# COVID Measures to Inform School Planning

As of September 28, 2020\*

\*Please note that the science of COVID-19 is evolving rapidly. The information in this PowerPoint reflects current existing models, and will be updated as-needed as guidance develops.









# Description

- The enclosed measures are offered as a tool to assist school leaders as they consider choices about onsite, hybrid, and remote learning models for their student populations.
- The existing **Ohio Public Health Advisory System** contains valuable community metrics. But 4 of the 7 indicators lag days or weeks behind new infections (increases in outpatient visits, ED visits, hospital admissions, ICU occupancy)
  - School Planning measures focus at the front end to catch increases in infections as they start
- Measures on the next slides are front-end indicators of a rise in new community infections. Schools can use these to assist in real-time decision making about remote, hybrid, and in-person learning.
  - Primary Measures: Assess how many people in the community have COVID & direction of trend
  - Secondary Measures: Community Performance Indicators how community systems are coping
  - <u>For Both:</u> Proposed Thresholds for interpretation and decision support for in-person / remote / hybrid learning models

## Primary 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

# Secondary measure: 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"); Positive test rates in asymptomatic people; Contact tracing success rate

<sup>\*</sup>Harvard Global Health Institute. *Key Metrics for COVID Suppression. Retrieved from* <a href="https://globalepidemics.org/wp-content/uploads/2020/06/key metrics and indicators v4.pdf">https://globalepidemics.org/wp-content/uploads/2020/06/key metrics and indicators v4.pdf</a>

# For all In-Person Learning, at all levels:

#### Measure implementation of reliable & bundled protection protocols

- ➤ Bundle: Stay Home when Sick, Distancing, Masking, Hand Hygiene, Cleaning
  - ➤ Also consider Cohorting, Ventilation
- >School measures of daily cases and quarantine
- >Important to maintain protocols consistently over time
  - Create systems to track school cases over time
  - ➤ <u>Measure implementation</u> of protection protocols
  - > If protocols cannot be maintained, consider remote / hybrid models

#### Read more:

- Overview of protection strategies: Harvard Global Health Institute. Risk Reduction Strategies for Reopening Schools. Retrieved from <a href="https://schools.forhealth.org/risk-reduction-strategies-for-reopening-schools/">https://schools.forhealth.org/risk-reduction-strategies-for-reopening-schools/</a>
- Meta-analysis of distancing, masks, and eye protection: Chu et al. (2020) Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. *The Lancet, 395* (10242), 1973-1987. Retrieved from <a href="https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext.">https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext.</a>

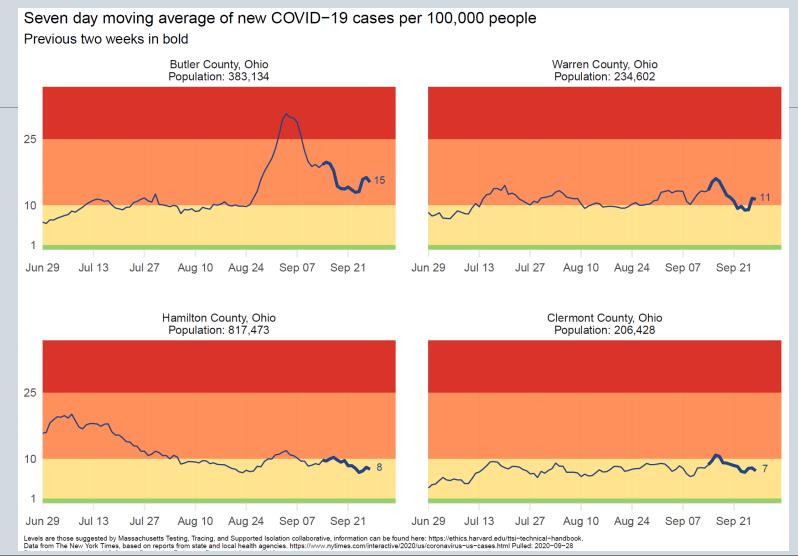
# Primary Measures and Proposed Thresholds

Below is an adaptation of suggested thresholds from Harvard Global Health Institute (see link below for original recommendations). Schools should consider student needs and ability to implement protection protocols as they make the decision for their district.

