



PRSD Healthcare Leadership Council

December 10, 2020



Essential Question(s) and Condition Parameters

The essential question facing school systems and districts:

“Are schools safe for staff and students if appropriate precautions are implemented in a highly disciplined and regulated manner?”

*“Does the answer change if we are in substantial community transmission?
If so, at what level of transmission?”*

A corollary question might be *“Does community transmission increase when we remove tens of thousands of students and staff from the highly regulated school environment?”*



Factors Impacting Full Virtual Transition

- As an opening statement, **closing schools may not have an impact on the level of virus in the community since that virus is not tied to schools.** ACHD experts concur that transmission is not driven by schools at this time. ACHD also attributes spread to social activities outside of school and/or behaviors that ignore the Big 3.
- **However, factors leading to the PRSD transition to full virtual-for-all:**
 - PDE/PADOH's recommendation since Allegheny County was in multiple weeks of substantial transmission;
 - Exponential increase in cases in Allegheny County and corresponding increase of cases at PRSD;
 - Growing staffing and supervision challenges given routine illness and/or quarantine of staff;
 - Uncertainty around college students returning and public health projections of a "surge on top of a surge" following the holiday;
 - New information from PDE/PADOH about closing schools for a period of time given the number of cases over a 14-day rolling period; and
 - Desire to manage the transition from hybrid to full virtual in a deliberate manner to avoid uncertainty and the "ping-pong" ball effect of transitions.



PADOH: Allegheny County Metrics

Criteria	10.23.20	10.30.20	11.6.20	11.13.20	11.20.20	11.27.20	12.4.20	12.11.20
Incidence Rate Per 100,000	56.1	54.8	65.9	138.7	211.9	280.8	339.6	TBD
PCR Positivity Percentage	3.6%	4.1%	4.3%	7.7%	9.0%	9.7%	12.6%	TBD

Guidelines
Not Magic
Numbers

Low = Green = < 10 Cases **and** < 5%
 Moderate = Yellow = 10 to < 100 Cases **or** 5% to < 10%
 Substantial = Red = > 100 Cases **or** > 10%

In recent days, the region, state and country have set daily records for confirmed cases and hospitalizations.



PDE/PADOH Conditions Guidance

Level of Community Transmission in the County	Incidence Rate per 100,000 Residents (Most Recent 7 Days)	AND/OR	PCR Percent Positivity (Most Recent 7 Days)	Recommended Instructional Models
Low	<10	AND	<5%	Full in-person Model OR Blended Learning Model
Moderate	10 to <100	OR	5% to <10%	Blended Learning Model OR Full Remote Learning Model
Substantial	≥100	OR	≥10%	Full Remote Learning Model

**When can we shift further left on the continuum back to the hybrid model?
Should we consider early grades given the emerging scientific literature?**

