COVID Measures to Inform School Planning

March 8, 2022*

Please note that the science of COVID-19 is evolving rapidly. This information reflects current guidance and evidence; it will be updated as needed.

March 3, 2022 Update

On February 25, 2022 the CDC updated their guidance and method of assessing community COVID levels.

This guidance has <u>not yet been updated</u> in this slide deck.

For more information on new CDC levels please see

<u>https://www.cdc.gov/coronavirus/2019-ncov/science/community-levels.html</u>

Updates

February 2022

➢ Added a slide showing vaccination for ages 5-17 by zip code

January 2022

➢ Provided updated summary of CDC, ODH guidance, slides 13-15

➢ Moved community data to front of deck for easy access

➢ Updated language from "fully vaccinated" to "up-to-date" on vaccines (including boosters where applicable)

September 2021

➢ Started providing current, local community data for 8 counties in Ohio rather than 4.

August 2021

➢ Updated to reflect new guidance from CDC, American Academy of Pediatrics, Ohio Department of Health, and Cincinnati Children's for the 2021-2022 school year

➢ Current, local community data added to the deck. This includes incidence by county, percentage of tests returning positive, and vaccinations by age.

Prioritizing In-Person Learning

It is clear there are risks not only from COVID, but also from students not being in school. Education and public health professionals agree it is critical to balance these risks, prioritizing a physical, full-time presence for all kids in classrooms.

Schools should examine measures related to all categories of risk when considering tradeoffs and strategies for the school year to promote balanced decision-making.
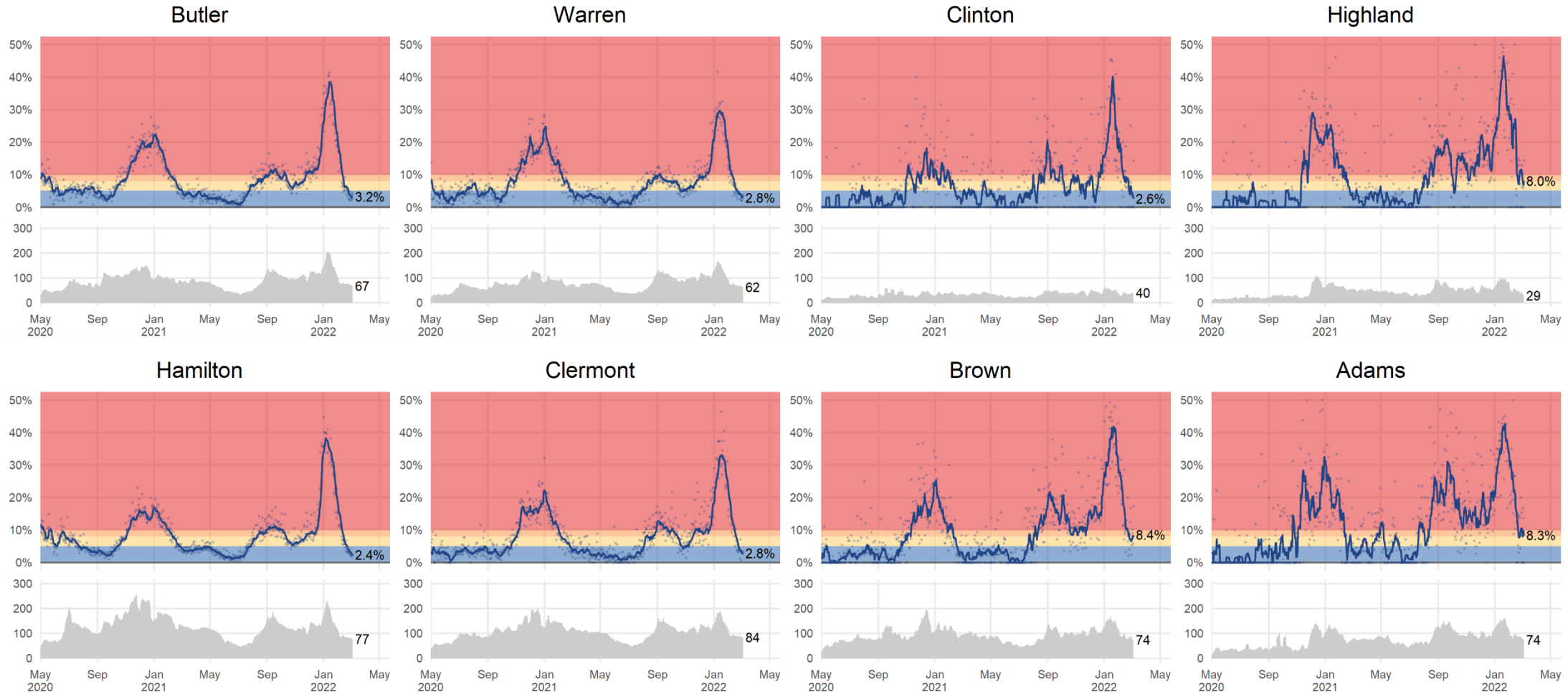
Academic / Social-emotional risks

