This document outlines Public Health Madison & Dane County (PHMDC):

- School 2020-2021 Requirements
- Updated School 2020-2021 Recommendations
- School Reopening Data & Justification

Public Health requirements and recommendations do not constitute a decision about whether to reopen schools for the 2020-2021 school year, but describe required risk mitigation strategies and provide guidance, tools, and summaries of updated science and data to help inform and support schools with school reopening decisions, planning, and operations. Schools are required to follow other aspects of the order.

**SCHOOL 2020-2021 REQUIREMENTS**

4K must follow the child care requirements under Public Health Madison & Dane County’s Order and must follow all regulatory and licensing requirements. Whichever requirements are more restrictive must be followed.

The following Dane County school requirements for the 2020-2021 school year are founded on evidence-based strategies to minimize the risk of COVID-19 transmission. Schools should be prepared for changes and/or additional requirements or Orders to be put forth at any time based on local data and emerging evidence.

Public and private kindergarten through twelfth grade schools must abide by the following:

i. Develop and implement a written hygiene policy and procedure that includes:
   1. Establishing expectations that employees and students who have a fever or other symptoms of COVID-19 do not come or remain at school.
   2. Establishing hand-washing expectations and ensuring supplies are available to employees and students.
   3. Describing proper cough and sneeze etiquette.

ii. Develop and implement a written cleaning policy and procedure that includes:
   1. Guidelines for cleaning and disinfecting frequently touched surfaces multiple times per day.
   2. Guidelines for cleaning common areas between use.
   3. Protocols for cleaning and disinfecting in the event of a positive COVID-19 case on site.

iii. Develop and implement a written protective measure policy and procedure that includes:
   1. Ensuring employees are provided with and wear face coverings at all times when required under Section 1 of this Order.
   2. Ensuring employees maintain at least six (6) feet distancing from others to the greatest extent possible at all times.
   3. When six (6) feet distancing is not possible for students, ensuring that student and employee groupings are as static as possible by having the same group of students stay with the same employees as much as possible. Restrict mixing between groups as much as possible.
   4. Common areas such as cafeterias, auditoriums, and gymnasiums can be used as classrooms, to
provide food, as child care and youth settings, and for government functions. Student groupings should be in distinct spaces within common areas and students groupings many not mix with other student groupings.

iv. Implement PHMDC’s action plan for COVID-19 case(s) at the school.

v. Document staff receipt, acknowledgement, or training on the policies in Sections 4.d.i-4.d.iv of this Order.

vi. Post PHMDC’s Workplace requirements for employers and workers guidance document in a prominent location where all employees may access and view. (English, Spanish, and Mandarin versions are included).
Recommendation 1:
Reopen schools using a phased approach, starting with elementary-aged students. A virtual option for all students and staff considered high risk is strongly encouraged.
- Review School Reopening Data & Justification (below)

Recommendation 2:
Implement risk mitigation strategies in schools.
- In addition to the risk mitigation strategies required by Public Health Madison & Dane County, additional strategies can also contribute to reducing disease transmission.
- For additional information on risk mitigation strategies, refer to Guidelines for the Prevention, Investigation, and Control of COVID-19 Outbreaks in K-12 Schools in Wisconsin.
- For guidance on operating schools during a pandemic, reference the Wisconsin Department of Public Instruction’s Education Forward Page.