Category	Daily New Cases per 100,000	Schools should:
Red	>25	Encourage remote learning for all learners when possible
Orange	10<25	Consider remote or hybrid learning unless Community Performance Indicators (slide 3) met. If Community Performance Indicators are met, follow guidance in Yellow:
Yellow	1<10	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 & phase-in:  • Priority 1: preK-5, special education through 8 <sup>th</sup> • Priority 2: grades 6-8 and special education for grades 9-12  • Grades 9-12:  ○ Not a priority in Orange – continued remote or hybrid learning  ○ Return in Yellow on hybrid schedule IF distancing can be maintained for all grades, majority of time
Green	<1	All grades in school with strict protection protocols

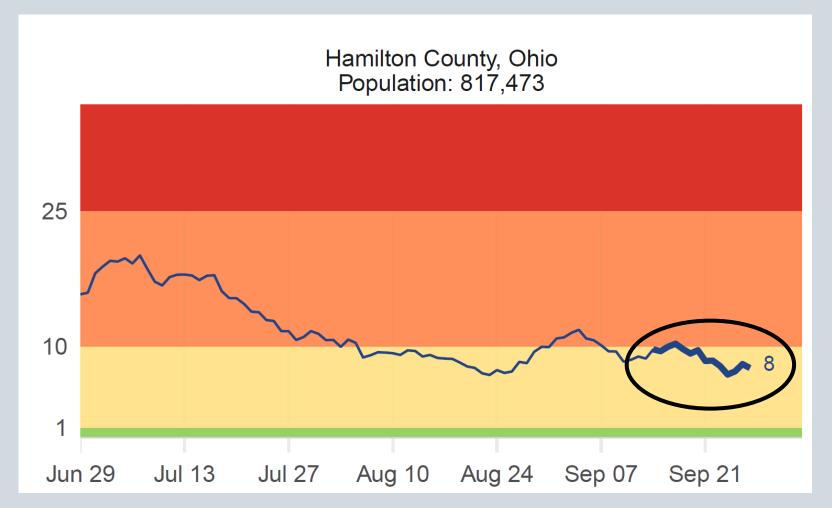
<sup>\*</sup>Harvard Global Health Institute. *The Path to Zero and Schools: Achieving Pandemic Resilient Teaching and Learning Spaces. Retrieved from* https://globalepidemics.org/wp-content/uploads/2020/07/pandemic resilient schools briefing 72020.pdf.

# Daily new cases per 100,000 (7-day moving avg)



Values when selected other countries opened schools: Denmark = 3.3, Germany = 0.8, Norway = 1.6

# Trend line of daily new cases per 100,000



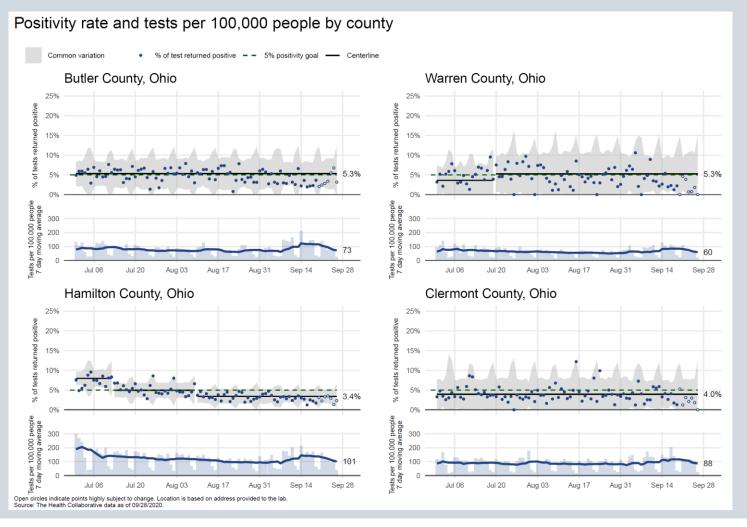
Previous 2 weeks. CDC positive indicators for continued re-opening:

- 14<sup>th</sup> day less than 1<sup>st</sup> day, 9 of past 14 days declined
- REBOUND = 5 consecutive days of increase

Centers for Disease Control and Prevention. (May 2020). CDC Activities and Initiatives Supporting the COVID-19 Response and the President's Plan for Opening America Up Again. Retrieved from <a href="https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/CDC-Activities-Initiatives-for-COVID-19-Response.pdf">https://www.cdc.gov/coronavirus/2019-ncov/downloads/php/CDC-Activities-Initiatives-for-COVID-19-Response.pdf</a>.

