

COVID-19 Guidance for Safe Schools

American Academy of Pediatrics Interim Clinical Guidance
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The AAP continues to strongly advocate that all policy considerations for school COVID-19 plans should start with a goal of having students physically present in school.

The purpose of this guidance revision is to continue to support communities, local leadership in education and public health, and pediatricians collaborating with schools in creating policies for safe schools during the COVID-19 pandemic that foster the overall health of children, adolescents, educators, staff, and communities and are based on available evidence. Since the beginning of this pandemic, new information has emerged to guide safety in schools. Opening schools generally does not significantly increase community transmission, particularly when guidance outlined by the World Health Organization (WHO),¹ United Nations Children’s Fund (UNICEF), and Centers for Disease Control and Prevention (CDC) is followed.²⁻³ The lower risk of transmission of the virus by younger children and reported milder or moderate illness in this age group suggest the appropriateness of in-person instruction for primary and elementary grades. Along with our colleagues in the field of education,⁴ the American Academy of Pediatrics (AAP) strongly advocates for additional federal assistance to all schools throughout the United States irrespective of whether the current local context allows for in-person instruction.

Schools and school-supported programs are fundamental to child and adolescent development and well-being and provide our children and adolescents with academic instruction, either in-person or virtually; social and emotional skills; safety; reliable nutrition; physical/occupational/speech therapy; mental health services; health services; and opportunities for physical activity, among other benefits.⁵ Beyond supporting the educational development of children and adolescents, schools play a critical role in addressing racial and social inequity. As such, it is critical to reflect on the differential impact the COVID-19 pandemic and the associated school closures have had on different racial and ethnic groups and populations facing inequities. Disparities in school funding, quality of school facilities, educational staffing, and resources for enriching curricula among schools have been exacerbated by the pandemic. Families rely on schools to provide child care; a safe, stimulating space for children to learn; opportunities for socialization; and access to school-based mental, physical, and nutritional health services.

Without adequate support for families to access these services, disparities will likely worsen, especially for children who are English language learners, children with disabilities, children living in poverty, and children who are Black, Hispanic/Latino, and American Indian/Alaska Native children.^{6,7} For children and adolescents in virtual learning models, educational disparities are widening for Black and Hispanic/Latino students as well as those living in poverty.⁸ According to the Pew Research Center, 1 in 5 teenagers are not able to complete schoolwork at home because of lack of a computer or internet connection.⁹ This technological “homework gap” disproportionately affects Black families living in poverty.⁸ The disparities for Black, Hispanic/Latino, and American Indian/Alaska Native communities continue to grow in food insecurity, housing instability, and obesity.

The AAP strongly recommends that school districts promote racial/ethnic and social justice by promoting the well-being of **all** children in any school COVID-19 plan, with a specific focus on ensuring equitable access to educational supports for children living in under-resourced communities.

Any school COVID-19 policies should consider the following key principles:

- To be able to keep schools safe, it is vitally important that communities take all necessary measures to limit the spread broadly of SARS-CoV-2 throughout the community.
 - It is critical to use science and data to guide decisions about the pandemic and school COVID-19 plans.
 - School transmission mirrors but does not drive community transmission.
 - Community-wide approaches to mitigation are needed for schools to open and remain open.
 - Adequate and timely COVID-19 testing resources must be accessible.
- School policies should be adjusted to align with new information about the pandemic; administrators should refine approaches when specific policies are not working.¹⁰
- Schools must continue to take a multi-pronged, layered approach to protect students, teachers, and staff. By using different approaches, these layers of protection will make in-person learning safe and possible.
- It is critically important to develop strategies that can be revised and adapted depending on the level of viral transmission and test positivity rate throughout the community and in the schools, recognizing the differences between school districts, including urban, suburban, and rural districts.
- School districts must be in close communication and coordinate with state and/or local public health authorities, school nurses, local pediatric practitioners, and other medical experts.
- School COVID-19 policies should be practical, feasible, and appropriate for child and adolescent's developmental stage and address teacher and staff safety.
 - Special considerations and accommodations to account for the diversity of youth should be made, especially for populations facing inequities, including those who are medically fragile or complex, have developmental challenges, or have disabilities. Children and adolescents who need customized considerations should not be automatically excluded from school unless required in order to adhere to local public health mandates or because their unique medical needs would put them at increased risk for contracting COVID-19 during current conditions in their community
- School policies should be guided by supporting the overall health and well-being of all children, adolescents, their families, and their communities but should also look to create safe working environments for educators and school staff. This focus on overall health and well-being includes addressing the behavioral/mental health needs of students and staff.
- These policies should be consistently communicated in languages other than English, if needed, based on the languages spoken in the community, to avoid marginalization of parents/guardians who are of limited English proficiency or do not speak English at all.
- Federal, state, and local funding should be provided for all schools so they can provide all the safety measures required for students and staff. The CDC estimates costs for mitigation strategies are between \$55 and \$442 per student, depending on type of strategy implemented. “These estimates, although not exhaustive, highlight the level of resources needed to ensure that schools reopen and remain open in the safest possible manner and offer administrators at schools and school districts and other decision makers the cost information necessary to budget and prioritize school resources during the COVID-19 pandemic.”¹¹ Funding to support virtual learning and provide needed resources must be available for communities, schools, and children facing limitations implementing these learning modalities in their home (eg, socioeconomic disadvantages) or in the event of school re-closure because of resurgence of SARS-CoV-2 in the community or a school outbreak.

