COVID Measures to Inform School Planning - Updated

As of November 22, 2020*

*Please note that the science of COVID-19 is evolving rapidly. This information reflects current existing models and will be updated as needed as guidance develops.
Updates

❖ Revised October 25, 2020: Many schools have been fully or partially on site for weeks. This document has been updated to elevate the importance of school-specific data on children with COVID and those who are quarantined.
The enclosed measures are offered as a tool to assist school leaders as they consider choices about on-site, hybrid, and remote learning models for their student populations.

The following measures are early indicators to assist in real-time decision making about remote, hybrid, and in-person learning.

**School Measures:**
- Number of school cases & quarantines among staff and students
  - Monitor closely for evidence of in-school transmission
  - Assess adequacy of staffing levels for safe and effective operations
- Consistent adherence to protective bundle measures

**Community Measures:**
- Rate of new COVID cases in the community & direction of trend
- Community Performance Indicators to demonstrate how community systems are coping

The existing **Ohio Public Health Advisory System** contains valuable community metrics, and schools may also use this to guide decisions. In addition, OPHAS may be used to guide government decisions or mandates around schools. But several indicators (outpatient visits, ED visits, hospital admissions, ICU occupancy) lag days or weeks behind new infections. The suggested measures above focus on current school state and incident infection as real-time indicators.
School Measures for In-Person Learning

Cases, Quarantines, Staffing and Protective Bundle Implementation

- Count and rate of daily COVID cases and students / staff in quarantine
  - Sub-measure of community acquired vs. school acquired infection (when known)
  - Measures of adequate staffing capacity for safe and effective operations

- Measures of protective bundle use and reliability
  - Home when sick, distancing, masking, hand hygiene, cleaning
  - Also consider measures of adequate cohorting and ventilation

- Maintain protection protocols effectively over time and adjust as evidence evolves. If protocols cannot be maintained, consider remote / hybrid models

- Evidence to guide when to stop on-site learning based on cases and quarantine does not exist, so base decisions on practical considerations (e.g., insufficient staffing, in-school transmission)
School Measures for In-Person Learning

**Cases in the school: count, rate, trend**
- Demonstrates level of virus in the school

**Quarantine in the school**
- The number of staff or students quarantined for close contact

*Evidence to guide when to stop on site learning based on cases and quarantine does not exist so base on practical considerations (e.g., insufficient staffing, significant in-school transmission)*

**Measures of protective bundle use**
- Home when sick, distancing, masking, hand hygiene, cleaning; also consider adequacy of cohorting and ventilation

*If protocols cannot be maintained, consider remote / hybrid models*
Community Measures

New Cases

1. Daily new cases per 100,000 (7-day moving avg)
   Demonstrates level of virus in community

2. Trend line of daily new cases per 100,000
   Indicates whether cases are increasing or decreasing

Community Performance Indicators

Percent of COVID tests that are positive
   Demonstrates adequacy of community testing (and prevalence of disease)

Also consider: Time from test to result (‘turnaround time’ – see appendix); Positive test rates in asymptomatic people; Contact tracing success rate

Below is an adaptation of suggested thresholds from Harvard Global Health Institute (see link below for original recommendations). This chart should be considered in the context of school cases and quarantines, evidence of school transmission, ability to implement protection protocols, and student academic and social needs.

<table>
<thead>
<tr>
<th>Category</th>
<th>Daily New Cases per 100,000</th>
<th>Schools should:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>&gt;25</td>
<td>Encourage remote learning for all learners when possible</td>
</tr>
<tr>
<td>Orange</td>
<td>10&lt;25</td>
<td>Consider remote or hybrid learning unless Community Performance Indicators (slide 3) met. If Community Performance Indicators are met, follow guidance in Yellow: Consider if school protective protocols can be strictly implemented (see slide 4) If no, consider remote or hybrid learning If yes, consider return to in-person with possible prioritization &amp; phase-in: • Priority 1: preK-5, special education through 8th • Priority 2: grades 6-8 and special education for grades 9-12 • Grades 9-12: o Not a priority in Orange – continued remote or hybrid learning o Return in Yellow on hybrid schedule IF distancing can be maintained for all grades, majority of time</td>
</tr>
<tr>
<td>Yellow</td>
<td>1&lt;10</td>
<td>All grades in school with strict protection protocols</td>
</tr>
<tr>
<td>Green</td>
<td>&lt;1</td>
<td>All grades in school with strict protection protocols</td>
</tr>
</tbody>
</table>

Daily new cases per 100,000 (7-day rolling average)

Seven day moving average of new COVID-19 cases per 100,000 people

Butler County, Ohio
Population: 353,134

Warren County, Ohio
Population: 234,602

Hamilton County, Ohio
Population: 817,473

Clermont County, Ohio
Population: 269,428

As of 11/22/20
Trend line of daily new cases per 100,000

Previous 2 weeks. CDC positive indicators for continued re-opening:
• 14th day less than 1st day, 9 of past 14 days declined; REBOUND = 5 consecutive days of increase


As of 11/22/20
Percent of COVID tests that are positive: Goal: < 5% (CDC)*, <3% (Harvard)**


Open circles indicate points highly subject to change. Location is based on address provided to the lab. Source: The Health Collaborative Date: as of 11/22/20
Percent of COVID tests that are positive  
Goal: < 5% (CDC)*, <3% (Harvard)**


References and Data Sources


Data Sources:

  ▪ Daily New Cases per 100,000 people by county, Greater Cincinnati Regional Data, Daily COVID Tests that are Positive

▪ Harvard Global Health Institute, Key Metrics for COVID Suppression: https://globalepidemics.org/key-metrics-for-covid-suppression/
  ▪ Daily New Cases per 100,000 people by county, United States, Current Test Positive Rate by State, vs target of 3% or lower
Measures Under Development

Potential future metrics to inform in-school COVID tracking:

• Count and rate of in-school transmission of COVID among students / staff
• Count of students / staff quarantined due to in-school close contact
• Total number of enrolled in-person students
• Total number of kid-days (# of kids * # of days in school)
• Count of in-school close contacts who became positive
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