COVID health risks
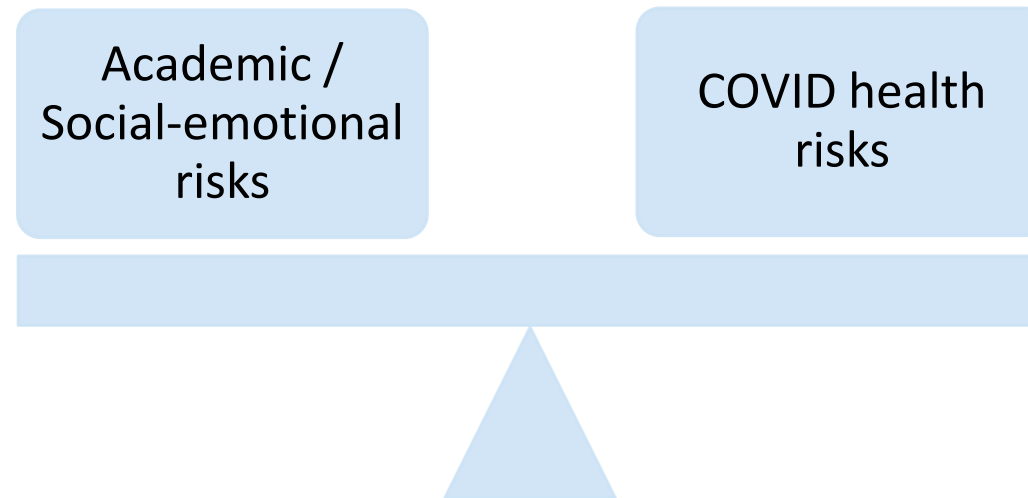
Current Community Data