With the above principles in mind, **the AAP strongly advocates that all policy considerations for school COVID-19 plans should start with a goal of having students physically present in school.** Although the AAP strongly advocates for in-person learning, the current widespread circulation of the virus will require

jurisdictions to review the local data as well as the current evidence on transmission in schools to determine the feasibility of in-person instruction. The importance of in-person learning is well-documented, and there is already evidence of the negative impacts on children because of school closures in 2020.

Policy makers and school administrators must also consider the mounting evidence regarding COVID-19 in children and adolescents, including the role they may play in transmission of the infection.^{12,13,14,15,16} SARS-CoV-2 appears to behave differently in children and adolescents than other common respiratory viruses, such as influenza, on which much of the current guidance regarding school closures is based. Although children and adolescents play a major role in amplifying influenza outbreaks, to date, this does not appear to be the case with SARS-CoV-2. Although many questions remain, the preponderance of evidence indicates that children and adolescents can become infected and are less likely to be symptomatic and less likely to have severe disease resulting from SARS-CoV-2 infection.¹⁷ We continue to learn more about the role children play in transmission of SARS-CoV-2. At present, it appears that children younger than 10 years are less likely to become infected and less likely to spread infection to others, although further studies are needed.^{18,19} Some data suggest children older than 10 years may spread SARS-CoV-2 as efficiently as adults, and this information should be part of the considerations taken in determining how to safely and effectively open schools. Additional in-depth studies are needed to truly understand the infectivity and transmissibility of this virus in anyone younger than 18 years, including children and adolescents with disabilities and medical complexities.

Finally, policy makers and school administrators should acknowledge that COVID-19 policies are intended to mitigate, not eliminate, risk. No single action or set of actions will completely eliminate the risk of SARS-CoV-2 transmission, but implementation of several coordinated interventions can greatly reduce that risk. For example, students older than 2 years and staff should wear cloth face coverings (unless medical or developmental conditions prohibit use) *and* should also physically distance, not one or the other. In the following sections, some general principles are reviewed that policy makers and school administrators should consider as they safely plan for school. For all of these, engagement of the entire school community, including families, teachers, and staff, regarding these measures should be a priority.

Since this guidance was first released, there have been several other documents released by the CDC, [National Association of School Nurses](#), and [National Academy of Sciences, Engineering, and Medicine](#). All these documents are consistent regarding the importance of considering the degree to which SARS-CoV-2 is circulating in a community in making school re-opening policies. It is also evident that uniformity across states as to metrics and thresholds used would greatly assist states and school districts. In addition, there should be different thresholds for different age groups and exceptions for certain populations of students, including those with learning and developmental disabilities and of low English proficiency. Although ideally schools could open in communities with low community transmission, there is mounting evidence of the low transmission within schools even in communities with escalating community transmission. Ultimately, the decision to open schools to in-person learning should be based on the joint guidance of local and state public health authorities and school administrators based on current data in the community as well as the evidence of transmission in schools.

Physical Distancing Measures: Physical distancing, sometimes referred to as social distancing, is simply the act of keeping people separated with the goal of limiting spread of contagion between individuals. It is fundamental to lowering the risk of spread of SARS-CoV-2, as the primary mode of transmission is through respiratory droplets by persons in close proximity. Regardless of distance between students, cloth face coverings should be worn at all times in addition to following other public health guidance. There is a conflict between optimal academic and social/emotional learning in schools and strict adherence to current physical

distancing guidelines. For example, the CDC recommends that schools "space seating/desks at least 6 feet apart when feasible." In many school settings, 6 feet between students is not feasible without drastically limiting the number of students. Some countries have been able to successfully reopen schools after first controlling community-wide spread of SARS-CoV-2 while using 3 feet of distance between students without increases in community spread.²⁰ Physical distance between desks should follow current public health guidance, and desks should be placed at least 3 feet apart and ideally 6 feet apart. In many jurisdictions, cloth face coverings are mandatory for children in public settings, including schools. **Schools should weigh the benefits of strict adherence to a 6-foot spacing rule between students with the potential downside if remote learning is the only alternative.** Further, while these guidelines support the concept of cohorting, strict adherence to a specific size of student groups (eg, 10 per classroom, 15 per classroom, etc) should be discouraged, because the size of cohorts will vary depending on many factors specific to individual schools and even individual classrooms.

Given what is known about SARS-CoV-2 transmission dynamics, adults within schools should maintain a distance of 6 feet from other people as much as possible, particularly around other adult staff. For all of the below settings, physical distancing by and among adults is strongly recommended, and meetings, break time, lunch, and curriculum planning should take place virtually or outside if possible. Current evidence for K-8 schools shows that the majority of SARS-CoV-2 transmission occurs primarily between adults, particularly teachers. Other strategies to increase adult-adult physical distance in time and space should be implemented, such as staggered drop-offs and pickups and drop-offs and pickups outside when weather allows, and staff should be encouraged to minimize contacts outside of schools. Parents should, in general, be discouraged from entering the school building. Physical barriers, such as plexiglass, should be considered in reception areas and employee workspaces where the environment does not accommodate physical distancing. Congregating in shared spaces, such as staff lounge areas, should not be allowed given the increasing evidence that these types of spaces have increased rates of transmission because of close proximity and lax adherence to masking recommendations.

The recommendations in each of the age groups below provide guidance to optimize safety of students in schools in the context of physical distancing guidelines and the developmentally appropriate implementation of the strategies. Educational experts may have preference for one or another of the guidelines based on the instructional needs of the classes or schools in which they work.

