



ROADMAP TO IN-PERSON LEARNING

The COVID-19 pandemic has created enormous instability and forced us to change nearly every aspect of our normal routines. This unpredictability coupled with the unprecedented sacrifices everyone has made during the pandemic has taken a significant toll on all Coloradans. This is particularly true for the education sector. Whether a student, parent, or educator, all have had to balance the anxiety that comes with ensuring care and education for our children on a consistent basis along with the safety of educators, staff, and students in the classroom and in school buildings.

Our education system serves as both an investment in our future and as an immediate lifeline and critical resource in our communities, including for Coloradans who rely on having their children in school for academic instruction, a nutritious meal, and so they can go to work each day. In addition, the education system is one of the most important determinants for Coloradans' long-term health and welfare.

It is for these reasons we believe it is critically important for the health of our children, communities, and state that we create the conditions for students to return to in-person learning in school. Research has shown that when the right precautions are taken by parents, students, schools, and the community as a whole, schools are relatively low-risk environments for children and educators.¹ We also know that the impacts to children and families are immense if we continue on our current path.

As we near the end of this unprecedented year and approach a very critical holiday period, we all must do our part to ensure safe and consistent in-person learning in the second semester of this year.

THE IN-PERSON IMPERATIVE

When COVID-19 arrived in Colorado last spring, we knew very little about the virus. As time has passed, our knowledge about the virus has grown, and we now have a better understanding of how it spreads, and who is most likely to be severely impacted. At first, we knew that the virus was highly contagious, and potentially very dangerous. When we started to see significant spread across our State, it was important for districts and the State to close in-person learning in our schools to protect families, students, educators, and staff as we learned how to better prevent and treat the virus.

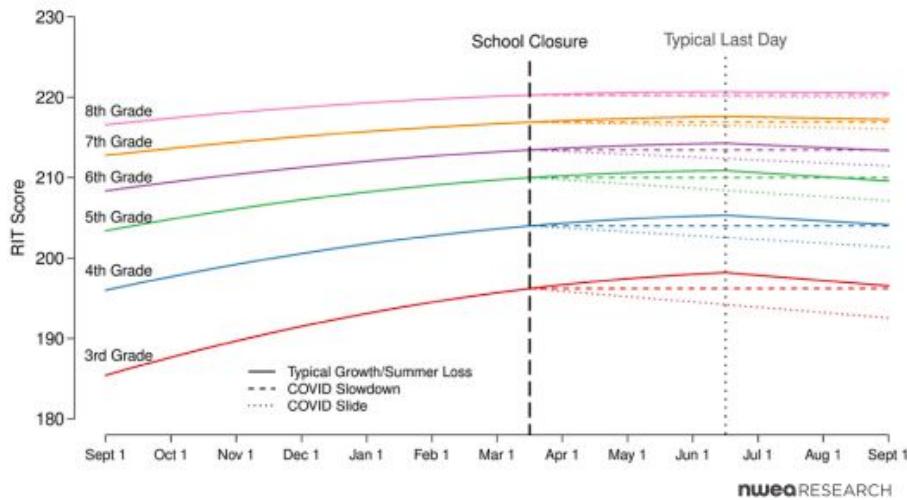
Even as our schools made their best efforts to adapt to remote learning, students, families, and educators continued to struggle. Families without reliable internet were not able to access remote content. Educators were forced to transition between remote, hybrid, and in-person environments, increasing their work loads, making it very difficult to understand student progress, and give

¹ <https://drive.google.com/file/d/1tQ2mIVokJrVr42121MALc9JDBN3s118B/view>; <https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-schools-transmission-August%202020.pdf>; <https://www.medrxiv.org/content/10.1101/2020.11.06.20227264v1.full.pdf>; Levinson et al. Reopening Primary Schools during the Pandemic. N Engl J Med 2020; 383:981-985.

students the one-on-one attention they needed. While extraordinary efforts have been made to provide high-quality remote instruction, children’s social, emotional, and educational growth and development is stunted without in-person interactions with other children and caring educators and staff.