Current Data: Incidence (7-day sum of new cases per 100,000)
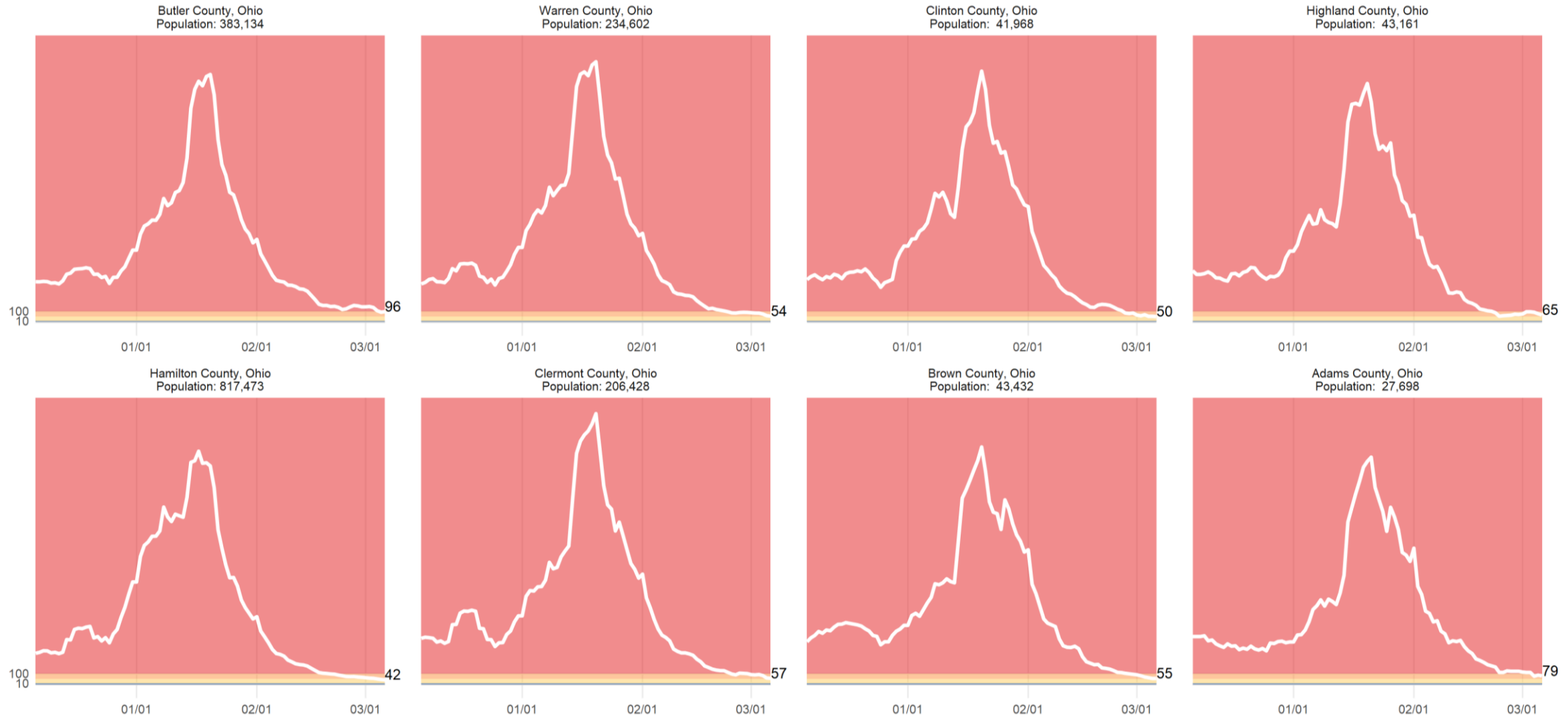
Levels are those found in CDC`s Guidance for COVID-19 Prevention in K-12 Schools, https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html
Data from The New York Times, based on reports from state and local health agencies. https://www.nytimes.com/interactive/2020/us/coronavirus-us-cases.html Pulled: 2022-03-07

3/7/2022

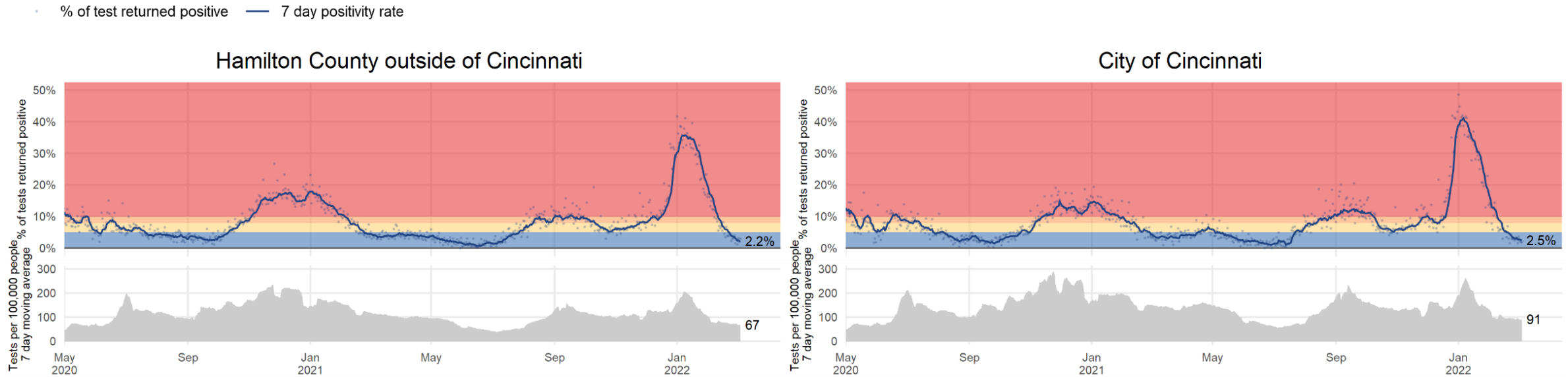# Current Data: Percent of community COVID tests that are positive, 7 day rolling average *(source: The Health Collaborative)*