Pre-Kindergarten (Pre-K): In Pre-K, the relative impact of physical distancing among children is likely small based on current evidence, and it is certainly difficult to implement. Therefore, Pre-K program planning should focus on more effective risk mitigation strategies for this population. These strategies include hand and cough hygiene, infection prevention education for staff and families, adult physical distancing from one another, adults and children wearing face coverings, cohorting, and spending time outdoors.

Higher-priority strategies:

- It is clear that children over the age of 2 years can safely wear cloth face coverings. It is imperative to ask families to support this important practice and for schools to provide strict rules for adherence.
- Cohort classes to minimize crossover among children and adults within the school; the exact size of the cohort may vary, often dependent on local or state health department guidance.
- Utilize outdoor spaces when possible.
- When the weather and air quality allow it, open windows and doors to improve air circulation. Strategically located fans, promoting circulation or decrease in stagnant air, can be utilized to enhance outdoor air circulation.²¹

- Limit unnecessary visitors into the building.

Lower-priority strategies:

- Reducing classmate interactions/play in Pre-K–aged children may not provide substantial COVID-19 risk reduction.

Elementary Schools:

Higher-priority strategies:

- Children should wear cloth face coverings
 - Practice by children and good modeling by adults will help children be more successful at wearing cloth face coverings at younger ages.
- Desks should be placed at least 3 feet apart, and ideally 6 feet apart.
 - If this reduces the amount of time children are present in school, harm may outweigh potential benefits.
- Cohort classes to minimize crossover among children and adults within the school.
- Utilize outdoor spaces when possible.
- When the weather and air quality allow it, open windows and doors to improve air circulation. Strategically located fans, promoting circulation or decrease in stagnant air, can be utilized to enhance outdoor air circulation.²²
- Avoid crowded hallways.

Lower-priority strategies:

- The risk reduction of reducing class sizes in elementary school-aged children may be outweighed by the challenge of doing so.
- Similarly, reducing classmate interactions/play in elementary school-aged children may not provide enough COVID-19 risk reduction to justify potential harms.

Secondary Schools: There is likely a greater impact of physical distancing on risk reduction of COVID-19 in secondary schools than early childhood or elementary education. There are also different barriers to successful implementation of many of these measures in older age groups, as the structure of school is usually based on students changing classrooms. Suggestions for physical distancing risk mitigation strategies when feasible:

- Universal cloth face coverings in middle and high schools.
- Planned avoidance of close physical proximity in cases of increased exhalation (singing, exercise, band); these activities are safest outdoors and spread out.
- Desks should be placed 6 feet apart when feasible.
- Cohort classes if possible, limit cross-over of students and teachers to the extent possible.
 - Ideas that may assist with cohorting:
 - Block schedules (with fewer classes in a given day and electives truncated to shortened time periods).
 - Eliminate use of lockers or assign them by cohort to reduce need for hallway use across multiple areas of the building.

- This strategy would need to be implemented in conjunction with planning to ensure that students are not carrying home an unreasonable number of books on a daily basis and may vary depending on other cohorting and instructional decisions schools are making.
 - Have teachers rotate into different classrooms instead of students when feasible.
 - Utilize outdoor spaces when possible.
 - Teachers and other adult staff should maintain a distance of 6 feet from students when possible and if not disruptive to educational process.
 - Restructure elective offerings to allow small groups within one classroom. This may not be possible in a small classroom.
- Educate students and families on the importance of mitigation measures when not in the school building. Numerous reports from local jurisdictions show that school-associated outbreaks are often associated with students congregating *outside the school setting*, where mitigation measures such as masks and distancing are ignored.
- When the weather and air quality allow it, open windows and doors to improve air circulation. Strategically located fans, promoting circulation or decrease in stagnant air, can be utilized to enhance outdoor air circulation.²³
- Avoid crowded hallways.

Special Education: Every child and adolescent with a disability is entitled to a free and appropriate education and is entitled to special education services based on their individualized education program (IEP). Students receiving special education services may be more negatively affected by distance-learning and may be disproportionately impacted by interruptions in regular education. It may not be feasible, depending on the needs of the individual child and adolescent, to adhere both to distancing guidelines and the criteria outlined in a specific IEP. Attempts to meet physical distancing guidelines should meet the needs of the individual child and may require creative solutions, often on a case-by-case basis. Additional safety measures for teachers and staff working with students with disabilities may need to be in place to ensure optimal safety for all. Each child/adolescent's IEP should be reviewed with the parent/guardian/adolescent yearly (or more frequently if indicated). All recommendations in the IEP should be provided for the individual child no matter which school option is chosen (in person, blended, or remote). See the [AAP Caring for Children and Youth with Special Health Care Needs During the COVID-19 Pandemic](#) for more details.

Adult Staff and Educators

- Universal cloth face coverings at all times; consider adding a face shield for further protection.
- Particular avoidance of close physical proximity to other adults and children.
- Desks should be placed 6 feet away from students if feasible.
- Cohort teachers with classes if possible, limit cross-over of students and teachers to the extent possible.
 - Recognizing certain teachers must cross-over to multiple classes, such as specials teachers, special educators, and secondary school teachers.
- Use plexiglass in front and around desks particularly if unable to be 6 feet away from students.

