

# COVID-19 Strategies for Schools

AUGUST 24, 2020



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Metro Denver Partnership for Health

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## Recommendations from the Metro Denver Partnership for Health

**Continued school closures threaten the health and safety of Colorado children. In addition to learning losses, children face increased risks of food insecurity, potential abuse, poor mental health and social-emotional wellness, and lack of physical activity. And these harms fall hardest on children from lower income families.<sup>1</sup>**

Colorado children need to get back to school. The Metro Denver Partnership for Health (MDPH) is pleased to provide evidence-informed guidance to our region's school superintendents to support their efforts in reopening school safely.

MDPH is led by the six local public health agencies serving the seven-county Denver metro area: Boulder County Public Health, Broomfield Public Health Department, Denver Department of Public Health and Environment, Denver Public Health, Jefferson County Public Health, and Tri-County Health Department serving Adams, Arapahoe, and Douglas counties.

While at least six feet of physical distancing, as currently recommended for other social settings, is preferred in schools, we recognize this is difficult to ensure. Given the growing data on low transmission potential from children to others and the relative harms of keeping kids out of school, we believe that schools can implement a suite of complementary infection control and prevention measures that can provide a comparably safe environment for students and staff.

This document provides guidance for in-person school attendance. These are recommendations for schools to consider, not requirements. This document also identifies considerations that school

superintendents can use to inform decision-making. For example, limited use of physical distancing will require schools to adopt other measures, including creating consistent cohorts of students and teachers; requiring face covering/face shields as much as possible; daily symptom checking for students and staff; rigorous hand hygiene; access to routine COVID testing; and vaccination for other infections that cause respiratory illnesses.

Adjustments may need to occur over time based on changing epidemiology in the community and evolving knowledge and prevention strategies. MDPH will work with our school leaders to ensure they have timely data and information to support their decisions and promote the health, safety, and well-being of students, teachers, staff, and families. This includes understanding community transmission, the relative risk and disease burden in the community and region, and communicating with parents and teachers.

### Background

More than three months after Colorado's first reported case of COVID-19, and with almost 9 million cases of COVID-19 diagnosed worldwide, several patterns relevant to school re-opening are beginning to emerge. First, children appear to have lower



rates of infection than do older persons and, when infection does occur, are much less likely to have serious complications than adults.<sup>2</sup> Second, while children (including those not showing symptoms) can transmit COVID-19, emerging evidence indicates that children are not primary drivers of transmission and that school reopening is likely to have minimal impact on transmission between students or between students and staff.<sup>3,4</sup>

Much of the decision-making regarding school closures in March was based on the decades of research showing that schools are a major venue for influenza transmission. However, the emerging evidence suggests that COVID-19 transmission among children is quite different from influenza. For example, recently published contact tracing data from several other countries indicate that children with COVID-19 illness transmitted infection to very few other individuals in school settings: 0/122 other children in France, 0/924 children and 0/101 adults in Ireland, and 2/735 children and 0/128 adults in Australia.<sup>5,6</sup> These observations are supported by assessments of outbreaks in household settings where children rarely appear to be the primary source of illness in other family members.<sup>7</sup>

In spite of these positive preliminary outcomes, getting kids back to school involves risk, especially as

the evidence regarding COVID-19 continues to evolve. No reopening structure can ensure zero transmission and some infections are likely to occur among students, staff, and families, whether from exposure in the home, the community, or in school. However, the American Academy of Pediatrics Colorado Chapter argues that the harms of school closures, including isolation and loss of community, will lead to adverse risks that can and should be mitigated by thoughtful prevention measures to allow a return to school.<sup>8</sup>

On balance, we think the health benefits of in-person school attendance outweigh the health risks. Furthermore, school closures are likely to provide less net societal benefit than other closure strategies that Colorado recently used in its Stay at Home and Safer at Home phases of physical distancing.

Vaccines for COVID-19 are in development, but none are available at present. However, vaccination for other infections that involve the respiratory system (influenza, measles, and pertussis [whooping cough]) are available and are underused in our community. Preventing these infections will decrease the occurrence of symptoms that might suggest COVID-19. Expanding access to vaccination among students and school staff will also help us prepare for the time when a COVID-19 vaccine has been licensed.



## Starting Dates

### Guidance

- **Students:** Returning to school in August.
- **Principals and teachers:** Returning prior to student arrival.