## Secondary Measure: Percent of COVID tests that are positive

Goal: < 5% (CDC)\*, <3% (Harvard)\*\*

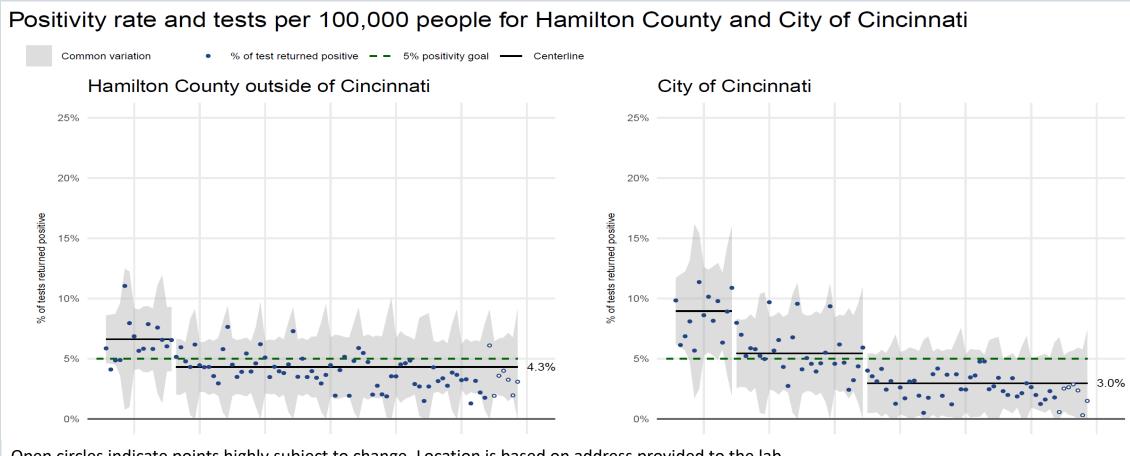


<sup>\*</sup>Redfield, R. Transcript for CDC Telebriefing on New Resources and Tools to Support Opening Schools, July 24, 2020. Retrieved from <a href="https://www.cdc.gov/media/releases/2020/t0724-new-resources-tools-schools.html">https://www.cdc.gov/media/releases/2020/t0724-new-resources-tools-schools.html</a>.

<sup>\*\*</sup>Harvard Global Health Institute, *Testing Targets*. Retrieved from <a href="https://globalepidemics.org/testing-targets/">https://globalepidemics.org/testing-targets/</a>.

# Secondary Measure: 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 data as of 9/28/2020

<sup>\*</sup>Redfield, R. Transcript for CDC Telebriefing on New Resources and Tools to Support Opening Schools, July 24, 2020. Retrieved from <a href="https://www.cdc.gov/media/releases/2020/t0724-new-resources-tools-schools.html">https://www.cdc.gov/media/releases/2020/t0724-new-resources-tools-schools.html</a>.

<sup>\*\*</sup>Harvard Global Health Institute, *Testing Targets*. Retrieved from <a href="https://globalepidemics.org/testing-targets/">https://globalepidemics.org/testing-targets/</a>.

# References and Data Sources

Harvard Global Health Institute. *The Path to Zero and Schools: Achieving Pandemic Resilient Teaching and Learning Spaces.* Retrieved from <a href="https://globalepidemics.org/wp-content/uploads/2020/07/pandemic resilient schools briefing 72020.pdf">https://globalepidemics.org/wp-content/uploads/2020/07/pandemic resilient schools briefing 72020.pdf</a>.

Harvard Global Health Institute. *Risk Reduction Strategies for Reopening Schools*. Retrieved from <a href="https://schools.forhealth.org/risk-reduction-strategies-for-reopening-schools/">https://schools.forhealth.org/risk-reduction-strategies-for-reopening-schools/</a>

Chu, D.K.., Akl, E.A., Duda, S., Solo, K., Yaacoub, S., Schunemann, H.J. (2020) Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. The Lancet, 395 (10242), 1973-1987. Retrieved from https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext.

Redfield, R. (2019, July 24). *Transcript for CDC Telebriefing on New Resources and Tools to Support Opening Schools*. <a href="https://www.cdc.gov/media/releases/2020/t0724-new-resources-tools-schools.html">https://www.cdc.gov/media/releases/2020/t0724-new-resources-tools-schools.html</a>

#### **Data Sources:**

- ■The Health Collaborative Situational Dashboard: <a href="https://www.cctst.org/covid19">https://www.cctst.org/covid19</a>. Includes
  - 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: <a href="https://globalepidemics.org/key-metrics-for-covid-suppression/">https://globalepidemics.org/key-metrics-for-covid-suppression/</a>
  - Daily New Cases per 100,000 people by county, United States
  - Current Test Positive Rate by State, vs target of 3% or lower

# Reviewed By

Hamilton County Public Health: Commissioner Greg Kesterman, MPA; Assistant Health Commissioner Jennifer Mooney, PhD, MS; David Carlson, MPH; Tom Boeshart, MPH

**Cincinnati Health Department**: Commissioner Melba R. Moore, DBA, MS, CPHA; Maryse Amin, PhD, MS; Steve Englender, MD, MPH

Cincinnati Children's Hospital Medical Center: Robert Kahn, MD, MPH; David Hartley, PhD, MPH; Andrew Beck, MD, MPH

**The Health Collaborative:** Craig Brammer, CEO; Alex Vaillancourt, CPHIMS, Chief Information Officer