Physical Distancing in Specific Enclosed Spaces:

Buses

- Encourage alternative modes of transportation for students who have other safe options, including walking or biking.
- Ideally, for students riding the bus, symptom screening would be performed prior to them being dropped off at the bus stop.
 - Having bus drivers or monitors perform these screenings is problematic, as they may face a situation in which a student screens positive yet the parent has left, and the driver would be faced with leaving the student alone or allowing the student on the bus.
- Assigned seating; if possible, assign seats by cohort (same students sit together each day).
- Tape marks showing students where to sit.
- Face coverings should be worn at all times.
- Driver should be a minimum of 6 feet from students; driver must wear face covering; consider physical barrier for driver (eg, plexiglass).
- Minimize number of people on the bus at one time *within reason*.
 - Consider altering start and end times at different grades to allow fewer students on the bus at a time.
- Adults who do not need to be on the bus should not be on the bus.
- Have windows open if weather allows and when able to do so safely.
- Ensure adequate cleaning of buses between uses.

Hallways

- Consider creating one-way hallways to reduce close contact.
- Place physical guides, such as tape, on floors or sidewalks to create one-way routes.
- Where feasible, keep students in the classroom and rotate teachers instead.
- Stagger class periods by cohorts for movement between classrooms if students must move between classrooms to limit the number of students in the hallway when changing classrooms.
- Assign lockers by cohort or eliminate use of lockers altogether.

Playgrounds

Enforcing physical distancing in an outside playground is difficult and may not be the most effective method of risk mitigation. Emphasis should be placed on maintaining classroom cohorts of students and limiting the size of groups participating in playground time (eg, mixing of cohorts). Outdoor transmission of virus is known to be much lower than indoor transmission. If playground equipment is being used, it should be part of cleaning plans implemented by schools.

Meals/Cafeteria

School meals play an important part in addressing food security for children and adolescents and are crucial sources of food and nutrition to children, adolescents, and their families. Regardless of whether children are participating in in-person or distance learning, school districts must continue to provide food security to all students. This may require enacting strong policies and procedures to ensure access to all students. Decisions about how to serve meals must take into account the fact that in many communities there may be more students eligible for free and reduced meals than prior to the pandemic.

- Maximize physical distancing during lunch because of the need to remove face covering during eating.
- Consider having students cohort, potentially in their classrooms.

- Create separate lunch periods to minimize the number of students in the cafeteria at one time.
- Use unused or underutilized spaces for lunch/break times.
- Use outdoor spaces when possible.
- Create an environment that is as safe as possible from exposure to food allergens.
- Encourage children and adults to wash their hands or use hand sanitizer before and after eating.

Face Coverings and Personal Protective Equipment (PPE): Appropriate cloth face coverings protect others if the wearer is infected with SARS-CoV-2, and they also offer protection for the wearer. Evidence continues to mount on the importance of universal face coverings in interrupting the spread of SARS-CoV-2.^{24, 25, 26} The [CDC has advised](#) that the combination of source control (masks protecting others) and personal protection (masks protecting the wearers) may be “synergistic,” in which individual protection “increases with increasing community mask use.”

The AAP strongly recommends the universal use of cloth face coverings in schools for adults and for all children older than 2 years. **It is important to note that the vast majority of children, even those with medical conditions, are able to safely and effectively wear face coverings with adequate practice and support as well as modeling from adults.** School staff and most students should be able to wear cloth face coverings safely and consistently and should be encouraged to do so. Children younger than 2 years and anyone who has trouble breathing or is unconscious, incapacitated, or otherwise unable to remove a face covering without assistance should not wear cloth face coverings.

For certain populations, the use of cloth face coverings by teachers may impede the education process. These include students who are deaf or hard of hearing, students receiving speech/language services, young students in early education programs, and English language learners. Although there are products (eg, face coverings with clear panels in the front) to facilitate their use among these populations.

Students and families should be taught how to properly wear a cloth face covering (over the nose and mouth), to maintain hand hygiene when removing it for meals and physical activity, and to replace and maintain a cloth face covering (they should be washed daily). Parents can be encouraged to send extra clean face coverings in a child’s bookbag, and schools should consider providing face coverings for students and staff who forget or are not able to provide their own.

School health staff should be provided with appropriate medical PPE to use in health suites. This PPE should include universal N95 masks, surgical masks, gloves, disposable gowns, and face shields or other eye protection. School health staff should be aware of [CDC guidance on infection control measures](#). [Asthma treatments using inhalers with spacers](#) should be used rather than nebulizer treatments whenever possible, because nebulizer treatments are aerosol-generating procedures, which increase risks to others. The [CDC recommends](#) that nebulizer treatments at school should be reserved for children who cannot use or do not have access to an inhaler (with spacer or spacer with mask) for a respiratory emergency. Schools should work with families and health care providers to assist with obtaining an inhaler and spacer for students with limited access. In addition, schools should work to ensure students have asthma action plans, which may include directly observed controller medication administration in schools to promote optimal asthma control. In those rare cases in which a student can only use a nebulizer, school health staff should [wear gloves, an N95 or equivalent facemask \(when available\), gown, and eye protection](#). Staff should be trained on proper donning and doffing procedures and follow [CDC guidance](#) regarding precautions when performing this aerosol-generating procedure. Nebulizer treatments should be performed in a space that limits exposure to others and

with minimal staff present. Rooms should be well-ventilated, or treatments should be performed outside. After the use of the nebulizer, the room should undergo routine [cleaning and disinfection](#).

School staff working with students who are unable to wear a cloth face covering or who are unable to manage secretions, who require high touch (hand over hand) instruction, and who must be in close proximity to these students should wear a surgical mask in combination with a face shield.

Symptom Screening: Schools should have a policy regarding symptom screening for teachers and staff and what to do if a student or school staff member becomes sick with symptoms. Temperature checks and symptom screening are part of many reopening processes to identify symptomatic persons to exclude them from entering buildings and business establishments. The list of symptoms of COVID-19 infection has grown since the start of the pandemic, and the manifestations of COVID-19 infection in children, although similar, is often not the same as that for adults. **First and foremost, parents should be instructed to keep their child at home if they are ill, and staff members should stay home if they are ill.** Any student or staff member with a fever of 100.4 degrees or greater or symptoms of possible COVID-19 virus infection should not be present in school.