### Other Considerations

- Consider condensing school calendar to maximize current low rates of transmission in anticipation of possible outbreaks later in the year. For example, minimize student holidays and out-of-class days until November or December break.
- Consider prolonging spring break for the same reason if needed.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)



## Masks and Other Protective Equipment

### Guidance

- **Students:** Face covering required unless six feet of physical distancing can be maintained, or mitigating circumstances preclude use.
- **Teacher and staff:** Face covering required unless six feet of physical distancing can be maintained, or mitigating circumstances preclude use.

### Other Considerations

- Masks can reduce respiratory droplet transmission, especially indoors with less than six feet of separation.
- Consider face shields (or N95 masks if feasible) as added barrier option for staff and for teachers, especially when working in close proximity or when students are unable to wear masks consistently, such as in some special education classes.
- Masks/face covering should be required except where doing so would inhibit the individual's health, in which case reasonable accommodations should be pursued to maintain safety and health.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)



## Vaccination

### Guidance

- Assure access to vaccination for influenza, measles (MMR), and pertussis (DTaP)

### Other Considerations

- In-school immunization programs and collaboration with healthcare systems can provide access to current vaccines.



## Cohort Grouping

### Guidance

- **Students and teachers:** Keep same group together each day.
- Use technology if/when new teachers need to join a classroom for a time-limited period.
- Common space such as libraries and cafeterias should be accessed as a cohort.
- Limit or discontinue use of lockers and locker rooms.

### Other Considerations

- Create schedules that decrease opportunities for group of students to mix such as limiting passing periods and in-between class times.
- For mixed cohorts (A/B, morning and afternoon cohorts) that cannot be physically distant: disinfect shared spaces/classrooms between cohort changes; require face coverings as feasible under previous guidance; monitor daily symptom screening checks; and promote hand hygiene.
- Indoor extracurricular programs should work to adhere to physical distancing and masking guidelines if cohorts are mixed.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)

[Colorado High School Activities Association Athletics Guidance](#)



## Physical Distancing

### Guidance

- Maintain six feet of distance in indoor and outdoor settings if possible
- One-way hallways
- **Primary School:** Stagger recess times
- **Secondary School:** Limit or discontinue use of lockers; limit in-between class time

### Other Considerations

- Mandatory face covering (except where doing so would inhibit the individual's health), hand hygiene, disinfection, cohorting, and daily symptom checks are strongly encouraged if 6 feet not feasible.
- Consider physical demarcations outlining six foot intervals for pick up, drop off, bus loading, etc.
- Avoid large groups, especially indoors (performances, assemblies).

### Resources

[Reopening Schools in the Context of COVID-19: Health and Safety Guidelines from Other Countries](#)

[Center for Disease Control and Prevention \(CDC\) School Guidelines](#)



## Bus Transportation

### Guidance

- One student per seat

### Other Considerations

- Masking/face covering should be required.
- Multiple children could share a seat if they are members of the same household, such as siblings, or in a classroom cohort.

### Resources

[Guidelines for Public Transportation Providers](#)



## Hand washing and Sanitizing

### Guidance

- **Students:** Observed hand washing/sanitizing at regular intervals
- **Teachers, staff:** every few hours through the day

### Other Considerations

- Implement health hygiene education (covering coughs and sneezes in tissues/elbows).
- Consider sneeze guards in some settings such as teacher or reception desks.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)



## Temperature and Symptom Screening

### Guidance

- **Students:** Self-reported by families (or self-report for secondary school) prior to arrival on school grounds. If incomplete, screened upon arrival.
- **School-based adults:** Self-reported prior to arrival on school grounds. If incomplete, screened upon arrival.

### Other Considerations

- Screen to include temperature checks.
- Designate a room to isolate any symptomatic individuals until he/she can safely return home or seek care.
- Develop streamlined process for same day testing of symptomatic students and staff in partnership with local health department and delivery system or providers.
- Districts can collaborate with Gary Community Investments for access to app-based symptom monitoring.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)

Contact Eric Parrie ([eparrie@garycommunity.org](mailto:eparrie@garycommunity.org)) with Gary Community Investments for access to app-based symptom monitoring and access to testing for staff and students.



## Building Entry/Exit

### Guidance

- Stagger drop-off/pickup times (assigned by cohort)
- Limit student and staff contact by parents or other adults who do not need to be on school grounds.