Despite our educators’ heroic efforts to educate students, research shows academic development is suffering. National estimates from NWEA show that students returning to school in the fall of 2020 likely returned with roughly 70% of the learning gains in reading compared to a typical school year and 50% of the learning gains in math. These impacts were likely to be worse for students in the early grades, and in some cases, students were projected to return nearly a full academic year behind what we would see in a normal school year.² At the same time the science has become increasingly clear that younger students (under the age of 14) are less susceptible to the virus, less likely to spread the virus, and at a lower risk for severe outcomes if they do contract the virus.³

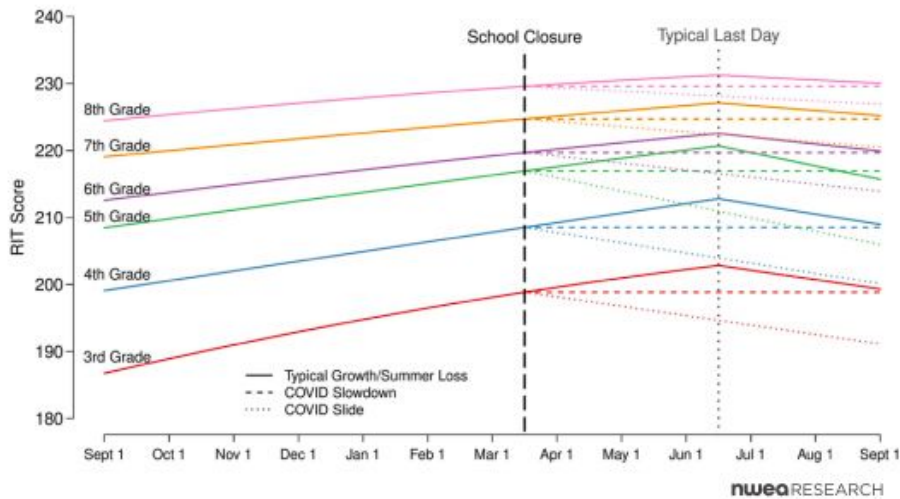
Figure 2. Reading forecast



² https://www.nwea.org/content/uploads/2020/05/Collaborative-Brief_Covid19-Slide-APR20.pdf

³ <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2771181>,
<https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiaa691/5943164#219065749>

Figure 1. Mathematics forecast



Students who were already struggling academically, and lower income families have been hit the hardest by the pandemic’s effects. In addition, communities with more risk factors are experiencing much higher disease transmission. Students with disabilities, students who are low-income, English language learners, students without access to the internet, and students experiencing homelessness or in foster care are more likely to struggle with remote learning and to experience learning loss. Research suggests that while average learning loss may be 7 months, students who are low income may fall behind by more than a year due to inequitable access to supportive tools like internet access and devices.⁴ This loss is associated with decreased educational attainment as a result of disruption in schooling, and ultimately decreased life expectancy.⁵ In addition, experts suggest that students are highly stressed and experiencing more significant mental health challenges than before.⁶ Research also demonstrates highly stressful environments and lack of social supports are associated with higher potential for child abuse.⁷

Families have also been significantly impacted. Before COVID-19, 65% of children under six had all of their parents in the workforce. In homes where parents may work one or two jobs to make ends meet, many have had to choose between their livelihoods and staying home to support their children’s education. Because of the pandemic, women have left the labor force in record numbers, taking significant steps backward in the fight for gender equity in the workforce.⁸ Parents are spending thousands on child care assistance -- often having to transition between providers because so many are struggling to stay open. This trend has a significant impact on parents working in the service sector, who often work nontraditional hours and struggle to find affordable child care. The

⁴<https://www.mckinsey.com/industries/public-and-social-sector/our-insights/covid-19-and-student-learning-in-the-united-states-the-hurt-could-last-a-lifetime>

⁵ <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2772834>

⁶ <https://www.apa.org/monitor/2020/09/safeguarding-mental-health>

⁷ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7440155/>

⁸<https://www.americanprogress.org/issues/women/reports/2020/10/30/492582/covid-19-sent-womens-work-force-progress-backward/>

instability poses significant risk for the economy, and for the first time in its history, the September 2020 Federal Reserve Beige Book included concerns about child care and school as a constraint on worker availability.⁹

Finally, educators and school staff have taken on the enormous responsibility of educating and supporting our children, while worrying about their own safety in school. Many educators and staff are frustrated and confused by changing health guidance and rules. Even though they know the benefits of in-person education for their students, they also worry about the risk to their own health and that of vulnerable household members. Many educators and staff have children of their own and are having difficulty navigating online education environments for their own children while also engaging in student instruction.