Recommendation 3:
Track school-based COVID-19 cases/outbreaks and have a plan for contact tracing.
- Track the number of outbreaks that occur in your school. Tracking this data may help address staff capacity, the potential need for school closure, and other school-related decisions.
  - An outbreak is defined as two or more COVID cases that occur within 14 days of each other among at least two people that don't live in the same house. The two cases are linked such as a close contact between two people or a common exposure. The cases are linked to the school either because they likely acquired their infection at school or attended while infectious and possibly spread COVID to at least one other person at the school.
  - If a school outbreak occurs, you should contact Public Health. Due to an overwhelming number of cases, Public Health may not always be able to identify a school outbreak. Call your site investigator if you have one, or call the Communicable Disease Nurse on-call at (608)266-4821. You can expect to hear back within 1-2 business days.
- Consider utilizing a school-based tracking system that includes:
  - Current cases or recent cases of staff and students
  - Current close contacts or recent close contacts of staff and students
  - Cumulative positive cases since the school has been open
  - Number of positive cases among students attending in-person versus number of students attending virtually
- Consider entering your data into the National School COVID-19 tracking system.
- Consider working with your IT department to implement a tracking system for your district.
- Use contact tracing capacity to address positive cases and close contacts within school grounds and school transportation.
  - For positive cases in schools, refer to the School Action Plan.
Recommendation 4: Develop a plan to move to virtual instruction.
- Determine a threshold at which you will move to virtual instruction. PHMDC recommendations for moving to virtual instruction can be found here.
- CDC’s indicators for school decision-making can be found here.

Recommendation 5: If widespread testing becomes more available, implement a school-based testing strategy.
- At this time testing resources for schools in Wisconsin remain scarce.
- Review the following resources from CDC about testing in schools:
  - Interim Considerations for Testing for K-12 School Administrators and Public Health Officials
  - Self-assessment Checklist for Good Testing Practices

SCHOOL REOPENING DATA & JUSTIFICATION

Worldwide, most countries have implemented either localized or national school closures in response to the COVID-19 pandemic, with estimates of >65% of enrolled children globally affected by school closures.1 To date, schools in many settings have partially or fully re-opened for in-person instruction, but many schools have also chosen to exclusively use virtual/online learning.

This document provides summaries of the scientific literature and evidence related to COVID-19 infection and transmission risk among school-age children, teachers and staff, and, more broadly, current data regarding COVID-19 and school environments. This is not a comprehensive review, and data limitations remain. References for this review primarily draw from peer-reviewed research but also include news articles, data dashboards, and other relevant sources given the rapidly evolving nature of the science and research related to COVID-19. Additional resources and links to other relevant literature reviews can be found at the end of this document.

Although possible, young children are less likely to transmit COVID-19. Older teens appear to have transmission risks similar to those of adults.
- According to the COVID-19 School Response dashboard that has tracked more than 16 million students and over 5 million staff attending school in-person across 47 states in the U.S., COVID-19 incidence was highest in high-school students, followed by those in middle school and then elementary school.ii
- Contact tracing data from South Korea revealed that household transmission of SARS-CoV-2 was highest among patients aged 10-19, and lowest among children under 10.iii
- Another national study of school-aged children attending school in-person from March – September 2020 found that the COVID-19 infection rate is twice as high in children aged 12 – 17 years as it is among 5 – 11 year olds.iv
- Children – especially those under the age of 12 – 14, appear to be less susceptible to infection than adults’ and once children are infected, they are less likely to pass the virus on to others.v
- Children under the age of 18 make up only 2% of COVID-19 cases in the United States, even though they represent 22% of the total population.vi
Children & adolescents with COVID-19 often experience less serious complications.

- Hospitalization rates in children are significantly lower than hospitalization rates in adults with COVID-19 (8.0 per 100,000 population compared to 164.5 per 100,000 population) suggesting that children may have less severe illness from COVID-19 compared to adults.\textsuperscript{viii}
- In one analysis of more than 550 confirmed cases among children under age 18 in China, Italy, and Spain, only nine people (1.6%) had severe or critical disease.\textsuperscript{ix}
- The most common symptoms in children are cough and/or fever.\textsuperscript{x}

Comprehensive school-based mitigation strategies have lessened the risk for transmission even in areas with moderate community transmission.