3/7/2022

Current Data: Percent of community COVID tests that are positive, 7 day rolling average *(source: The Health Collaborative)*

3/7/2022

Current Data: Hamilton County percentage of population with vaccine started, completed, and boosted by age

Age Group

Percentage of population with vaccine started, completed, and with booster by age in Hamilton County

Source: OHA COVID-19 Dashboard as of March 07 2022
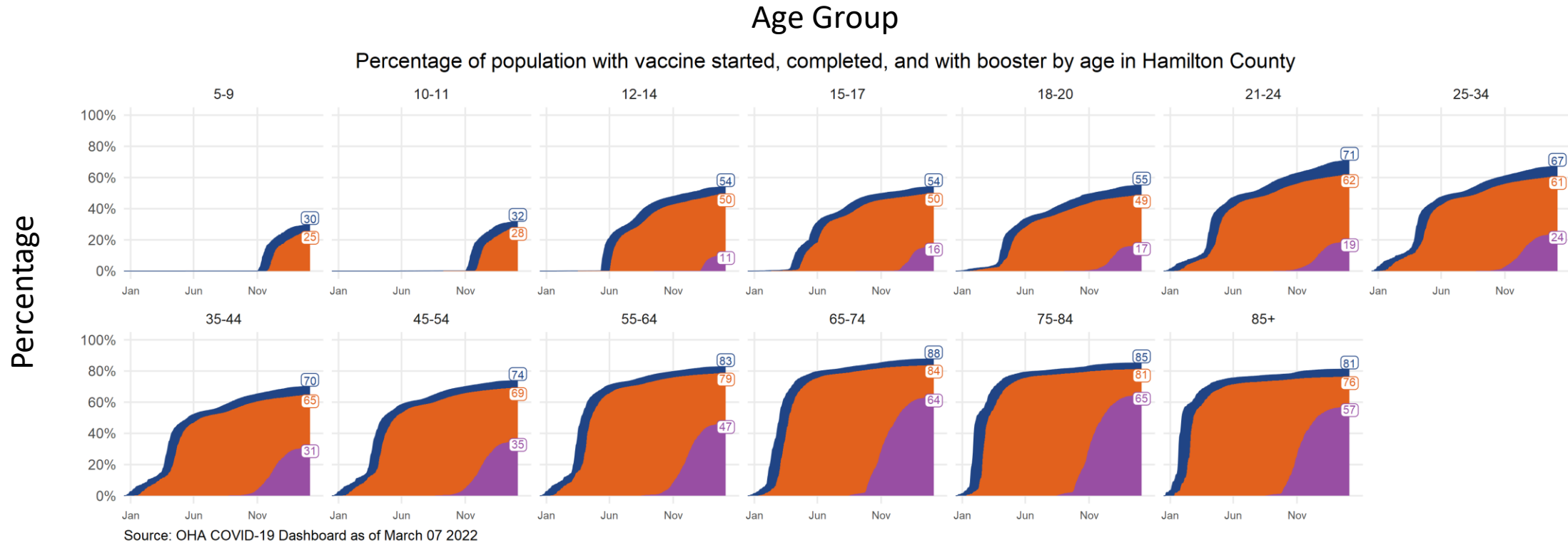
Age 12 to 17 eligible for booster as of January 3rd, 2022

As of 3/7/2022

Current Data: Hamilton County percentage of children age 5-17 who have completed a vaccine series

Details on vaccine series by age:
https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html

Source: Ohio Department of Health. Vaccinations given through 3/7/2022

As of 3/7/2022

LAYERS OF PROTECTION increase the effectiveness of preventing in-school transmission and keeping kids in school.