WHERE WE ARE NOW

Months after the crisis began, we know significantly more about COVID-19, how and why it spreads, and what works to contain the virus. When schools take the right precautions¹⁰, the risk level of in-person learning is low. Research has shown that COVID-19 is less likely to infect younger children, and they are less likely to spread the virus.¹¹ In addition, we know that COVID-19 is more likely to spread in higher risk settings like nursing homes and congregate living facilities.¹²

We now benefit from the various innovative approaches that schools have taken to help prevent the spread of the virus in their communities. Across our state, schools are crafting hybrid approaches for older students with smaller cohorts and helping to instill a culture of mask wearing and social distancing among students. School teams have found approaches that work in their context and many students have shown real leadership in implementing protocols and making sacrifices to protect public health. In addition, the State has taken steps to protect students, educators, and staff in school, including providing masks for educators and staff and providing additional resources through the CARES Act for protective equipment like air filters and ventilation systems to reduce aerosol exposure.

Schools have developed protocols for off-site health screening in an effort to encourage parents to keep symptomatic children at home to prevent spread from occurring within the school building. While access to rapid testing has improved, it is still not available for all schools at all times -- especially those that lack school nurses and the resources necessary to pay for widespread testing.

Schools have also faced staffing challenges, particularly related to quarantine. When staff are quarantined, schools struggle to find substitute teachers and are more likely to move classes, grade

⁹ <https://www.federalreserve.gov/monetarypolicy/beigebook202009.htm>

¹⁰ <https://policylab.chop.edu/sites/default/files/pdf/publications/PolicyLab-Executive-Summary-Evidence-Guidance-In-Person-Schooling-COVID-19-Nov-2020.pdf>

¹¹ <https://jamanetwork.com/journals/jamapediatrics/fullarticle/2771181>,
<https://academic.oup.com/jid/advance-article/doi/10.1093/infdis/jiaa691/5943164#219065749>

¹² <https://onlinelibrary.wiley.com/doi/10.1111/irv.12819>

levels, or even the entire school to remote learning. While quarantine is a necessary tool to combat the virus,¹³ rapid COVID tests are less sensitive and accurate than PCR tests, making it difficult for schools to quickly determine who is infected. Lacking actionable testing information, large numbers of teachers, students, and staff are quarantined. Additional high-quality rapid testing, as well as contact tracing, can enhance the ability of schools, together with public health professionals, to reduce the disruption of quarantine.

In order to return our children and youth to in-person learning, we must use data, science, and transparency to build trust with and among school districts, schools, parents, educators, and staff. Some parents, educators, and staff are frustrated by a lack of information about what disease transmission looks like in communities, whether such transmission is occurring outside or within a school, and the on-and-off nature of quarantine. Without adequate information, parents and communities are unable to make informed decisions about in-person learning, even while data suggests that children under the age of 14 are less likely to transmit the virus, and that early public health intervention limits both the size and duration of school outbreaks.

In addition, elective and extracurricular activities have implications for schools' ability to maintain in-person learning. We must all recognize there are temporary tradeoffs that must be taken into account. While there are countless benefits of these activities, especially for high school students who have already given up so much of their normal adolescent experiences to COVID-19, some team sports and other higher risk electives and extracurriculars have presented challenges to schools in maintaining cohorts, or introduced new exposure opportunities into schools. In order to facilitate the lifelong benefit of in-person learning, we must come together to prioritize children being *in* school over other in-person activities.

WHAT THE STATE HAS DONE

Medical Masks for Educators

The State provided 1.6 million medical grade masks to every school in Colorado for ten weeks beginning in the middle of August. Following this program, the State delivered an additional 1.3 million medical grade masks over the next seven weeks to schools that opted into the continued mask program.

Community Based Testing

The State has facilitated a broad expansion of free, quick, and easy community-based COVID-19 testing. CDPHE and its partners have established more than 50 community testing sites, providing as many as 45,000 COVID tests per day. The testing efforts include ensuring educators, staff, and students have access to both rapid and PCR testing, contractually requiring that children over 2 can

¹³ Nussbaumer-Streit B, Mayr V, Dobrescu Alulia, Chapman A, Persad E, Klerings I, Wagner G, Siebert U, Christof C, Zachariah C, Gartlehner G. Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. *Cochrane Database of Systematic Reviews* 2020, Issue 4. Art. No.: CD013574. DOI: 10.1002/14651858.CD013574. Accessed 08 December 2020.

be tested at all state-supported community test sites, and prioritizing emerging and innovative testing solutions for school and education settings.

COVID-19 Dial

In response to the pandemic, the State has taken steps to protect students, educators, and staff while utilizing the best available science about disease transmission. These steps include developing a COVID-19 dial to provide tailored guidance to counties about how to balance social and economic activity with the restrictions needed for public health disease control. The dial’s color levels are based on the number of new cases, the percent positivity of COVID-19 tests, and the impact on hospitals, as well as local considerations.