- There is clear evidence that the development of and adherence to protocols to identify cases, isolation of infected individuals and quarantining of close contacts, and maintaining cohorts with limited mixing between groups can substantially limit the spread of SARS-CoV-2 in the context of group settings with school-age children.\textsuperscript{xi}
- According to a review of school transmission by the World Health Organization, schools that have successfully reopened in communities with higher incidence rates have found that adherence to strong and multifaceted risk mitigations strategies and school safety plans are critical.\textsuperscript{xii}
- Schools that require masks and six-foot distancing report lower infections than schools who do not.\textsuperscript{xiii}
- In Dane County, data from September 14 to December 1 shows that:
  - 112 out of 2,536 (4%) of children ages 0-17 who tested positive and 140 adults were linked to a cluster at a childcare facility or school.
  - An additional 116 children 0-17 and 170 adults in childcare or school settings tested positive during that time period, but were isolated and not linked to transmission in those settings, or transmission could not be confirmed.
- Primary schools in the Netherlands returned to full capacity and full-day teaching in early June, and the case rate has thus far remained flat. These schools exempted staff and children who are high-risk or have high-risk family members from returning in-person.\textsuperscript{xiv}

Teachers and staff may be at higher risk of school-based transmission, but with proper adherence to mitigation strategies both in the school and community environment, this risk can be reduced.

- According to the COVID-19 School Response dashboard—an opt-in data collection tool comprising over 26 million data points representing schools across the country—teachers and staff report, on average, having a higher COVID rate than students and the surrounding community.
- Across many studies of school outbreak data, transmission from staff-staff was most common; among staff and students was less common; and student-student spread was more rare.\textsuperscript{xv}
- A study of 1448 cases associated with schools in South Wales, Australia found that the chances of child-child transmission was 0.3% compared to a staff-to-staff transmission rate of 4.4%.\textsuperscript{xvi}
- Evidence suggests teachers’ risk of infection may vary based on the school type (lower in elementary, higher in junior high and high school), though research is limited.\textsuperscript{xvii}
- In France, an investigation of 541 students and 46 teachers revealed no documented transmission events from students to teachers.\textsuperscript{xviii}
- Dane County contract tracing interviews have found that teacher interaction with other teachers in the school setting has led to exposures to COVID, resulting in staff quarantine and shortages.
- A study examining transmission risks among health care workers found that congregating in nonmedical spaces increased the likelihood of infection, specifically: staying in the same break room with a co-worker without a mask for more than 15 minutes, consuming food within 1 meter of a co-worker, and failure to keep a safe social distance from a co-worker were statistically significant risk factors for infection.\textsuperscript{xix}
Additional resources in support of school reopening:
American Academy of Pediatrics
National Academies of Sciences, Engineering, Medicine
Center for Disease Control and Prevention
Wisconsin Community Resilience and Response Task Force
UCSF Collaborative to Advise on Re-opening Education Safely (CARES)
Washington State Health Department Schools Literature Review
Schools for Health: Risk Reduction Strategies for Reopening Schools

i UNESCO. School closures caused by Coronavirus (Covid-19).
ii https://statsiq.co1.qualtrics.com/public-dashboard/v0/dashboard/5f78e5d4de521a001036f78e#/dashboard/5f78e5d4de521a001036f78e?pageld=Page_c0595a5e-9e70-4df2-ab0c-14860e84d36a
iii https://wwwnc.cdc.gov/eid/article/26/10/20-1315_article
vii https://www.cdc.gov/mmwr/volumes/69/wr/mm6914e4.htm
viii https://www.cdc.gov/mmwr/volumes/69/wr/mm6932e3.htm
ix https://www.cdc.gov/mmwr/volumes/69/wr/mm6932e3.htm
x https://www.cdc.gov/mmwr/volumes/69/wr/mm6932e3.htm
xvi https://www.thelancet.com/journals/lanche/article/PIIS2352-4642(20)30251-0/fulltext
xvii https://www.eurosurveillance.org/content/10.2807/1560-7917.ES.2020.25.29.2001352
xviii https://www.pasteur.fr/fr/file/35404/download
xix https://www.ajicjournal.org/action/showPdf?pii=S0196-6553%2820%2930765-3