THE SWISS CHEESE RESPIRATORY VIRUS PANDEMIC DEFENCE
RECOGNISING THAT NO SINGLE INTERVENTION IS PERFECT AT PREVENTING SPREAD

Community COVID rates

PHYSICAL DISTANCE STAY HOME IF SICK
MASKS
HAND HYGIENE COUGH ETIQUETTE
AVOID TOUCHING YOUR FACE
IF CROWDED, LIMIT YOUR TIME
FAST & SENSITIVE TESTING & TRACING
VENTILATION, OUTDOORS, AIR FILTRATION
GOVT MESSAGING & FINANCIAL SUPPORT
QUARANTINE & ISOLATION
VACCINES

PERSONAL RESPONSIBILITIES   SHARED RESPONSIBILITIES
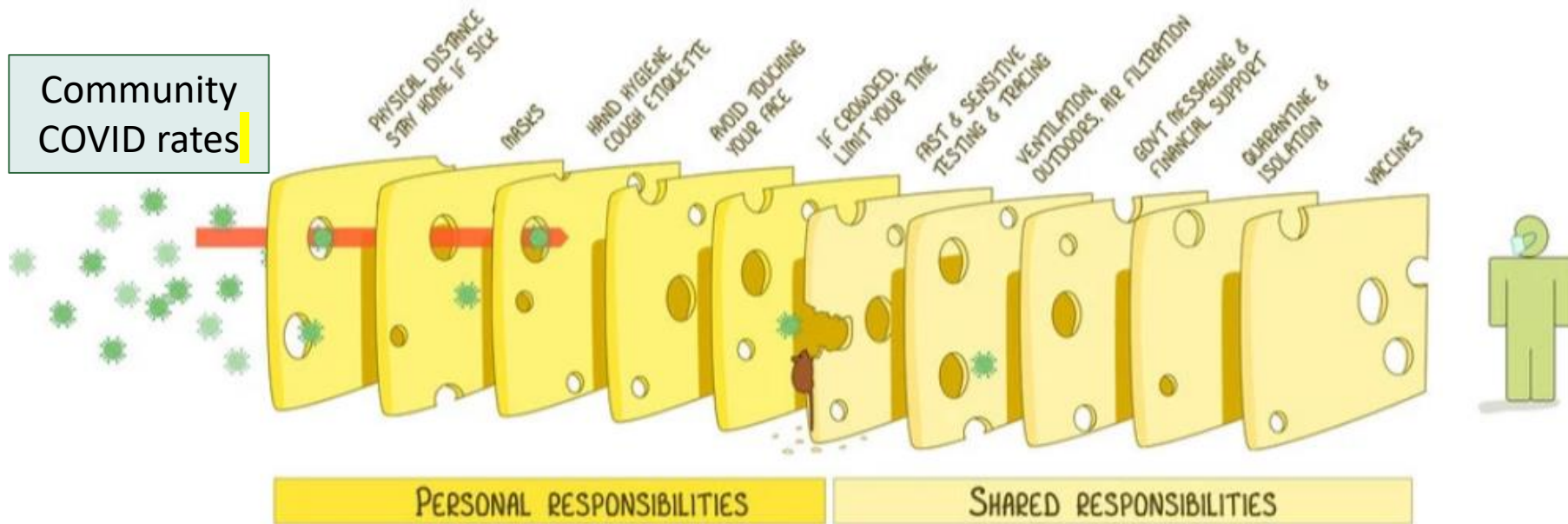
EACH INTERVENTION (LAYER) HAS IMPERFECTIONS (HOLES).
MULTIPLE LAYERS IMPROVE SUCCESS.

IAN M MACKAY
VIROLOGYDOWNUNDER.COM
WITH THANKS TO JODY LANARD, KATHERINE ARDEN & THE UNI OF QLD
BASED ON THE SWISS CHEESE MODEL OF ACCIDENT CAUSATION, BY JAMES T REASON, 1990
VERSION 3.0
UPDATE: 24OCT2020

Schools
Cases, In-school Transmission, Quarantine, Absences

Layers of Protection

Key Layers to reduce COVID transmission and to keep kids face-to-face in school are:

➤ **Vaccinations Up-To-Date (including booster)** for all eligible staff and students

➤ **Universal Masking** for everyone age 2 and older

Other important layers include:

- Physical Distancing as much as possible, ideally more than 3 feet
  - *If more than 3 feet is not possible with all students in school, prioritize other layered strategies*
- Improved ventilation and air flow
- Hand and respiratory hygiene
- Staying home when sick
- Cleaning of physical space
- Use of pods or cohorting of students
- Screening and surveillance testing of asymptomatic students
- School closure/move to virtual – **should be last resort**