### Other Considerations

- Establish pickup procedure for anyone with COVID symptoms being sent home.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)



## Ventilation

### Guidance

- Ensure that ventilation systems operate properly per OSHA guidance.
- Increase circulation of outdoor air as much as possible by opening windows and doors and other methods when indoor and outdoor conditions safely permit.
- Improve engineering controls using the building ventilation systems to maximize air exchange rates.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)

[CDPHE Guidance for Preventing, Reporting and Mitigating Workplace Outbreaks](#)



## Cleaning Procedures

### Guidance

- Clean frequently touched surfaces in schools and on buses at least daily and between use as much as possible
- Primary School: Remove toys or classroom items that cannot be easily cleaned or sanitized, such as plush toys.

### Resources

[CDPHE Environmental Cleaning Guidance](#)

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)



## Testing

### Guidance

- Develop systems for prompt referral of symptomatic teachers, staff, and students for fast-turnaround testing

### Other Considerations

- While a negative test result does not necessarily allow an adult or student with COVID-like symptoms to avoid isolation at home, it can enhance faster detection of outbreaks if positive cases are detected
- Districts can collaborate with Gary Community Investments for streamlined access to testing.

### Resources

[CDPHE Testing Overview](#)

Contact Eric Parrie ([eparrie@garycommunity.org](mailto:eparrie@garycommunity.org)) with Gary Community Investments for access to app-based symptom monitoring and access to testing for staff and students.



## Protocols for Positive Cases and Return to School

### Guidance

- Symptomatic adults and students should not come to school or should be sent home.

### Other Considerations

- Symptomatic students on school grounds should be isolated until they can return home safely.
- Work with Colorado Department of Public Health and Environment to develop guidelines on return to school, contact tracing, and indications for classroom to avoid school closure.

### Resources

[Centers for Disease Control and Prevention \(CDC\) School Guidelines](#)



## Comorbidities (Who is at greater risk and should not be in-person at school?)

### Guidance

- Develop approaches to allow adults or students who are at greater risk of serious complications from COVID to learn/work remotely.
- For students, this should be determined by a health care provider.
- For adults, highest priority for remote work should be given to those 65 and older or with highest-risk underlying illnesses (i.e, heart disease, lung disease, diabetes).

### Other Considerations

- Consider offering use of medical grade masks (with appropriate fit) as an alternative to remote work.

### Resources

[Centers for Disease Control and Prevention Information People at Higher Risk for Severe Illness](#)

## APPENDIX

# Metro Denver Regional Dashboard for Schools

The Metro Denver Partnership for Health (MDPH) has identified three key metrics that schools and local public health agencies across the metro region can monitor to inform their decisions regarding in-person school attendance.

These “regional” metrics – COVID-19 case rates, trends in case numbers, and test positivity – are measured at the county level and provide an overview of COVID-19 transmission within a community. While case rates appear to be the primary determinant of community transmission, the other two metrics provide important contextual information in interpreting case rates. When assessed together, these metrics can provide greater understanding of the magnitude and trajectory of transmission within a county, and we believe that they can prove valuable to all districts

for monitoring and decision-making. Following these metrics uniformly across the entire metro region can provide important comparative data.

There are additional metrics that may be useful for districts to consider tracking to inform discussions with their school boards, public health agencies, teachers, and community partners. These include trends in the number of hospitalizations and case rates among school-age children, both measured at the county level, and levels of personal protective equipment (PPE), measured at the school district level.

These metrics may be updated over time to align with state indicators associated with public health orders and as additional information and data are available.

| <b>Regional Metric</b>   | <b>Purpose</b>  | <b>Green Threshold</b> | <b>Yellow Threshold</b> | <b>Red Threshold</b>      | <b>Comments</b>   |
|--|---|------------------------|-------------------------|---------------------------|---|
| <b>Case rates: 14-day case number per 100,000 population</b>         | Current level of community transmission to understand where the community has been.     | Less than 50           | 50-100                  | Greater than 100          | A 14-day case number per 100,000 measures the magnitude of COVID-19 infection in a community and is the single best indicator for the likelihood of transmission across the community as well as in settings such as schools.   |
| <b>Trend in case numbers per 100,000 in the past two weeks</b>       | Trend in community transmission to understand where the community is heading.           | Less than 25% increase | 25-50% increase         | Greater than 50% increase | Trend in case rates informs the directionality of transmission within a community and provides context for interpreting and responding to different levels of case rates.   |
| <b>Percent positivity on polymerase chain reaction (PCR) testing</b> | Adequacy of testing to understand if it is enough to understand community transmission. | Less than 5%           | 5.1-7%                  | Greater than 7%           | Test positivity provides important insights as to whether testing across the community is sufficient to measure the true magnitude of infection and also how testing is impacting case rates. Rising test positivity rates indicate that rising case rates are not simply a result of increased testing, but a measure of true increases in transmission. |