School policies regarding symptom screening and temperature checks must balance how to perform these procedures for large numbers of students and staff with what we know about how children manifest and transmit COVID-19 infection and with the essential role of schools in the lives of children and families. At this time, the [CDC does not recommend universally screening students](#) at school, because screening may fail to identify many students with SARS-CoV-2 infection, while unnecessarily and repeatedly excluding others with chronic medical conditions. Schools should develop plans for rapid response to a student or staff member with fever at school regardless of the implementation of temperature checks or symptom screening prior to entering the school building.

Instead of temperature checks and symptom screening after arrival to school, the CDC recommends that parents be encouraged to monitor their children and keep them home if they have symptoms of infectious illness. Where symptom screening and temperature checks are mandated, schools may consider allowing parents to perform and report the screening at home. Procedures using texting apps, phone systems, or online reporting rely on parent report and may be most practical but possibly unreliable, depending on individual family's ability to use these communication processes, especially if not made available in their primary language or if families lack access to electronic forms of communication. School nurses or nurse aides should be equipped to measure temperatures for any student or staff member who may become ill during the school day and should have an identified area to separate or isolate students who may have COVID-19 symptoms.

COVID-19 manifests similarly to other respiratory illness in children.^{27, 28, 29, 30} Although children manifest many of the same symptoms of COVID-19 infection as adults, some differences are noteworthy. [According to the CDC](#), children may be less likely to have fever, may be less likely to present with fever as an initial symptom, and may have only gastrointestinal tract symptoms. Students or staff members excluded because of symptoms of COVID-19 should contact their health care provider to discuss testing and medical care. In the absence of testing, students or staff should follow local health department guidance for returning to school after illness.

Testing Considerations: Testing, when combined with effective contact tracing and quarantine, is an important part of the overall public health strategy to limit the spread of COVID-19. The AAP has issued [COVID-19 testing guidance](#).

Diagnostic testing for acute infection with COVID-19 is indicated when an individual has symptoms of COVID-19, or when an individual is asymptomatic but has recent known or suspected exposure to COVID-19. The CDC offers [interim guidance on rapid antigen testing](#).

Screening and surveillance testing involve testing individuals or populations without symptoms or known exposures to COVID-19. Such testing may be part of a strategy to prevent transmission in a congregate setting, such as a school, or to monitor the prevalence of infection in a community. [The CDC does not recommend universal testing of students and staff](#). Testing all students in a school for acute SARS-CoV-2 infection is not feasible in most settings. Some evidence exists that in certain congregate settings, such as schools, that frequent sequential testing of all or a portion of the population may identify asymptomatic persons and allow early exclusion and quarantine of close contacts.³¹

Testing is also not effective when used as the sole prevention method but must be layered with other strategies including physical distancing and masking.³² Outbreaks have been reported in which the index patient was a young person who had a negative test before participating in group activities with minimal protective measures other than testing.^{33,34} Serologic blood testing for antibodies to SARS-CoV-2 should not be used for individual decision making and has no place in considerations for entrance to or exclusion from school. [CDC guidance](#) recommends that antibody testing for COVID-19 should not be used to make decisions about grouping people residing in or being admitted to congregate settings, such as schools, dormitories, or correctional facilities.

Contact Tracing and Quarantine: A student or school staff member who has had a known exposure to COVID-19 (eg, close contact—within 6 feet for a cumulative total of 15 minutes or more within 24 hours—with an individual with laboratory-confirmed SARS-CoV-2 infection or illness consistent with COVID-19), according to [CDC guidelines](#), should self-quarantine. The CDC continues to endorse quarantine for 14 days but does provide options for shorter quarantine durations (10 days from the last exposure or 7 days from last exposure with a negative test at least 5 days after exposure) as potential mechanisms to balance burden to communities and employers against a small probability of spreading the virus. In every case, local health officials should make the determination on quarantine and contact tracing. However, depending on current community viral case rates, local health authorities may make differing recommendations regarding contact tracing and/or school exclusion or school closure.

School districts should partner with their local health officials to facilitate contact tracing in their schools. Special consideration should be given for how to conduct effective contact tracing for staff who work at multiple school facilities (eg, substitute teachers, kitchen staff, custodians, school safety agents) and for related exposures before and after the school day (eg, bus drivers and attendants who may transport students to multiple schools, or students and staff at after-school programs in school buildings). There should be a plan for how to communicate with families and school staff when someone with COVID-19 has been identified within a school building (eg, separate messages for close contacts who are asked to quarantine and for other members of the school community who are not determined to be close contacts). It is important for local school districts and local public health authorities to develop contact tracing procedures that promote information and data sharing that protect confidentiality. The US Department of Education has provided [guidance on how to collaborate on information sharing](#) during the pandemic in a manner that complies with public health exceptions to the Family Educational Rights and Privacy Act (FERPA). Ideally, such communication should be translated into languages other than English for families who are not proficient in English.

State and local governments are encouraged to offer child- and family-centered support for close contacts (eg, priority access to testing for children and families if possible, economic and social support services for parents who must stay home with a quarantined child, pediatric-specific advice for how families can support a child who is asked to quarantine or self-isolate). School districts should also prepare emergency plans for how teaching and learning will continue when staff and students are asked to quarantine (eg, backup staff coverage for in-person learning when teachers must quarantine, a rapid transition to remote learning at home for students who must quarantine).

