[23-24]. This approach may be particularly helpful in schools using "pods" or cohorts. Because of the complexities of acting on a positive result, pooled testing is best used in situations where the number of positives is expected to be very low. Pods could be established in grade groups, such as all students in a particular grade or in similar grades (e.g., K-grade 2; grades 3-5). Schools may have alternative methods for assigning pods based on instructional and facility considerations. If a confirmed positive case is found, close contacts of anyone in that pod should be quarantined and tested.

School officials making decisions about schools in areas of moderate, substantial, or high community transmission could adopt a regular screening program to prevent infections from spreading within the school. Achieving substantial reduction in transmission requires more frequent testing and shorter lags between test administration and reporting of results. When combined with mitigation measures such as mask use, physical distancing, and others, testing protocols may be an effective tool in reducing transmission. Screening testing can be administered directly at a school facility (see Feasibility considerations section below), at a central location through the school district, or through referral to community-based testing providers.

- **Moderate (yellow) and substantial (orange) community transmission**: students, teachers, and staff participate in regular screening testing to reduce the risk of transmission within the school.
  - Teachers and staff participate in routine screening testing at least once per week. In areas with substantial and high community transmission, twice a week screening testing may be preferable to quickly detect cases among teachers and staff.
  - Students in elementary, middle, and high schools participate in weekly routine screening testing. If a confirmed positive case is found, any close contacts are quarantined and tested.
  - Schools may consider testing a random sample of at least 10% of students. For example, a school may randomly select 20% of the students each week for testing out of the entire population of students attending in-person instruction. Alternatively, a school may select one pod for each grade level each week for testing. Different strategies for random selection may be used based on most adequate fit for a school screening testing strategy.
- **High (red) community transmission**: students, teachers, and staff participate in regular screening testing to reduce the risk of transmission within the school.
  - Teachers and staff in elementary schools participate in routine screening testing weekly. In areas with substantial and high community transmission, twice a week screening testing may be preferable to quickly detect cases among teachers and staff.
  - Students in elementary schools participate in weekly routine screening testing, as described above for moderate (yellow) and substantial (orange).

When considering which tests to use for screening testing, schools or their testing partners should select tests that can be reliably supplied and that provide results within 24 hours. NAATs are high-sensitivity tests for detecting SARS-CoV-2 nucleic acid. Most NAATs need to be processed in a laboratory with variable time to results (may be 1-3 days), but some NAATs are point-of-care tests with results available in about 15 minutes. Pooled testing — in which samples from multiple people are initially combined — may reduce costs and turn-around times. These may be considered for weekly screening testing in areas of moderate (yellow) community transmission.

Antigen tests are generally less sensitive than NAATs for clinical diagnosis, and most can be processed at the point-of-care with results available in about 15 minutes. Antigen test results may need confirmation with a NAAT, such as a negative test in persons with symptoms and a positive test in persons without symptoms. Schools should work with the health department to develop a confirmation and referral plan before implementing testing. The immediacy of results (test results in 15-30 minutes), modest costs, and feasibility of implementation of antigen tests make them a reasonable option for school-based screening testing. The feasibility and acceptability of tests that use nasal (anterior nares) swabs make these types of tests more readily implemented in school settings. Tests that use saliva specimens may also be acceptable alternatives for younger children, if tests are available and results are returned within 24 hours.

Taking into consideration the potential for limited availability of supplies for screening testing or feasibility of implementing screening testing, schools may consider a prioritization strategy. When determining which individuals should be selected for screening testing, schools and public health officials may consider prioritizing teachers and staff over students given the increased risk of severe illness among certain adults. In selecting among students, schools and public health officials may prioritize high school students, then middle school students, and then elementary school students, reflecting higher infection rates among adolescents compared to younger children.

Reporting test results

Every COVID-19 testing site is required to report to the appropriate state or local health officials all diagnostic and screening tests performed. Schools that use antigen testing must apply for and receive a Clinical Laboratory Improvement Amendments (CLIA) ⧉ certificate of waiver, and report test results to state or local public health departments as mandated by the Coronavirus Aid, Relief, and Economic Security (CARES) Act.

Parents should be asked to report positive cases to schools, to facilitate contact tracing and ensure communication and planning in schools. In addition, school administrators should notify staff, teachers, families and emergency contacts or legal guardians immediately of any case of COVID-19 while maintaining confidentiality in accordance with the Health Insurance Portability and Accountability Act of 1996 (HIPAA ⧉), the Americans with Disabilities Act (ADA ⧉), and the Family Educational Rights and Privacy Act (FERPA 📕 ⧉), and other applicable laws and regulations. Notifications must be accessible for all students, faculty and staff, including those with disabilities or limited English proficiency (e.g., through use of interpreters or translated materials).