Agency-specific COVID Recommendations for Schools can be found at the inks below

▪*CDC:*
https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-guidance.html

▪*AAP:*
https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/

▪*ODH:*
https://coronavirus.ohio.gov/wps/portal/gov/covid-19/responsible-restart-ohio/sector-specific-operating-requirements/sector-specific-operating-requirements

Key Layer: <u>Up-To-Date Vaccinations</u> (including boosters)
for all eligible staff and students

Currently, all individuals 5 years and older are eligible for vaccination. All individuals 12 years and older are eligible for boosters.

Note: Only Pfizer vaccine is authorized for youth under age 18

From the Centers for Disease Control and Prevention:

COVID-19 vaccines are safe and effective. COVID-19 vaccines were evaluated in tens of thousands of participants in clinical trials. The vaccines met the Food and Drug Administration's (FDA) rigorous scientific standards for safety, effectiveness, and manufacturing quality needed to support emergency use authorization (EUA).

From the American Academy of Pediatrics:

AAP recommends COVID-19 vaccination for all children and adolescents 5 years of age and older who do not have contraindications using a COVID-19 vaccine authorized through an Emergency Use Authorization (EUA) or Biologics License Application (BLA), recommended by CDC, and appropriate for their age and health status. AAP also supports coadministration of COVID-19 vaccines with other vaccines on the immunization schedule.

For information on where/how to promote vaccination, please go to http://testandprotectcincy.com

Full statements on vaccine safety and effectiveness can be found at

- ***CDC:*** *https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/safety-of-vaccines.html*
- ***AAP:*** *https://publications.aap.org/pediatrics/article/149/1/e2021054332/183385/COVID-19-Vaccines-in-Children-and-Adolescents*

Key Layer: Universal Masking

Agency	Agency Recommendations
Centers for Disease Control and Prevention (CDC)	Universal Indoor Masking for all students aged 2 and older, regardless of vaccination status
American Academy of Pediatrics (AAP)	Universal Masking for all students aged 2 and older, regardless of vaccination status
Cincinnati Children's Hospital	Universal Masking for all students aged 2 and older, regardless of vaccination status

It is **recommended that masks be <u>required</u>** for all K-12 students, regardless of vaccination status, because:

- Many children have not yet been vaccinated against COVID-19

- No vaccine is 100% effective at preventing infection

- Masks are about 85% effective in preventing the spread of COVID-19

- Many other layers are more difficult with more kids in the classroom (e.g., distancing)

To protect yourself and others from COVID-19, CDC continues to recommend that you wear the most protective mask you can that fits well and that you will wear consistently. More details: https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/types-of-masks.html

CDC Guidance Update: <u>Isolation</u> after positive for COVID-19
updated *CDC guidelines for K-12 schools* *1-6-2022*

- Isolation is what a person does if they become infected with COVID

- If a student or staff member has a confirmed or suspected case of COVID:
  - Isolate for at least 5 full days (the first day of symptoms is Day 0. If symptoms never develop, then day of positive test is Day 0.)
  - If after 5 days, the student or staff member has been fever-free without fever-reducing medication for 24 hours and symptoms are improving, they can:
    - End isolation IF they are able to strictly mask for days 6-10; or
    - They should isolate through Day 10 if they are not able to strictly mask

  NOTE – schools must be prepared to provide a space for students to adequately distance during times, such as lunch, when they would remove their mask.

  More Details: https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-contact-tracing/about-isolation.html

CDC Guidance Update: <u>Quarantine</u> after being exposed to COVID
updated CDC guidelines for K-12 schools 1-6-2022

- Quarantine is what a person does if they are a <u>Close Contact</u> to someone who is infected with COVID

- <u>Close Contact</u>: In a school setting close contact is considered someone who is exposed for 15 cumulative minutes to a person with COVID at less than 3 feet away if unmasked, or 3-6 feet away if both are masked.