[CDC guidance for health care personnel exposed to COVID-19](#) may apply to school health staff, including school nurses and school-based health center (SBHC) staff, who may not need to quarantine after exposure if they were using appropriate PPE during close contact with someone who subsequently tests positive for COVID-19. This guidance is vital to maintaining adequate school health services during in-person learning. Ensuring adequate PPE for school health services staff is necessary.

Cleaning and Disinfection: The main mode of COVID-19 spread is from person to person, primarily via respiratory droplet transmission. For this reason, strategies for infection prevention should center around this form of spread, including physical distancing, face coverings, and hand hygiene. Given the challenges that may exist in children and adolescents effectively adhering to recommendations, it is critical that staff consistently set a good example for students by modeling behaviors around physical distancing, face coverings, and hand hygiene. Infection via fomites is less likely. However, because the virus may survive on certain surfaces for some time, it is possible to get infected after touching a virus contaminated surface and then touching the mouth, eyes, or nose. Frequent handwashing as a modality of containment is vital.

The additional cleaning requirements because of the COVID-19 pandemic will require additional resources for schools both in supplies and potential in staffing. Cleaning should be performed per established protocols followed by disinfection when appropriate.³⁵ Normal cleaning with soap and water decreases the viral load and optimizes the efficacy of disinfectants. When using disinfectants, the manufacturers' instructions must be followed, including duration of dwell time, use of PPE if indicated, and proper ventilation. The use of the Environmental Protection Agency (EPA)-approved disinfectants against COVID-19 is recommended ([EPA List N](#)). When possible, only products labeled as [safe for humans and the environment](#) (eg, Safer or Designed for the Environment), containing active ingredients such as hydrogen peroxide, ethanol, citric acid, should be selected from this list, because they are less toxic, are not strong respiratory irritants or asthma triggers, and have no known carcinogenic, reproductive, or developmental effects.

When EPA-approved disinfectants are not available, alternative disinfectants such as diluted bleach or 70% alcohol solutions can be used. Children should not be present when disinfectants are in use and should not participate in disinfecting activities. Most of these products are not safe for use by children, whose "hand-to-mouth" behaviors and frequent touching of their face and eyes put them at higher risk for toxic exposures. If disinfection is needed while children are in the classroom, adequate ventilation should be in place and nonirritating products should be used. Disinfectants such as bleach and those containing quaternary ammonium compounds or "Quats" should not be used when children and adolescents are present, because these are known respiratory irritants.

In general, elimination of high-touch surfaces is preferable to frequent cleaning. For example, classroom doors can be left open rather than having students open the door when entering and leaving the classroom, or the door can be closed once all students have entered followed by hand sanitizing. As part of increasing social distance between students and surfaces requiring regular cleaning, schools could also consider eliminating the

use of lockers, particularly if they are located in shared spaces or hallways, making physical distancing more challenging. If schools decide to use this strategy, it should be done within the context of ensuring that students are not forced to transport unreasonable numbers of books back and forth from school on a regular basis.

When elimination of use of high-touch surfaces is not possible, surfaces that are used frequently, such as drinking fountains, door handles, sinks and faucet handles, etc, should be cleaned and disinfected at least daily and as often as possible.³⁶ Bathrooms, in particular, should receive frequent cleaning and disinfection. Shared equipment including computer equipment, keyboards, art supplies, and play or gym equipment should also be disinfected frequently. Hand washing should be promoted before and after touching shared equipment. Computer keyboard covers can be used to facilitate cleaning between users. [Routine cleaning practices](#) should be used for indoor areas that have not been used for 7 or more days or outdoor equipment. Surfaces that are not high touch, such as bookcases, cabinets, wall boards, or drapes should be cleaned following standard protocol. The same applies to floors or carpeted areas.

Outdoor playgrounds/natural play areas only need routine maintenance, and hand hygiene should be emphasized before and after use of these spaces. Outdoor play equipment with high-touch surfaces, such as railings, handles, etc, should be cleaned and disinfected regularly if used continuously.

[Alternative disinfection methods](#): The efficacy of alternative disinfection methods, such as ultrasonic waves, high-intensity UV radiation, and LED blue light against COVID-19 virus is not known. The EPA does not routinely review the safety or efficacy of pesticidal devices, such as UV lights, LED lights, or ultrasonic devices. Therefore, the EPA cannot confirm whether, or under what circumstances, such products might be effective against the spread of SARS-CoV-2.³⁷

Ventilation: The primary mode of transmission of SARS-CoV-2 appears to be by respiratory droplet transmission by people in close proximity. Although airborne transmission has occurred in some settings, the preponderance of evidence at this time suggests that this is not a primary mode of transmission. For example, the reproductive number of SARS-CoV-2 is in the range of other viruses known to be transmitted primarily by respiratory droplets, such as influenza. Further, simple face masks appear to be quite effective for decreasing the likelihood of transmission of SARS-CoV-2, in contrast with known airborne pathogens such as measles. With this in mind, mitigation efforts should focus on prevention of droplet transmission. Proper ventilation, however, does have a role in preventing the spread of any respiratory pathogen.³⁸ Heating, air conditioning, and ventilation (HVAC) systems should be inspected for optimal functioning, filters should be within their service life, and MERV-13 (minimum efficiency reporting value) efficiency filtration should be used, if the equipment allows.^{39,40} Demand-controlled ventilation (DCV) should be disabled when possible, and the system should run continuously to improve air exchanges in the school building. The American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) recently published pandemic-specific guidelines for schools to implement and retrofit equipment, improve air quality, and slow transmission of viruses such as SARS-CoV-2 via heating, ventilation, and air conditioning systems.⁴¹

Other Considerations

On-site School-Based Health Services: On-site school health services, including school-based health centers, should be supported if available, to complement the pediatric medical home and to provide pediatric acute, chronic, and preventive care. Collaboration with [school nurses](#) is essential, and school districts should involve school health services staff and consider collaborative strategies that address and prioritize immunizations and other needed health services for students, including behavioral health, vision screening, hearing, and

reproductive health services. Plans should include required outreach to connect students to on-site services regardless of remote or in-person learning mode, including considering maintaining services in SBHCs, even during periods of virtual learning.

