REOPENING GUIDELINES FOR DANE COUNTY SCHOOLS: Metric Guidelines to Resume In-Person Instruction

These metric guidelines will be reexamined and updated as additional information about COVID-19 transmission, mitigation, impact, and treatments become available. Metrics will also be assessed in combination with Forward Dane metrics, case trajectory (increasing, stable, or decreasing), current best practices, federal and state guidance, and unforeseen influencing factors.

Schools are not required to open for in-person instruction, and schools that choose to provide in-person instruction should consider offering a virtual option. Schools should take into consideration that some staff and students might be at higher risk of serious illness and COVID complications, particularly those with underlying medical conditions.

Table 1. School Reopening Guideline Matrix

<table>
<thead>
<tr>
<th>Population</th>
<th>Threshold</th>
<th>Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>School staff</td>
<td>N/A</td>
<td>Under the current order, school staff are allowed to return to school buildings as long as schools follow Public Health Madison &amp; Dane County School Requirements and Emergency Orders.</td>
</tr>
<tr>
<td>Grades K through 2a</td>
<td><strong>Target:</strong> A 14-day average of <strong>54 cases per day or less in Dane County.</strong> The target is sustained for four consecutive weeks.</td>
<td>Public Health Madison &amp; Dane County will post a data status update on our website each week.</td>
</tr>
<tr>
<td></td>
<td><strong>Additional Considerations:</strong> This metric will be assessed in combination with Forward Dane metrics, case trajectory, current best practices, federal and state guidance, and other unforeseen influencing factors.</td>
<td>Once the target is met and sustained for four consecutive weeks and additional considerations are assessed schools may want to consider reopening. Schools must still follow requirements as outlined in the Order. *Target met on 8/18/2020.</td>
</tr>
<tr>
<td>Grades 3 through 5a</td>
<td><strong>Target:</strong> A 14-day average of <strong>39 cases per day or less in Dane County.</strong> The target is sustained for four consecutive weeks.</td>
<td>Public Health Madison &amp; Dane County will post a data status update on our website each week.</td>
</tr>
<tr>
<td></td>
<td><strong>Additional Considerations:</strong> This metric will be assessed in combination with</td>
<td>Once the target is met and sustained for four consecutive weeks and additional considerations are assessed schools may</td>
</tr>
</tbody>
</table>
Recent studies and Dane County data show that children under 10 years old appear to contract the virus at lower rates than children and youth ages 11-17.

**Table 2. School Closing Recommendation Matrix**

<table>
<thead>
<tr>
<th>Population</th>
<th>Threshold</th>
<th>Next Steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle and high school (grades 6 through 12)</td>
<td><strong>Target:</strong> A 14-day average of <strong>19 cases per day or less in Dane County</strong>. The target is sustained for four consecutive weeks.</td>
<td>Public Health Madison &amp; Dane County will post a data status update on our website each week.</td>
</tr>
<tr>
<td></td>
<td><strong>Additional Considerations:</strong> This metric will be assessed in combination with Forward Dane metrics, case trajectory, current best practices, federal and state guidance, and other unforeseen influencing factors.</td>
<td>Once the target is met and sustained for four consecutive weeks and additional considerations are assessed schools may want to consider reopening. Schools must still follow requirements as outlined in the Order.</td>
</tr>
</tbody>
</table>

Forward Dane metrics, case trajectory, current best practices, federal and state guidance, and other unforeseen influencing factors want to consider reopening. Schools must still follow requirements as outlined in the Order.

According to **WI statute 252.02**, the Wisconsin Department of Health Services has authority to close schools if necessary to control an outbreak.

Suspension of in-person instruction at a school or district level

**Target:** On a case-by-case basis, Public Health Madison & Dane County will review outbreak data and several factors, including but not limited to number of positive cases, extent of exposure, and contact tracing capacity and will make a recommendation about closure at a school or district level.

**Additional Considerations:** Schools and district administrators may also choose to close their schools and districts based on impediments to school functioning, such as high absenteeism and staff shortages.

Suspension of in-person instruction county wide

**Target:** If Dane County surpasses 54 cases over a 14-day average, Public Health Madison & Dane County will review local data to determine whether a county wide closure of in-person instruction is recommended. Public

Public Health Madison & Dane County will post a status update on our website if a countywide closure is recommended.