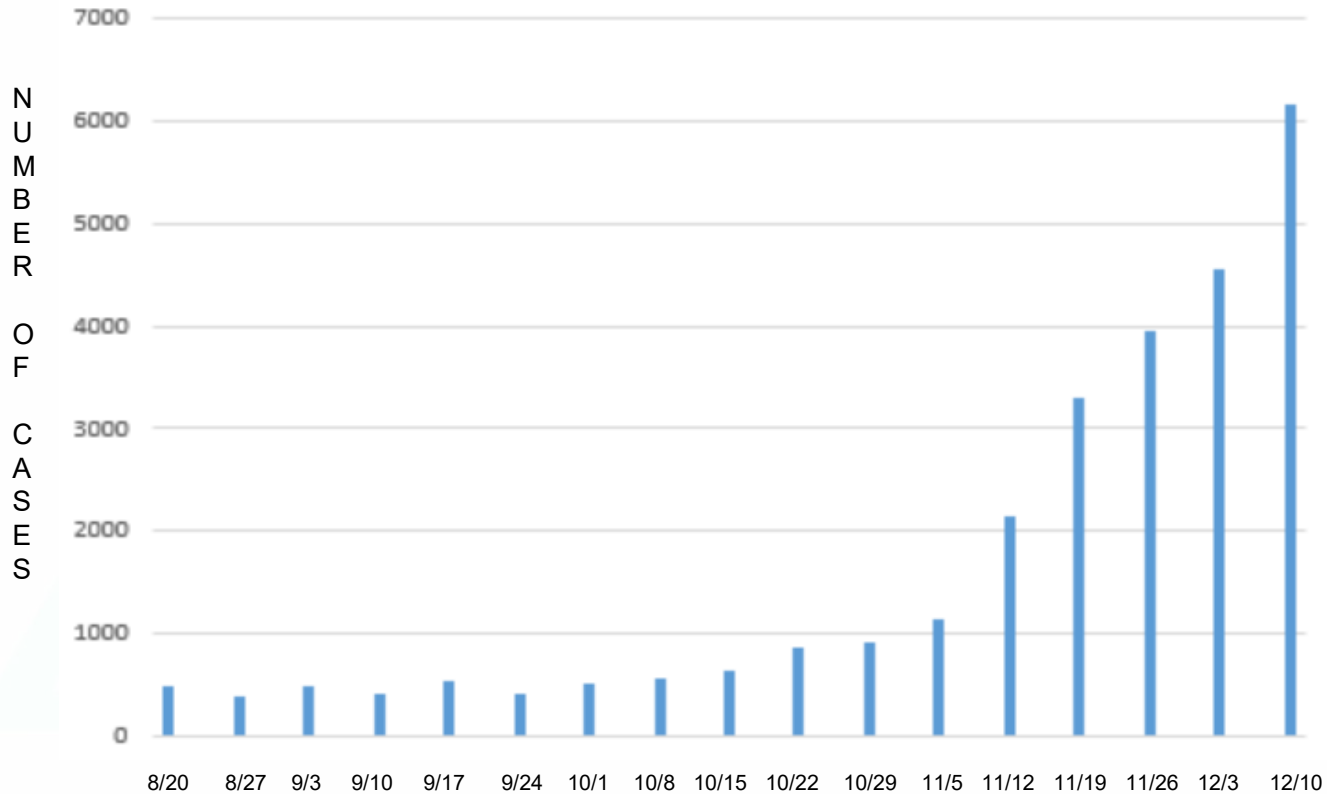
Guidelines
Not Magic
Numbers

Current
Full Virtual-for-All





Allegheny County Weekly Case Metrics





Pine-Richland Case Metrics*

	September	October	November	December-to-Date		
Total	2	5	42	29		
Students	1	5	34	23		
Staff	1	0	8	6		
PRHS	PRMS	EHUE	HES	RES	WES	OTHER
30	16	5	9	9	7	2

*Cases last updated on December 10th at 12:30 p.m. There are currently 9 active cases within the isolation period.



Pine-Richland Case Description

- As the amount of virus and transmission increases in the community, we will see an increase in cases for students, staff, parents and community members within Pine and Richland Townships.
- It would be inaccurate (wrong) to infer that the increase in student and staff cases is connected to the educational program.
 - Staff – In all but one case, contact tracing indicates that exposure occurred outside of the school environment. In that one case, the initial source and location of exposure is less clear.
 - Students – Contact tracing often to the household (siblings, parents) or other community events.
- Public health experts are clear and consistent that most transmission is happening in social settings where people are not adhering to the Big 3 (e.g., dinners, parties, family gatherings, travel, weddings, etc.).



PDE/PADOH: Moderate/Substantial

Guidelines and Numbers But Still Not Magic Numbers	School does not need to close	Close school(s) for 3-7 days*	Close school(s) for 14 days*
Small (< 500) HES and RES	1 student or 1 staff	2-4 students/staff in same school building	5+ students/staff in same school building
Medium (500 – 900) WES and PRMS	1-3 students or staff	4-6 students/staff in same school building	7+ students/staff in same school building
Large (> 900) EHUE and PRHS	1-5 students or staff	6-10 students/staff in same school building	11+ students/staff in same school building



CDC Core Indicators

Core indicators include one or both measures of community burden AND one self-assessed measure of school implementation of key mitigation strategies. Additional information including how to calculate these indicators is found in the table below.

Measures of community burden

- The number of new cases per 100,000 persons within the last 14 days, AND/OR
- The percentage of RT-PCR tests that are positive during the last 14 days, AND



Implementation of mitigation strategies

- The school's ability to adhere to the following key mitigation strategies
 - Consistent and correct use of [masks](#)
 - [Social distancing](#) to the extent possible
 - [Hand hygiene and respiratory etiquette](#)
 - [Cleaning and disinfection](#)
 - [Contact tracing](#) in collaboration with local health department

Schools should adopt the additional mitigation measures outlined below to the largest extent possible, practical and feasible.