The dial suggests in-person learning for elementary schools until the county reaches the “purple” level. For middle schools, in-person learning is suggested until the county is at the “red” level, with “in-person, hybrid, or remote” suggested at red. For high schools, in-person learning is suggested until the county is at the “red” level, with hybrid or remote suggested at red. At the purple level, in-person, hybrid, or remote is suggested as appropriate for all levels.

	LEVEL GREEN: PROTECT OUR NEIGHBORS	LEVEL BLUE: CAUTION	LEVEL YELLOW: CONCERN	LEVEL ORANGE: HIGH RISK	LEVEL RED: SEVERE RISK	LEVEL PURPLE: EXTREME RISK
P-12 Schools	In-person	In-person	In-person suggested	In-person suggested Counties are encouraged to prioritize in-person learning by considering suspending other extracurricular and recreational activities in order to preserve effective cohorting and minimize disruptions to in person learning	P-5: in person suggested Middle school: in-person, hybrid, or remote suggested High school: hybrid or remote suggested	In-person, hybrid, or remote as appropriate

Quarantine Guidance

In order to protect students, educators, and staff, Colorado adopted a “targeted contact identification” approach, which allows students, educators, and staff who are not in small cohorts to be identified based on determinations of close contact with a confirmed case. This is beneficial because it no longer requires large groups of students and staff to quarantine.

In addition, the State has recently adopted CDC’s options for shortened quarantine, based on an analysis conducted by CDC scientists. CDPHE supports the use of these quarantine scenarios in schools:

- 1) A 7-day quarantine period with a negative test conducted after day 5, or
- 2) A 10-day quarantine period.

Resourcing Schools for Protection

Recognizing the importance of resources to combat this pandemic, the State has provided resources directly to school districts and schools to help respond to the pandemic and prepare for safe reopening. These include \$510 million in Coronavirus Relief Funds (CRF) to school districts, schools, and Boards of Cooperative Educational Services (BOCES) to be used for expenses related to the COVID-19 crisis, including personal protective equipment (PPE), some small changes to ventilation, materials like plexiglass and equipment, and additional staffing capacity.

In addition to this, the State has recently put \$15 million in CRF towards the Safe Schools Reopening Grant program, a new grant program at the Colorado Department of Education focused on providing resources to school districts and schools that have struggled to reopen. Funding can be used for similar purchases as the larger CRF allocation.

MOVING FORWARD

The State, in consultation with the Back-to-School Working Group, has made the following recommendations and commitments for moving forward with safe, consistent school reopening this semester:

Trust and Transparency: Ensuring all of our students can return to in-person instruction is not just the responsibility of superintendents or local public health, it is the responsibility of parents and the community as a whole. Protecting in-person learning means creating a safe environment for educators and students, an accessible and transparent process for information sharing, and fostering accountability among all parties involved.

In order to build trust and transparency, the State should:

- 1) **Communicate Regularly:** Build a communication plan to ensure school districts, educators, and parents have access to regularly updated information about disease transmission, emerging research and best practices to maintain in-person learning. This communication plan may include encouraging communities to hold virtual Town Halls where this information is provided and time is allowed for questions and feedback.
- 2) **Prioritize Learning:** Encourage counties to commit to prioritize in-person learning by considering suspending in-person extracurricular and recreational activities that significantly interfere with cohorting once a county reaches level Orange, Red, or Purple on the COVID-19 dial in order to minimize disruptions. In addition, in-person, school sponsored activities such

as athletics, music, art, and theatre should only occur once full time or hybrid in-person learning is successfully occurring with minimal disruptions.

- 3) **Transparency and Accessibility:** Ensure local public health case and outbreak data is fully transparent and accessible to school districts, educators, staff, parents, and the public through state-provided school data dashboards that are publicly available.
- 4) **Prioritizing Equity:** If full-time in person is temporarily not feasible for a school or district due to staffing constraints, and a hybrid model must be adopted for part of the student body, the State should encourage school districts and schools to prioritize full-time in-person education for the most vulnerable groups, including students with disabilities, students who are low-income, English language learners, students without access to the internet, students experiencing homelessness or in foster care, and children of frontline workers.

Prevention and Protection: Safety is a common value among families, educators, students, and school staff. Knowing we will never achieve a zero-risk environment, global data continues to demonstrate classrooms can operate relatively safely when several layers of precautionary measures are implemented. State data from the past four months also confirms the mitigating value multiple protections can have on lowering risk of transmission in the school setting. School disruptions typically follow the level of transmission in the community as is the case currently throughout Colorado. As a result, layering precautions within the education environment is increasingly important.