| Potential Additional Metric   | Green Threshold  | Yellow Threshold | Red Threshold             | Comments   |
|---|--|------------------|---------------------------|--|
| <b>Trend in number of hospitalizations of persons with COVID-19 in the past two weeks</b>             | Stable or declining (less than 5% increase in the past two weeks compared to the previous two weeks) | 5-25% increase   | Greater than 25% increase | Hospitalization is minimally affected by testing availability and is thus an important additional measure of increased transmission.   |
| <b>School district personal protective equipment (PPE) supply</b>                                     | Greater than one month   | 2-4 weeks        | Less than two weeks       | PPE supply is a measure of the ability to take steps to prevent transmission.  |
| <b>Trend in case rates (numbers per 100,000) in the past two weeks for school-age children (5-18)</b> | Less than 25% increase   | 25-50% increase  | Greater than 50% increase | Assessing trends in case rates among school-age children may provide unique insights on the impact of schools and COVID-19 transmission in the event that they change before overall community-wide case rates do. |

## Endnotes

- <sup>1</sup>Van Lancker W, Parolin Z. (2020). “COVID-19, school closures, and child poverty: a social crisis in the making”. *Lancet Public Health*. 2020;5(5):e243-4 [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(20\)30084-0.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(20)30084-0.pdf)
- <sup>2</sup>Bialek, S., et.al. (2020). “Coronavirus Disease 2019 in Children – United States, February 12 – April 2, 2020. *Morbidity and Mortality Weekly Report*”. April 10, 2020. 69 (14). <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6914e4-H.pdf>.
- <sup>3</sup>Ludvigsson, J. (2020). “Children are unlikely to be the main drivers of the COVID-19 pandemic — a systematic review”. *Acta Paediatrica*, May 19, 2020. <https://onlinelibrary.wiley.com/doi/abs/10.1111/apa.15371>
- <sup>4</sup>Heavey, L. et al. (2020). “No evidence of secondary transmission of COVID-19 from children attending school in Ireland”. *Euro Surveill*. 2020; 25(21), May 28 2020. <https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.21.2000903>
- <sup>5</sup>Danis, K, Epaulard, O, Benet, T. (2020). “Cluster of coronavirus disease 2019 (Covid-19) in the French Alps, 2020”. *Clin Infect Dis*.
- <sup>6</sup>Heavey (2020).
- <sup>7</sup>Ludvigsson (2020).
- <sup>8</sup>Treitz, M., and Lev, R. (2020). “Guest commentary: Schools must reopen for the health of children”. *The Denver Post*. June 24, 2020. <https://www.denverpost.com/2020/06/24/colorado-schools-reopen-coronavirus-guest-commentary/>

## Addresses of Websites

- **CDC schools guidance:** <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools.html>
- **CHSAA guidance:** <https://chsaanow.com/2020-05-22/chsaa-to-lift-moratorium-with-strict-guidelines-for-resuming-in-person-conditioning-sessions/>
- **Health and Safety Guidelines from Other Countries:** <https://learningpolicyinstitute.org/product/reopening-schools-covid-19-brief>
- **Public transportation guidance:** <https://drive.google.com/file/d/1F6ejkZlCwLOvmalkjo5Y9ksF-5CQ13Kp/view>
- **CDPHE workplace outbreak prevention:** <https://drive.google.com/file/d/1zDIIWVOEDSkmbN2qCF83W2jM7N4ZcaZs/view>
- **CDPHE environmental cleaning guidance:** <https://covid19.colorado.gov/cleaning-guidance>
- **CDPHE testing overview:** <https://covid19.colorado.gov/covid-19-in-colorado/about-covid-19/testing-for-covid-19>
- **CDPHE information for people at high risk:** <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/index.html>

## Acknowledgements

Special thanks to Steve Federico, MD, Director of General Pediatrics and School and Community Programs at Denver Health, for his invaluable contributions to this document.

MDPH extends its thanks to the Colorado Health Foundation for providing support to the Colorado Health Institute to facilitate MDPH’s COVID-19 activities.



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