CDC Core Indicators

INDICATORS	Lowest risk of transmission in schools	Lower risk of transmission in schools	Moderate risk of transmission in schools	Higher risk of transmission in schools	Highest risk of transmission in schools
CORE INDICATORS					
Number of new cases per 100,000 persons within the last 14 days*	<5	5 to <20	20 to <50	50 to ≤ 200	>200 
Percentage of RT-PCR tests that are positive during the last 14 days**	<3%	3% to <5%	5% to <8%	8% to ≤ 10%	>10% 



CDC Core Indicators

INDICATORS	Lowest risk of transmission in schools	Lower risk of transmission in schools	Moderate risk of transmission in schools	Higher risk of transmission in schools	Highest risk of transmission in schools
CORE INDICATORS					
<p>Ability of the school to implement 5 key mitigation strategies:</p> <ul style="list-style-type: none"> • Consistent and correct use of masks • Social distancing to the largest extent possible • Hand hygiene and respiratory etiquette • Cleaning and disinfection • Contact tracing in collaboration with local health department <p>Schools should adopt the additional mitigation measures outlined below to the extent possible, practical and feasible.</p>	<p>Implemented all 5 strategies correctly and consistently</p> 	<p>Implemented all 5 strategies correctly but inconsistently</p>	<p>Implemented 3-4 strategies correctly and consistently</p>	<p>Implemented 1-2 strategies correctly and consistently</p>	<p>Implemented no strategies</p>



CDC Transmission Risk by Modality (Best Fit)

Some risk:

K - 6

- Hybrid Learning Model: Some students participate in virtual learning and other students participate in in-person learning
- Small, in-person classes, activities, and events
- Cohorting; leveraging all available safe community spaces, including outdoor spaces; alternating schedules, and staggered schedules are applied rigorously
- No mixing of groups of students (i.e., cohorts) and teachers throughout/across school days
- Students and teachers do not share objects
- Students, teachers, and staff always follow all steps to protect themselves and others, including proper use of face masks, social distancing, hand hygiene, and respiratory etiquette
- Regularly scheduled cleaning and disinfection of frequently touched surfaces implemented consistently

Medium risk:

7 - 12

- Hybrid Learning Model: Most students participate in in-person learning, some students participate in virtual learning
- Larger in-person indoor classes, activities, and events
- Cohorting, alternating schedules, and staggered schedules are applied with some exceptions
- Some mixing of groups of students (i.e., cohorts) and teachers throughout/across school days
- Students and teachers minimally share objects
- Students, teachers, and staff follow all steps to protect themselves and others such as proper use of face masks, social distancing, hand hygiene and respiratory etiquette
- Regularly scheduled cleaning and disinfection of frequently touched surfaces largely implemented consistently



CDC Application of Indicators

Each indicator or combination of indicators should neither be used in isolation nor should they be viewed as hard cut-offs by STLT officials and school district decision-makers. Rather, they serve as broad guideposts of inherent risk to inform decision-making.

If, after applying the core indicators described in the table below, a school is at “medium,” “higher,” or “highest” risk of transmission, **it does not** mean that the school cannot re-open for in-person learning, but that the risk of introduction and subsequent transmission of SARS-CoV-2 is higher and the school could consider alternative learning models (e.g., mix of in-person and virtual learning, also known as hybrid learning, or virtual-only).

Similarly, if a school meets all core indicators and many secondary indicators, a case or cases of COVID-19 may still occur in a school among students, teachers, administrators, and other staff. As a result, falling into the category of being at “lower” or “lowest” risk of transmission does not mean that the school should relax adherence to mitigation measures.

Officials should frequently monitor these indicators and adjust accordingly.



Educational Model Continuum*

“Old Days”

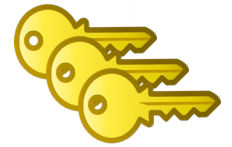
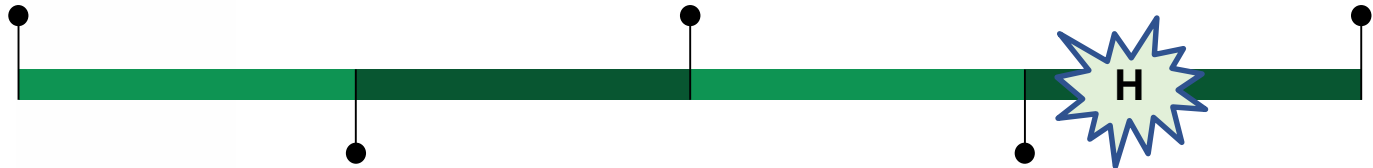
Schools operate as they did on and before March 13, 2020.

Traditional with Significant Restrictions

Restrictions could include limiting the number of students in a class; alternative transportation options; staggered schedules, etc.