Health equity considerations in school-based testing

Public health officials and school administrators may consider placing a higher priority for access to testing in schools that serve populations experiencing a disproportionate burden of COVID-19 cases or severe disease. These may include:

- Schools in communities that have experienced disproportionately high rates of COVID-19 cases relative to population size, including communities with moderate or large proportions of racial and ethnic groups such as American Indian/Alaska Native, Black, and Hispanic persons.
- Schools in geographic areas with limited access to testing due to distance or lack of availability of testing[25].

Ethical considerations for school-based testing

Testing should be offered on a voluntary basis. It is unethical and potentially illegal to test someone who does not want to be tested, including students whose parents or guardians do not want them to be tested. School-based testing should never be conducted without consent from a parent or legal guardian (for minor students) or from the individual (for adults, including adult students and teachers and staff). Assent may also be considered for minor students. Schools should make a communication plan to notify local health officials, staff, and families immediately of any case of COVID-19 while maintaining confidentiality in accordance with the Americans with Disabilities Act (ADA) ⬈ and Family Educational Rights and Privacy Act (FERPA) ⬈ , the Protection of Pupil Rights Amendment (PPRA) ⬈ , and other applicable laws and regulations. Collaboration with local counsel, education and /or public health is recommended to ensure appropriate consent is obtained and maintained and results are retained with appropriate privacy and confidentiality.

Considerations before starting ANY testing strategy

Before implementing testing in their schools, K-12 administrators should coordinate with public health officials to ensure there is support for this approach from students, parents, teachers, and staff and to develop a testing plan that has key elements in place.

- Dedicated infrastructure and resources to support school-based testing.
- Use of tests that are authorized by FDA for the specific intended use (i.e., screening, pooling), and a mechanism in place for prescriptions/test orders by a licensed health care provider.
- CLIA certificate of waiver requirements to perform school-based testing with EUA authorized tests.
- Mechanism to report all testing results (both positive and negative) as required by the STLT health department.
- Ways to obtain parental consent for minor students and assent/consent for the students themselves.
- Physical space to conduct testing safely and privately.
- Ability to maintain confidentiality of results and protect student privacy.
- Plans for ensuring access to confirmatory testing when needed through the STLT health department for symptomatic persons who receive a negative test result and asymptomatic persons who receive a positive test result.

If these elements are not in place, schools may consider a referral-based testing strategy in collaboration with public health officials.

Schools should work with STLT public health officials to decide whether and how to use testing. K-12 schools operated by the federal government (e.g., for Department of Defense Education Activity [DoDEA], which operates K-12 schools for DoD Dependents) should collaborate with federal health officials. In addition to state and local laws, school administrators should follow guidance from the Equal Employment Opportunity Commission ⬈ , and applicable federal laws when offering testing to faculty, staff, and students who are employed by the K-12 school.

Feasibility considerations and challenges of school-based testing

These challenges must be considered carefully and addressed as part of plans for school-based testing developed in collaboration with public health officials.

- In some schools, school-based healthcare professionals (e.g., school nurses) may perform COVID-19 viral testing if the school or test site receives a Clinical Laboratory Improvement Amendments (CLIA) certificate of waiver ⬈ . Some school-based healthcare professionals may also be able to perform specimen collection to send to a lab for testing, if trained in specimen collection, without a CLIA certificate. It is important that school-based healthcare professionals have access to,

and training on the proper use of personal protective equipment (PPE). Facilities should be aware of the FDA EUA ⧉ for antigen tests ⧉ and the Center for Medicare & Medicaid (CMS's) enforcement discretion 📄 ⧉ regarding the CLIA ⧉ certificate of waiver when using tests in asymptomatic individuals.

- Not every school system will have the staff, resources or training (including the CLIA certificate of waiver) to conduct testing. Public health officials should work with schools to help link students and their families, teachers, and staff to other opportunities for testing in their community.

- School-based testing may require a high degree of coordination and information exchange among health departments, schools, and families.

- There may also be legal and regulatory factors to consider with onsite school-based testing regarding who will prescribe the tests, who will administer the tests, how tests will be paid for, and how results will be reported. Such factors include local or state laws defining the services school nurses and other school-based health professionals are permitted to provide, as well as applicable privacy laws.