Vision Screening: Vision screening practices should continue in school whenever possible. Vision screening serves to identify children who may otherwise have no outward symptoms of blurred vision or subtle ocular abnormalities that, if untreated, may lead to permanent vision loss or impaired academic performance in school. Personal prevention practices and environmental [cleaning and disinfection](#) are important principles to follow during vision screening, along with any additional guidelines from local health authorities.

Hearing Screening: Safe hearing screening practices should continue in schools whenever possible. School screening programs for hearing are critical in identifying children who have hearing loss as soon as possible so that reversible causes can be treated and hearing restored. Children with permanent or progressive hearing loss will be habilitated with hearing aids to prevent impaired academic performance in the future. Personal prevention practices and environmental [cleaning and disinfection](#) are important principles to follow during hearing screening, along with any additional guidelines from local health authorities.

Students with Disabilities: The impact of loss of instructional time and related services, including mental health services as well as occupational, physical, and speech/language therapy during the period of school closures and remote learning is significant for students with disabilities. All students, but especially those with disabilities, may have more difficulty with the social and emotional aspects of transitioning out of and back into the school setting. As schools prepare for or continue in-person learning, school personnel should develop a plan to ensure a review of each child and adolescent with an IEP to determine the needs for compensatory education to adjust for lost instructional time as well as other related services. In addition, schools can expect a backlog in evaluations; therefore, plans to prioritize those for new referrals as opposed to re-evaluations will be important. Many school districts require adequate instructional effort before determining eligibility for special education services. However, virtual instruction or lack of instruction should not be reasons to avoid starting services such as response-to-intervention (RTI) services, even if a final eligibility determination is postponed.

Behavioral Health/Emotional Support for Children and Adolescents: The COVID-19 pandemic has created profound challenges for communities, families, and individuals, leading to a range of emotional and behavioral responses. There are many factors unique to this pandemic (eg, uncertainty, rapidly changing and conflicting messages, duration of the crisis, need for quarantine, and use of [face coverings](#)) that increase its effects on emotional and behavioral health (EBH). Populations with a higher baseline risk, such as historically under-resourced communities, and children and youth with special health care needs, may be especially vulnerable to these effects. The impact of the pandemic is also compounded by isolation and an interruption in the support systems families utilize. (See: [Interim Guidance on Supporting the Emotional and Behavioral Health Needs of Children, Adolescents, and Families During the COVID-19 Pandemic](#))

Schools are a vital resource to continue to address and provide resources for a wide range of mental health needs of children and staff. The emotional impact of the pandemic, grief because of loss, financial/employment concerns, social isolation, and growing concerns about systemic racial inequity—coupled with prolonged limited access to critical school-based mental health services and the support and assistance of school professionals—demand careful attention and structured screening and supports in place during all modes of learning, whether remote or in-person. Schools should be prepared to adopt an approach for mental health support, and just like other areas, supporting mental health will require additional funding

to ensure adequate staffing and the training of those staff to address the needs of the students and staff in the schools.

Schools should consider providing training to classroom teachers and other educators on how to talk to and support children during and after the COVID-19 pandemic. Students requiring mental health support should be referred to school mental health professionals.

Suicide is the second leading cause of death among adolescents or youth 10 to 24 years of age in the United States. In the event distance learning is ongoing, schools should develop mechanisms to evaluate youth remotely if concerns are voiced by educators or family members and should be establishing policies, including referral mechanisms for students believed to be in need of in-person evaluation, even before schools resume in-person instruction.

School mental health professionals should be involved in shaping messages to students and families about the response to the pandemic and the changing school learning plans based on a variety of community SARS-CoV-2 factors. Fear-based messages widely used to encourage strict physical distancing may cause problems when schools resume in-person instruction, because the risk of exposure to COVID-19 may be mitigated but not eliminated. Communicating effectively is especially critical, given potential adaptations in plans for in-person or distance learning that need to occur during the school year because of changes in community transmission of SARS-CoV-2.

When schools are in-person, plans should already be in place for outreach to families whose students do not return for various reasons. This outreach is especially critical, given the high likelihood of separation anxiety and agoraphobia in students. Students may have difficulty with the social and emotional aspects of transitioning back into the school setting, especially given the unfamiliarity with the changed school environment and experience. Special considerations are warranted for students with pre-existing anxiety, depression, and other mental health conditions; children with a prior history of trauma or loss; children with autism spectrum disorder; and students in early education who may be particularly sensitive to disruptions in routine and caregivers. Students facing other challenges, such as poverty, food insecurity, and homelessness, and those subjected to ongoing racial inequities may benefit from additional support and assistance.

Schools need to incorporate academic accommodations and supports for all students who may still be having difficulty concentrating or learning new information because of stress or family situations that are compounded by the pandemic. It is important that school personnel do not anticipate or attempt to catch up for lost academic time through accelerating curriculum delivery at a time when students and educators may find it difficult to even return to baseline rates. These expectations should be communicated to educators, students, and family members so that school does not become a source of further distress.