100% Virtual All

All students are learning remotely from home.



Traditional with Some Restrictions

Restrictions could include spacing of desks in classrooms; direction signs in hallways; table and seating spacing in cafeterias; etc.

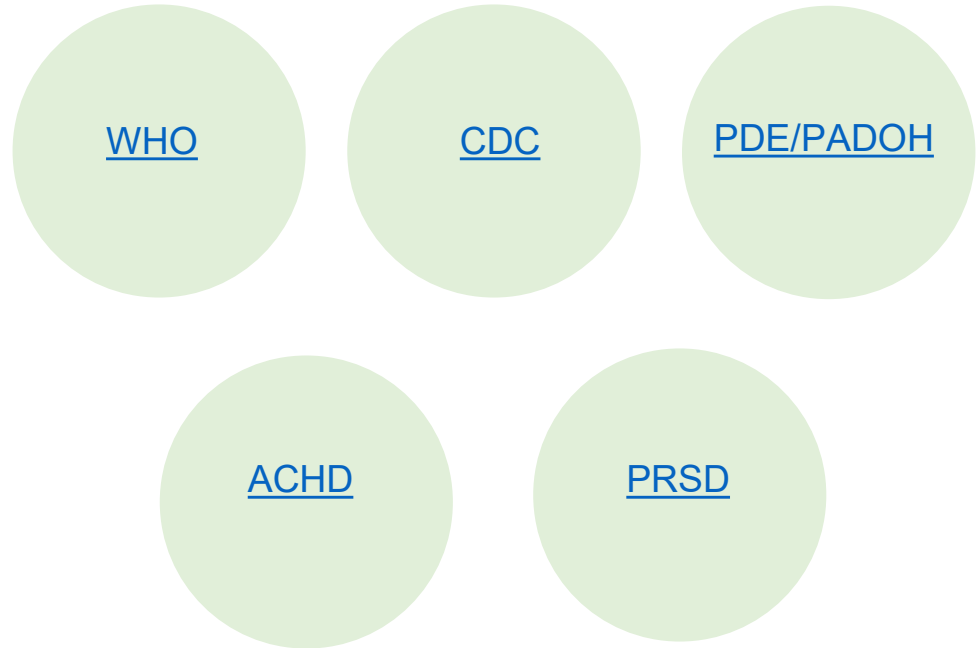
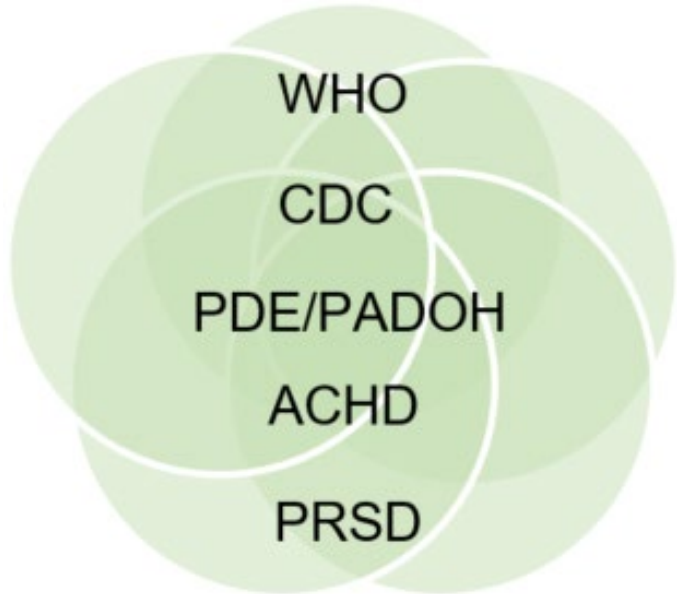
Dynamic Hybrid Between Traditional and Virtual

A combination of traditional with significant restrictions and virtual instruction for some.