This includes the following actions:

- 1) **Mask Wearing:** Continue to support the CDC, CDPHE, and CDE strong recommendation for all children ages 3 and over to wear a mask.
- 2) **Personal Protective Equipment:** Because teaching requires constant talking, some educators may prefer a surgical or cloth mask instead of a KN95 mask. The state can continue to provide high-quality medical, surgical, or other masks as appropriate for teachers, in-school health care providers, and other members of the school community for different operational or educational needs.
- 3) **Symptom Screening:** Create evidence-based protocols and supplementary resources for schools to implement symptom screening in the home setting, as recommended by the CDC,¹⁴ as well as strategies for in-school screening when home screening is incomplete.
- 4) **Effective Cohorting:** Support effective cohorting models and protocols to minimize classroom disruptions, and continue to research more effective ways to minimize disruptions from quarantines.
- 5) **Additional Staffing:** Support additional staffing to ensure schools can operate during staff quarantine periods.
- 6) **Ventilation:** Create resources and tools to improve ventilation in learning spaces, including the use of outdoor spaces and outside facing windows remaining open in classrooms.¹⁵

¹⁴ <https://covid19.colorado.gov/cases-and-outbreaks-child-care-schools#AtHome>,
<https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/symptom-screening.html>

¹⁵ <https://drive.google.com/file/d/1oNUhQx2CCwSsMrbSkLOreAN1Yjp62sYd/view>

- 7) **Hand Washing:** Continue encouraging hand washing hygiene, cleaning, and disinfecting with appropriate products known to be effective against SARS-CoV-2.
- 8) **Physical Distancing:** Support effective models for physical distancing in classrooms.

Testing and Vaccines: In order to ensure that we can contain the spread of the virus in our communities, school districts and schools should have access to consistent testing for staff and students. This means staff having access to regular surveillance testing, and students and staff having the ability to access a test if they are symptomatic, have been exposed, or are in quarantine. In addition, we need to make sure educators and school staff have access to the vaccine as soon as possible.

In order to make this happen, the State should:

- 1) **Additional Testing:** Continue providing resources for testing, particularly in the highest viral prevalence communities such as those counties in Red or Purple, as well as those that have greater challenges in accessing testing. This should include offering regular screening for educators and staff interested, for symptomatic individuals that need a diagnostic test, and for individuals who do not have symptoms but have been quarantined after an exposure.
 - a) Continue to support PCR testing. CDPHE supports more than 50 community-based testing sites where educators, staff, students, and community members can obtain free, quick, and easy COVID-19 testing. This barrier-free testing is available regardless of person's symptoms, address, or ability to pay. The state is committed to extending this program and expanding testing capacity.
 - b) Work to develop a supply chain, training, and CLIA waiver support for antigen testing to provide rapid, on-demand testing that can be performed when a student, educator, or staff member has symptoms at school.
 - c) Collaborate with public health and medical experts to explore the benefits and feasibility of surveillance testing in schools, especially in the older grades.
- 2) **Contact Tracing:** Support additional capacity for contact tracing for schools, which may include contact tracing resources at the State level.
- 3) **Testing Resources:** Promote partnerships between the medical and public health community and school districts to help not only provide testing materials, but also the personnel to administer and manage testing programs and contact tracing when positive cases are identified. Facilitate access to in-person or virtual medical evaluation for ill students, teachers, and staff.
- 4) **Vaccination Prioritization:** Continue to prioritize educators and school staff in the phased vaccination prioritization.
- 5) **Vaccination Messaging:** Provide clear messaging on the vaccine and its safety, effectiveness, and importance to our return to normalcy, including sharing talking points for schools to share with parents and their communities. This messaging should be in Spanish and other languages common in Colorado.

While these are the initial recommendations, these are not the only recommendations from this working group. This group will continue to convene to look at longer term recommendations to keep our students learning in person throughout the year. These include specific recommendations

around staffing, mental health supports, differential learners, including students receiving special education supports and English learners, and extracurricular activities.

CONCLUSION

Getting all students back to safe and consistent in-person learning is a top priority for the State of Colorado. We must continue to be informed by the lived experience and expertise of educators and school staff, as well as the emerging science on disease transmission.

We all owe a debt of gratitude to the hardworking educators and staff across the state, some of the true heroes of this pandemic. Nine months into this crisis, we know schools can be relatively low-risk environments if the right precautions are taken by parents, students, schools, and our communities. While the state will work to fulfill these recommendations, we call on all of our communities to determine how they can make safe, consistent in-person learning this upcoming semester a reality for all of Colorado's students.