- CDC Quarantine Guidelines: (***See next slide for ODH Quarantine guidelines for students <u>exposed in classroom setting</u>***)

If up-to-date with all recommended vaccines* **OR had confirmed COVID-19 in past 90 days:**	**If NOT up-to-date with all recommended vaccines*:**
•Does NOT need to quarantine •Wear a well-fitting mask for 10 days when around others •Monitor for symptoms •Recommended to test on day 5	•Quarantine for at least 5 days after last exposure (Last exposure = Day 0) •Wear a well-fitting mask for Days 6-10 after last exposure when around others •Monitor for symptoms •Recommended to test on day 5

*All Recommended Vaccines (https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html)

- *Age 18+ and over: Primary series (2 Pfizer, 2 Moderna, or 1 Johnson and Johnson) PLUS 1 booster if more than 5 months after primary series*

- *Age 12-17: Primary series (2 Pfizer) PLUS booster if more than 5 months after primary series*

- *Age 5-12: Primary series (2 Pfizer)*

More Details: https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-contact-tracing/about-quarantine.html

ODH Guidance Update: <u>Quarantine</u> after being exposed to COVID <u>in the school setting</u>
Ohio Department of Health, updated 12/30/2021

Mask to stay / Test to play: <u>Applicable only to students and staff exposed in the classroom environment</u>

- Direct contacts, regardless of vaccination or masking status, may remain in the classroom environment if they do the following:
  - Wear a mask for 10 days after their last date of exposure
  - Self-monitor, or parent-monitor, for symptoms of COVID-19
  - Isolate and get tested if start to experience symptoms associated with COVID-19 (regardless of severity)
  - Testing on day 5 after exposure is recommended (can be PCR or Ag)

- Asymptomatic contacts may continue to participate in extracurricular activities if they do the following:
  - Wear a mask when able
  - Test on initial notification of exposure to COVID-19
  - *Recommend test on day 5 after exposure*

Eligibility to participate in mask to stay/test to play is contingent on the exposure being in the school setting or school-related activities. This does not apply to household exposures or exposures outside of the school setting or school-related activities.

More information: https://coronavirus.ohio.gov/static/responsible/schools/k-12-schools-quarantine-alternative.pdf

Using Data to Inform Decisions

Using data to guide decision making

Key Measures: There are 2 categories of data which are key to assessing COVID context when making decisions on layers of protection / in-person learning

District or building data – *If there is evidence of COVID being transmitted among staff or students, or there is a high number of students* **or staff in isolation** *or quarantine, it may be necessary to add more layers of protection on at least a short-term basis. Key school measures include:*

- In-school transmission
- Children in isolation or quarantine
- Vaccination up-to-date

See guiding questions on Slide 18 to assess the level of school transmission to make decisions

Community data – *As cases in the community increase, more cases are likely to enter the school building and more layers of protection will be needed to prevent in-school transmission. Key community measures include:*

- Incidence (new cases per 100,000 people per week)
- Test positivity (7-day moving average)
- Vaccination completion

See CDC guidance on Slide 19-20 to assess the level of community transmission to make decisions

District or Building Data to Guide Decisions

Monitoring cases & transmission within the school will allow schools to assess the effectiveness of their protective layers **and ability to staff classrooms**

- **Cases:** Count and rate of school COVID cases
- **Isolation/Quarantine:** Number of students and staff absent due to exposure or illness
- **Transmission**: Monitor closely for evidence of in-school transmission

Questions to Consider when assessing your in-school data:
- Is there evidence of in-school / school-related transmission? (**YES** / NO)
  - If yes, note setting of transmission: in-class, extracurricular, transportation, etc.
- Are case counts increasing, decreasing, or not changing? (**INCREASING** / Decreasing / Flat)
- Are students and staff adhering to Protective Bundle with high reliability? (YES / **NO**)

If answers match RED responses above, consider methods to reduce potential exposures.
- Add additional protective layers
- Consider short-term transition to a hybrid or remote model for specific grades or classrooms.

Community Data to Inform Decisions: CDC-defined levels of community transmission

- **Incidence:** total number of new cases per 100,000 people in the past 7 days
- **Test positivity**: percentage of COVID tests that are returned as positive

Table 1. CDC Indicators and Thresholds for Community Transmission of COVID-19[1]

Indicator	Low Transmission Blue	Moderate Transmission Yellow	Substantial Transmission Orange	High Transmission Red
Total new cases per 100,000 persons in the past 7 days[2]	0-9	10-49	50-99	≥100
Percentage of NAATs that are positive during the past 7 days[3]	<5.0%	5.0%-7.9%	8.0%-9.9%	≥10.0%

NAAT - Nucleic Acid Amplification Test, including PCR

Using Data to set layers of protection

Community / county data should be referenced as schools select protective measures, prioritizing masking & vaccination. The example below outlines recommendations that align with CDC guidance.