According to **WI statute 252.02**, the Wisconsin Department of Health Services

*a*Recent studies and Dane County data show that children under 10 years old appear to contract the virus at lower rates than children and youth ages 11-17.
Health Madison & Dane County will review outbreak data and make a determination based on several factors, including but not limited to number of positive cases, extent of exposure, and contact tracing capacity.

**Additional Considerations:** This metric will be assessed in combination with Forward Dane metrics, case trajectory, current best practices, federal and state guidance, and other unforeseen influencing factors.

has authority to close schools if necessary to control an outbreak.
SCHOOL METRICS MEASUREMENT RATIONALE & PROTOCOL

The current grade level target recommendations for in-person instruction are shown in Table 3. The rationale for these recommendations, as well as the protocol for determining whether the targets are met, are described below.

Table 3. Dane County Target Recommendations for In-Person Instruction

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Target Recommendations for In-Person Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-2</td>
<td>14-day average of 54 cases or fewer per day, sustained for four weeks</td>
</tr>
<tr>
<td>3-5</td>
<td>14-day average of 39 cases or fewer per day, sustained for four weeks</td>
</tr>
<tr>
<td>6-12</td>
<td>14-day average of 19 cases or fewer per day, sustained for four weeks</td>
</tr>
</tbody>
</table>

Rationale

Targets

After extensive review of national, state, and local school thresholds for in-person instruction (including CDC, Harvard, COVID-Local, COVIDActNow, Minnesota, Milwaukee, San Francisco, Massachusetts, Oregon, and Michigan), a decision was made to center thresholds on average county-level case counts. Minnesota’s Safe Learning Plan for 2020-21 states, “While there are many factors to take into consideration when determining an appropriate learning model for school opening, the decision-making process should first center on local data indicating the level of viral activity in the surrounding community.” Harvard’s The Path to Zero and Schools: Achieving Pandemic Resilient Teaching and Learning Spaces (hereafter called the ‘Harvard guidance’) established its risk levels and guidance based on daily new confirmed cases, while also encouraging triangulation with additional important metrics.

The Wisconsin Department of Health Services’ (DHS) Activity Tracker, Harvard guidance, COVID-local and COVIDActNow served as the main sources of the recommendations used for determining in-person instruction by grade level. The DHS Activity Tracker provides a statewide framework for categorizing disease burden (case rate) into varying levels of severity and served as a starting point for identifying grade-level targets. Like the DHS Activity Tracker, the Dane County schools metric recommendations uses a 14-day rolling case average. A 14-day rolling case average lends itself to more stable data, rather than a 7-day or daily case average, which can fluctuate due to the day of the week and small outbreaks.

Grades K-5

As emerging research has shown more limited transmission in younger children\textsuperscript{iii}, lower susceptibility\textsuperscript{iii} and lower disease severity\textsuperscript{iv,vi}, a target recommendation allowing for a greater daily case burden was chosen for the younger age groups. Opening in a phased manner, with grades K-2 first, is a way to carefully minimize risk of exposure to the greatest extent possible while supporting a way to get back to school. As schools reopen for in-person school, we must ensure we are still able to identify and contain
the number of cases that are likely to result from more people being exposed in more settings. Therefore, differing thresholds were chosen to inform recommendations for K-2 and 3-5.

For grades 3-5, the 39 cases per day corresponds with the DHS Activity Tracker burden of “Moderately High,” which has an upper limit of 100 cases/100,000 population over 14 days. The conversion of the 14-day rate/100,000 to a daily case count for Dane County was as follows:

- Divide 100 by 14 days = 7.14 cases per 100,000 per day
- Multiply 7.14 by the Dane County population of 546,695
- Divide the result by 100,000 = 39.03 cases per day
- Decimals numbers are rounded down to the nearest whole number = 39 cases per day

For grades K-2, where emerging research suggests transmission is more limited, we identified a higher threshold recommendation for in-person learning. The Harvard guidance, COVID-local, and COVIDActNow were used as guides since the DHS Activity Tracker provides no additional categories over 100 cases/100,000 population as of the date of the school metrics release. These three resources define a moderate level of risk (yellow color in a spectrum of green, yellow, orange and red) as up to 10 cases/100,000 population per day. The conversion of the daily rate/100,000 to a daily case count for Dane County was as follows:

- Multiply 10 cases by the Dane County population of 546,695
- Divide the result by 100,000 = 54.67
- Decimals numbers are rounded down to the nearest whole number = 54 cases per day

**Grades 6-12**

With some studies vii suggesting older children transmit COVID-19 as much as adults do and recent large school outbreaks across the US, a different reopening target recommendation was chosen for students in grades 6-12. The average of 19 cases per day corresponds with the DHS Activity Tracker burden of “Moderate,” which has an upper limit of 50 cases/100,000 population over 14 days. The conversion of the 14-day rate/100,000 to a daily case count for Dane County was as follows:

- Divide 50 by 14 days = 3.57 cases per 100,000 per day
- Multiply 3.57 by the Dane County population of 546,695
- Divide the results by 100,000 = 19.52 cases per day
- Decimals numbers are rounded down to the nearest whole number = 19 cases per day

**Timeframe**

A total of five weeks of sustained data at the target level recommendations (measured across four weeks, since it’s a 14-day average) was chosen to ensure data stability and monitor trends over time. A 14-day rolling case average lends itself to more stable data, rather than a 7-day or daily case average, which can fluctuate due to the day of the week and small outbreaks.
**Measurement Protocol**

To determine whether a grade-level target recommendation has been met, Public Health Madison & Dane County will use the daily case count published on the dashboard to measure the daily average over the previous 14 days. To identify the first 14-day period during which the target was met, this calculation will be monitored daily. The date at which the target is met is considered Measurement 1. Because the target needs to be sustained over four weeks, the average will be calculated one, two, and three weeks from Measurement 1, corresponding to Measurements 2-4 (see example below).

Average case counts from the previous 14 days will be monitored daily to identify the date that the target recommendation is met for different school grade groups (K-2, 3-5, 6-12). This will ensure that each group has the opportunity to return to school in person as soon as their target has been assessed, met, and sustained for four weeks. Once the target is confirmed as met, Measurement 1 and the subsequent weekly measurements will be published on the Public Health Madison & Dane County website each Thursday to correspond with Forward Dane weekly data snapshot reporting. The delay between each measurement and reporting will ensure that all test results for the 14-day measurement period have been entered and processed. Once the target has been successfully sustained for 4 weeks, we require three additional days to ensure all test results and cases are accounted for.

If Measurements 2, 3, or 4 exceed the target, Public Health Madison & Dane County will assess the data and reason for the increase in combination with other factors outlined in the opening paragraph of this document. If the increase is deemed to be of public health significance, the four-week measurement period ends and will restart once there is a 14-day period that meets the target. This new point in time will become the new Measurement 1. Likewise, even if the target is met and sustained for a four-week period, other factors described in the school metrics document may delay reopening recommendations.

**Example**

If the target of the 14-day case average of 39 or less is met on October 10, then the clock starts on sustaining this level for four weeks. If the average remains at or below 39, this is our timeline:

**Week 1:** Data from September 27 to October 10, average is 39 cases per day, average will be posted on our website on October 15 (the weekly Data Snapshot is posted on Thursdays)

**Week 2:** Data from October 4 to 17, average will be posted to our website on October 22

**Week 3:** Data from October 11 to 24, average will be posted to our website on October 29

**Week 4:** Data from October 18 to 31, the first possible date the target could be met is October 31. We will validate that the target is met on November 3, as we require three days to ensure all test results and cases are accounted for. If warranted, a recommendation would not come until after November 3.

Note that the full assessment period totals five weeks. Week 1 reflects the two previous weeks of data. Therefore, the clock starts after two weeks have passed—this reflects the 14-day average, and constitutes Measurement 1. From that point, three additional weeks pass in order to capture a total of four 14-day case average measurements.
i Children are unlikely to be the main drivers of the COVID-19 pandemic-A systematic review. 19 May 2020. https://doi.org/10.1111/apa.15371


iii “Susceptibility to and transmission of COVID_19 amongst children and adolescents compared with adults: a systematic review and meta analysis” 24 May 2020 https://doi.org/10.1101/2020.05.20.20108126


vii “Contact tracing during coronavirus disease outbreak, South Korea, 2020.” https://doi.org/10.3201/eid2610.201315