Mental Health of Staff

The personal impact on educators and other school staff should be recognized. In the same way that students need ongoing support to process the information they are being taught; teachers cannot be expected to be successful at teaching children without having their mental health needs supported. The strain on teachers this year as they have been asked to teach differently while they support their own needs and those of their families has been significant. Additional challenges with staff shortages, changing learning modalities, and prolonged duration of the crisis are continuing to present additional challenges and further impact teachers and school staff. Resources such as Employee Assistance Programs and other means to provide support and mental health services should be prioritized. The individual needs and concerns of school professionals should

be addressed with accommodations made as needed (eg, for a classroom educator who is pregnant, has a medical condition that confers a higher risk of serious illness with COVID-19, resides with a family member who is at higher risk, or has a mental health condition that compromises the ability to cope with the additional stress).

Although schools should be prepared to be agile to meet evolving needs and respond to increasing knowledge related to the pandemic and may need to institute partial or complete closures when the public health need requires, school leaders should recognize that staff, students, and families will benefit from sufficient time to understand and adjust to changes in routine and practices. During a crisis, people benefit from clear and regular communication from a trusted source of information and the opportunity to dialogue about concerns and needs and feel they are able to contribute in some way to the decision-making process. Change is more difficult in the context of crisis and when predictability is already severely compromised.

Food Insecurity: In 2018, 11.8 million children and adolescents (1 in 7) in the United States lived in a food-insecure household.⁴² The coronavirus pandemic has led to increased unemployment and poverty for America's families, which will likely increase even further the number of families who experience food insecurity.⁴³ School COVID-19 planning must consider the many children and adolescents who experience food insecurity already (especially at-risk and populations living in poverty) and who will have limited access to routine meals through the school district if schools remain closed. The short- and long-term effects of food insecurity in children and adolescents are profound.⁴⁴ **Schools should continue to plan for how students participating in free- and reduced-meal programs will receive food in the event of a school closure or if they are excluded from school because of illness or SARS-CoV-2 infection.**

Immunizations: Existing school immunization requirements should be maintained and not deferred because of the current pandemic. In addition, **although influenza vaccination is generally not required for school attendance, it should be highly encouraged for all students and staff.** The symptoms of influenza and SARS-CoV-2 infection are similar and taking steps to prevent influenza will decrease the incidence of disease in schools, and the related lost educational time and resources needed to handle such situations by school personnel and families. School districts should consider requiring influenza vaccination for all staff members.

Pediatricians should work with schools and local public health authorities to promote childhood vaccination messaging well before the start of the school year. It is vital that all children receive recommend vaccinations on time and get caught up if they are behind as a result of the pandemic. The capacity of the health care system to support increased demand for vaccinations should be addressed through a multifaceted collaborative and coordinated approach among all child-serving agencies including schools.

Schools should collaborate with state and local public health to assure that teachers and staff have access to the COVID-19 vaccine as recommended by the [Advisory Committee on Immunization Practice \(ACIP\) and CDC](#). Pediatricians should work with families, schools, and public health to promote receipt of the [COVID-19 vaccine](#) as it becomes available to children and adolescents.

Organized Activities: It is likely that sporting events, practices, and conditioning sessions as well as other extracurricular activities will be limited in many locations. The [AAP Interim Guidance on Return to Sports](#) helps pediatricians inform families on how best to ensure safety when considering a return to sports participation. Preparticipation evaluations should be conducted in alignment with the [AAP Preparticipation Physical Evaluation Monograph, 5th ed](#), and state and local guidance.

Additional Information:

- [AAP Guidance Related to Childcare During COVID-19](#)
- [AAP Guidance on Providing Pediatric Well-Care During COVID-19](#)
- [AAP Guidance on Cloth Face Coverings](#)
- [AAP Guidance on Testing](#)
- [AAP Guidance on Use of Personal Protective Equipment \(PPE\)](#)
- [AAP Guidance on Caring for Children and Youth with Special Health Care Needs During the COVID-19 Pandemic](#)
- [AAP Interim Guidance on Supporting the Emotional and Behavioral Health Needs of Children, Adolescents and Families During the COVID-19 Pandemic](#)
- [List of latest AAP News articles](#) on COVID-19
- [Pediatrics COVID-19 Collection](#)
- [AAP COVID-19 Advocacy Resources](#) (Login required)
- [Centers for Disease Control and Prevention: Considerations for Schools](#)
- [Centers for Disease Control and Prevention: School Decision Tree](#)
- [Centers for Disease Control and Prevention: Parent Decision Making Tool](#)
- [Centers for Disease Control and Prevention: Activities and Initiatives Supporting the COVID Response](#)
- [Centers for Disease Control Schools and Childcare - Plan, Prepare, & Respond](#)
- [Centers for Disease Control and Prevention: Information for Pediatric Healthcare Providers](#)
- [COVID-19 Interim Guidance: Return to Sports](#)
- Information for Parents on HealthyChildren.org: [Returning to School During COVID-19](#)

Resources:

- [Coalition to Support Grieving Students](#)
- [Using Social Stories to Support People with I/DD During the COVID-19 Emergency](#)
- [Social Stories for Young and Old on COVID-19](#)

Interim Guidance Disclaimer: The COVID-19 clinical interim guidance provided [here](#) has been updated based on current evidence and information available at the time of publishing. Guidance will be regularly reviewed with regard to the evolving nature of the pandemic and emerging evidence. All interim guidance will be presumed to expire on June 30, 2021 unless otherwise specified.

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