

K-12 Schools and COVID-19: Latest Information Regarding Masks

July 30, 2021

At this critical juncture in the pandemic, collaboration at all levels — helping families, students, and staff stay safe in school using the evidence-based tools we have against COVID-19 — is more important than ever.

Since the release of the CDPH K-12 Schools Guidance for 2021-22 on July 12, 2021 there have been further developments about the importance of masks from scientific and public health leaders based on the evidence, science, and trends regarding COVID-19, particularly in light of the Delta variant, a much more contagious form of the virus that causes the infection.

The CDPH guidance on universal masking for K-12 indoor settings is aligned with top national scientific recommendations:

- The Centers for Disease Control and Prevention (CDC) [recommended](#) universal masking in K-12 schools on July 28th.
- The American Academy of Pediatrics (AAP) [recommended](#) universal masking in K-12 schools on July 19th. The AAP is the leading national pediatric group, committed to ensuring the health and well-being of all children and youth.

It is clear that the pandemic is continuing to evolve rapidly right now, and that the Delta variant is acting differently than the earlier versions of the virus. New data suggest that people who are vaccinated are likely as infectious as unvaccinated and Delta is two times as contagious as the initial 2020 virus. There is still a large proportion of people who are infected with no symptoms. This highlights that, in the face of Delta, masking among all at schools will give us the best chance of keeping transmission low and minimizing any necessary quarantines. For the youngest kids, masks provide a key layer of protection until they have a chance to be vaccinated.

The evolution of the pandemic, with rapidly rising case rates throughout the state, limits our ability to know at this point the exact timing or the exact metrics informing when universal masking might change. For example, regarding the question about benchmark vaccination rates that would allow for a change in universal masking, the contagiousness of a virus informs the percent of people that might need to be vaccinated in a community in order to prevent ongoing spread, and allow for a change to a universal masking recommendation. In the face of the more contagious Delta variant, the understanding of what a potential benchmark might be is evolving.

However, CDPH continues to follow closely the trends that informed the masking decisions in schools for our state and the country. We are hopeful that we will have a better understanding in mid-Fall, after schools have been open in the context of the Delta variant. We will be closely watching key metrics, including transmission in schools, community case rates and vaccination rates and will continue to work with school leaders to understand actual experience. Low, sustained community case rates and no school outbreaks would be reassuring indicators.

In addition, it is crucial for all in our schools and broader communities to stay focused on vaccination as the most effective pathway out of the pandemic. At the individual level, vaccines prevent most severe illness, hospitalizations, and death. However, importantly, they also help prevent outbreaks and infections that lead to new variants. It may be that the most important take-home point for students and families and schools is that the sooner everyone gets vaccinated, the sooner we can all take off our masks. If ongoing outbreaks of Delta or other variants in the schools are avoided, through the use of the layers that work, including masks, this pandemic will end even faster.

Additional information regarding the evidence on effectiveness of masks and their safety can be helpful in discussions between and with public health leaders and liaisons, schools, parents, students, and school board members. We are providing some additional information below in order to support those conversations.

Summarized Points:

- Universal masking is recommended by the [CDC](#) in its Guidance for COVID-19 Prevention in K-12 Schools (updated July 27, 2021). From the CDC announcement: “CDC recommends universal indoor masking for all teachers, staff, students, and visitors to K-12 schools, regardless of vaccination status. Children should return to full-time in-person learning in the fall with layered prevention strategies in place.”
- Universal masking indoors in K-12 schools is recommended by the [American Academy of Pediatrics](#), the leading national pediatric advisory group, committed to ensuring the health and well-being of all children and youth.
- Masks prevent infections and outbreaks in K-12 settings, thereby preventing disease in students and school staff, supporting learning, and minimizing missed school days for students.
- Masks are one of the most effective and simplest safety mitigation layers to prevent in-school transmission of COVID-19 infections and to support full time in-person instruction in K-12 schools. SARS-CoV-2, the virus that causes COVID-19, is primarily transmitted via airborne particles. Masks limit the spread amount of the virus expelled into in the air from infected persons and protect others exposed to these particles.
- In the context of the highly contagious Delta variant, masking indoors for both vaccinated and unvaccinated people is a powerful and important tool for preventing infections. Masking for all at schools will give us the best chance of keeping transmission low and minimizing any necessary quarantines.
- For the youngest kids, masks provide a key layer of protection until they have a chance to be vaccinated.
- Vaccination is the most effective pathway out of the pandemic. The sooner everyone gets vaccinated, the sooner we can all take off our masks. If ongoing outbreaks of Delta or other variants in the schools are avoided, through the use of the layers that work, including masks, this pandemic will end even faster.

Evidence on mask effectiveness

For a list of articles regarding mask effectiveness, the CDC provides an excellent overview [here](#).

And a few highlighted studies that illustrate the effectiveness, in case they are useful for administrators and board members (citations are in the CDC overview linked above):

- An investigation of a high-exposure event, in which 2 symptomatically ill hair stylists interacted for an average of 15 minutes with each of 139 clients during an 8-day period, found that none of the 67 clients who subsequently consented to an interview and testing developed infection. The stylists and all clients universally wore masks in the salon as required by local ordinance and company policy at the time.
- In a study of 124 Beijing households with > 1 laboratory-confirmed case of SARS-CoV-2 infection, mask use by the index patient and family contacts before the index patient developed symptoms reduced secondary transmission within the households by 79%.
- A retrospective case-control study from Thailand documented that, among more than 1,000 persons interviewed as part of contact tracing investigations, those who reported having always worn a mask during high-risk exposures experienced a greater than 70% reduced risk of acquiring infection compared with persons who did not wear masks under these circumstances.
- A study of an outbreak aboard the USS Theodore Roosevelt, an environment notable for congregate living quarters and close working environments, found that use of face coverings on-board was associated with a 70% reduced risk.
- Investigations involving infected passengers aboard flights longer than 10 hours strongly suggest that masking prevented in-flight transmissions, as demonstrated by the absence of infection developing in other passengers and crew in the 14 days following exposure.

Finally, it may be helpful to note, for those who heard about it when it was published, the retraction of the article that suggested that CO₂ retention occurred because of masking. The article was [retracted](#) last week based on “fundamental concerns about the study methodology, uncertainty regarding the validity of the findings and conclusions, and the potential public health implications.”