School-selected Layers of Protection	Community Transmission Blue (Low)	Community Transmission Yellow (Moderate)	Community Transmission Orange (Substantial)	Community Transmission Red (High)
Vaccination	School recommends for all eligible staff and students			
Masking	School recommends for all staff and students	School requires for unvaccinated staff and students* School recommends for vaccinated staff and students	School requires for all staff and students	
Other protective layers	*School uses community, district, or building-level data to guide choices on other layers of protection*			

*School may recommend that vaccinated staff be encouraged to mask to normalize the behavior

References and Data Resources

American Academy of Pediatrics. *COVID-19 Guidance for Safe Schools*, July 2021. Retrieved from https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/

Brown University/Harvard University Safra Center, Pandemics Explained. *Schools and the Path to Zero: Strategies for Pandemic Resilience in the Face of High Community Spread, Updated December 2020.* Retrieved from https://globalepidemics.org/2020/12/18/schools-and-the-path-to-zero/.

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Children's Hospital of Philadelphia. *Revised Guidance for In-person Education in K-12 Settings*, July 2021. Retrieved from https://policylab.chop.edu/announcements/new-revised-guidance-person-education-k-12-settings.

COVID Collaborative, Harvard University Safra Center for Ethics, Brown University, New America. *Education Updates*. Retrieved from https://www.covidcollaborative.us/infection-prevention-and-control-in-schools.

Harvard T.H. Chan School of Public Health. *Risk Reduction Strategies for Reopening Schools.* Retrieved from https://schools.forhealth.org/risk-reduction-strategies-for-reopening-schools/

Ohio Department of Health. *COVID-19 Fact Sheet - Guidelines for K-12 Student Quarantine*, April 2021. Retrieved from https://coronavirus.ohio.gov/static/responsible/covid-19-fact-sheet-k-12-exposure-and-quarantine.pdf.

Data Sources:
- The Health Collaborative Situational Dashboard: https://www.cctst.org/covid19. Includes local data -
  - Daily New Cases per 100,000 people by county, Greater Cincinnati Regional Data, Daily COVID Tests that are Positive
- Centers for Disease Control and Prevention, COVID-19 Integrated County View: https://covid.cdc.gov/covid-data-tracker/#vaccinations-county-view
  - Daily New Cases per 100,000 people by county, United States. current Test Positive Rate by State

Emerging Science

Effectiveness of three versus six feet of physical distancing for controlling spread of COVID-19 among primary and secondary students and staff: A retrospective, state-wide cohort study https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab230/6167856

Incidence and Secondary Transmission of SARS-CoV-2 Infections in Schools https://pediatrics.aappublications.org/content/early/2021/01/06/peds.2020-048090

Dawson P, Worrell MC, Malone S, et al. Pilot Investigation of SARS-CoV-2 Secondary Transmission in Kindergarten Through Grade 12 Schools Implementing Mitigation Strategies — St. Louis County and City of Springfield, Missouri, December 2020. MMWR Morb Mortal Wkly Rep. ePub: 19 March 2021. DOI: http://dx.doi.org/10.15585/mmwr.mm7012e4.

Doyle T, Kendrick K, Troelstrup T, et al. COVID-19 in Primary and Secondary School Settings During the First Semester of School Reopening — Florida, August–December 2020. MMWR Morb Mortal Wkly Rep. ePub: 19 March 2021. DOI: https://www.cdc.gov/mmwr/volumes/70/wr/mm7012e2.htm .

Hershow RB, Wu K, Lewis NM, et al. Low SARS-CoV-2 Transmission in Elementary Schools — Salt Lake County, Utah, December 3, 2020–January 31, 2021. MMWR Morb Mortal Wkly Rep. ePub: 19 March 2021. DOI: https://www.cdc.gov/mmwr/volumes/70/wr/mm7012e3.htm.

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.

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