- The benefits of school-based testing need to be weighed against the costs, inconvenience, and feasibility of such programs to both schools and families.

- Antigen tests usually provide results diagnosing an active SARS-CoV-2 infection faster than NAATs, but antigen tests have a higher chance of missing an active infection even in symptomatic individuals and confirmatory molecular testing may be recommended.

Vaccination for teachers and staff, and in communities as soon as supply allows

Vaccines are an important tool to help stop the COVID-19 pandemic. STLT health officials are the best resource in answering questions about when and where school staff can be vaccinated in each state, territory, or jurisdiction. Vaccines are now authorized for use by the FDA and are being distributed to help protect against COVID-19. The end goal is to offer vaccines to the entire U.S. population. With limited supply, identifying priority groups for COVID-19 vaccination is critical for implementation planning using a phased approach. The ACIP COVID-19 Vaccines Work Group considered evidence related to SARS-CoV-2 epidemiology, vaccination program implementation, and ethical principles in developing the interim recommendation for allocation of COVID-19 vaccine. ACIP reviewed evidence-based information pertaining to COVID-19 vaccines, including initial allocation of COVID-19 vaccine supplies. ACIP recommended that health care personnel and residents of long-term care facilities be offered vaccination in the initial phase of the COVID-19 vaccination program (Phase 1a). Following ACIP's interim recommendation for vaccine allocation in Phase 1a, the Work Group proposed vaccine allocation for Phases 1b and 1c. Phase 1b includes frontline essential workers, including those who work in the education sector (teachers and school staff). Teachers and school staff hold jobs critical to the continued functioning of society and are at potential occupational risk of exposure to SARS-CoV-2. STLT officials should consider giving high priority to teachers in phase 1b.

Vaccinating teachers and school staff can be considered one layer of mitigation and protection for staff and students. Strategies that minimize barriers to access vaccination for teachers and other frontline essential workers, such as vaccine clinics at or close to the place of work, are optimal. STLT health officials have worked with community and school leadership and developed approaches that include on-site employer/occupational clinics, use of pharmacies, mobile clinics, and health department point of dispensing strike teams. Survey data also suggest that there is broad support for vaccinating teachers and school staff early in the phased vaccination approach[26].

Observational data demonstrate that pregnant people with COVID-19 have an increased risk of severe illness compared with non-pregnant people of reproductive age. Additionally, pregnant people with COVID-19 might be at increased risk of adverse pregnancy outcomes, such as preterm birth, compared with pregnant people without COVID-19. Currently, there are limited data about the safety of COVID-19 vaccines for people who are pregnant. Teachers and school staff who are pregnant may choose to be vaccinated. A conversation between pregnant patients and their healthcare providers may help them decide whether to get vaccinated with a vaccine that has been authorized for use under Emergency Use Authorization (EUA).

School officials and health departments can work together to also support messaging and outreach regarding vaccination for members of school communities as they become eligible for vaccination in their jurisdictions. For example, school communication platforms can be leveraged for outreach to older adult family members of students, particularly for students living in multi-generational households. In later phases of vaccination, school communication can facilitate outreach to encourage vaccination of household members of school-age children as they become eligible. This should include outreach in a language that limited English proficient family members of students can understand and in alternate formats as needed to facilitate effective communication for individuals with disabilities.

Implementation of layered mitigation strategies will need to continue until we better understand potential transmission among people who received a COVID-19 vaccine and there is more vaccination coverage in the community. In addition, vaccines are not yet approved for use in children under 16 years old. For these reasons, even after teachers and staff are vaccinated, schools need to continue mitigation measures for the foreseeable future, including requiring masks in schools and physical distancing.

Footnotes

[1]Middle and high schools in virtual only instruction unless they can strictly implement all mitigation strategies, and have few cases; schools that are already open for in-person instruction can remain open, but only if they strictly implement mitigation strategies and have few cases.

[2]School staff in this document refers to any school employees, contractors, or independent consultants interacting with students and/or teachers during the course of the school day, including, for example, school administration, bus drivers, cafeteria workers, school nurses, speech/occupational therapists, custodians, and other school employees.

[3]Additional information about operating school meals is provided in CDC's K-12 school guidance.

[4]Previously, CDC provided guidance for schools through the Indicators for Dynamic School Decision- Making. The current indicators and thresholds are an update to that document that reflect a focus on the past 7 days, and four (rather than five) categories of community transmission.

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