***As conditions change and public health guidance evolves, shifts have occurred between “H” and “V.” These shifts could happen for classroom(s), building(s) or the district.**



More Agreement Than Disagreement





Disagreement Causes Conflict

- A main challenge – of communication and confidence – are the discrepancies in details and lack of coherence between governmental agencies and public health officials (i.e., mixed messages).
- Examples include:
 - Open or Close: CDC/NIAID/ACHD or PDE/PADOH
 - Close Contact: 15 minutes consecutive or 15 minutes cumulative
 - Physical Distancing: WHO (3') or CDC (6')
 - Masks: Cloth Face Coverings or Multiple Options
 - Case-Based Closure: New PDE/PADOH Requirements Using Number of Cases or Evidence of School Transmission (i.e., type of cases)



Findings and Recommendations

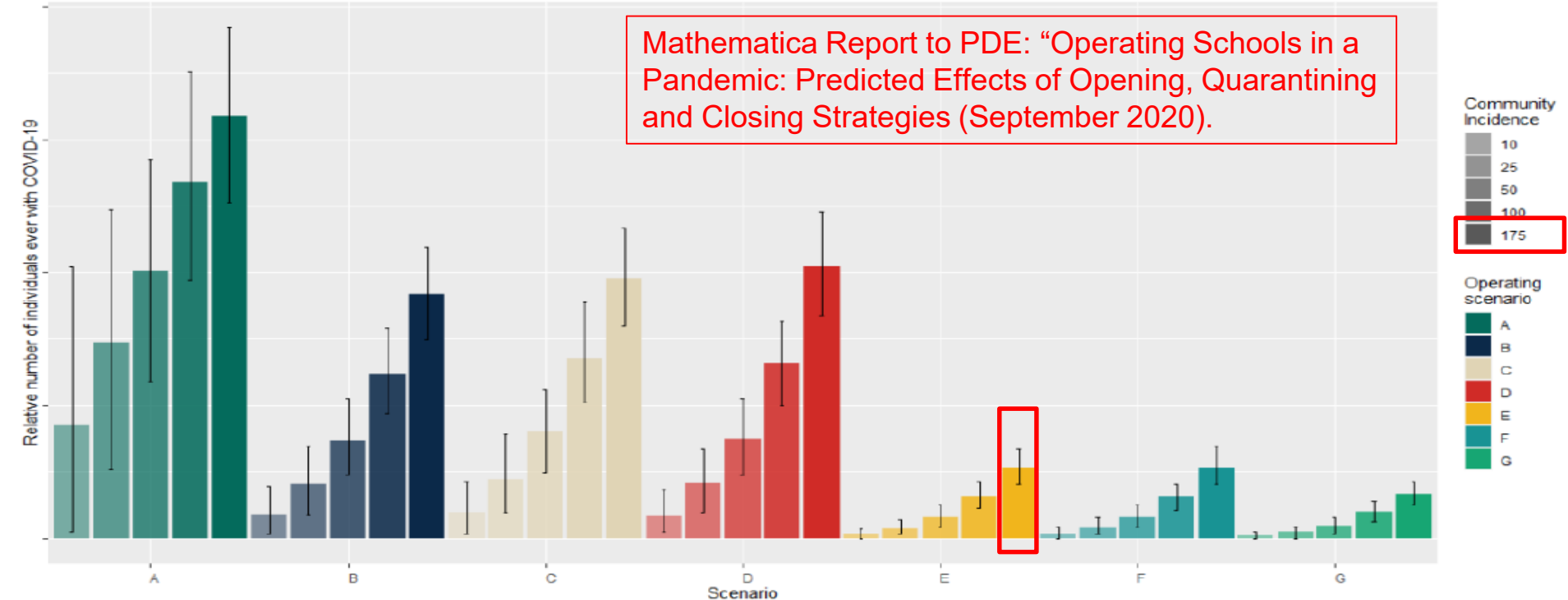
- As of December 6, 2020, the CDC (Dr. Redfield), NIAID (Dr. Fauci) and ACHD (Dr. Bogen) recommend some level of in-person instruction with precautions.
- As of December 6, 2020, the PDE and PADOH recommend remote learning for school districts in counties that have spent at least two consecutive weeks in substantial transmission.
 - In the fall, PDE commissioned the Mathematica Report that indicates that a hybrid model similar to PRSD significantly reduces any risk of in-school transmission.
 - ACHD experience with all school districts over the past 14 weeks reinforce these findings.
 - PRSD experience over the past 14 weeks reinforces these findings. There is little to no evidence of school-based transmission (e.g., staff as an example).



Findings and Recommendations

- Transmission is happening in small group social settings or events such as weddings where people congregate with relaxed attention to mitigation (e.g., no masks, inconsistent masks, close physical proximity, etc.).
- Transmission – at this time – is not happening in a highly regulated school environment that pays disciplined attention to the Big 3. **Cloth face coverings that meet CDC specifications are a critical element already worn by the vast majority of PRSD students and staff.**
- Along with many in our country, we are working to understand whether some level of substantial transmission in the community will increase risk of in-school transmission.
- Along with many in our country, we are working to understand whether the answers vary depending on the grade span of students.

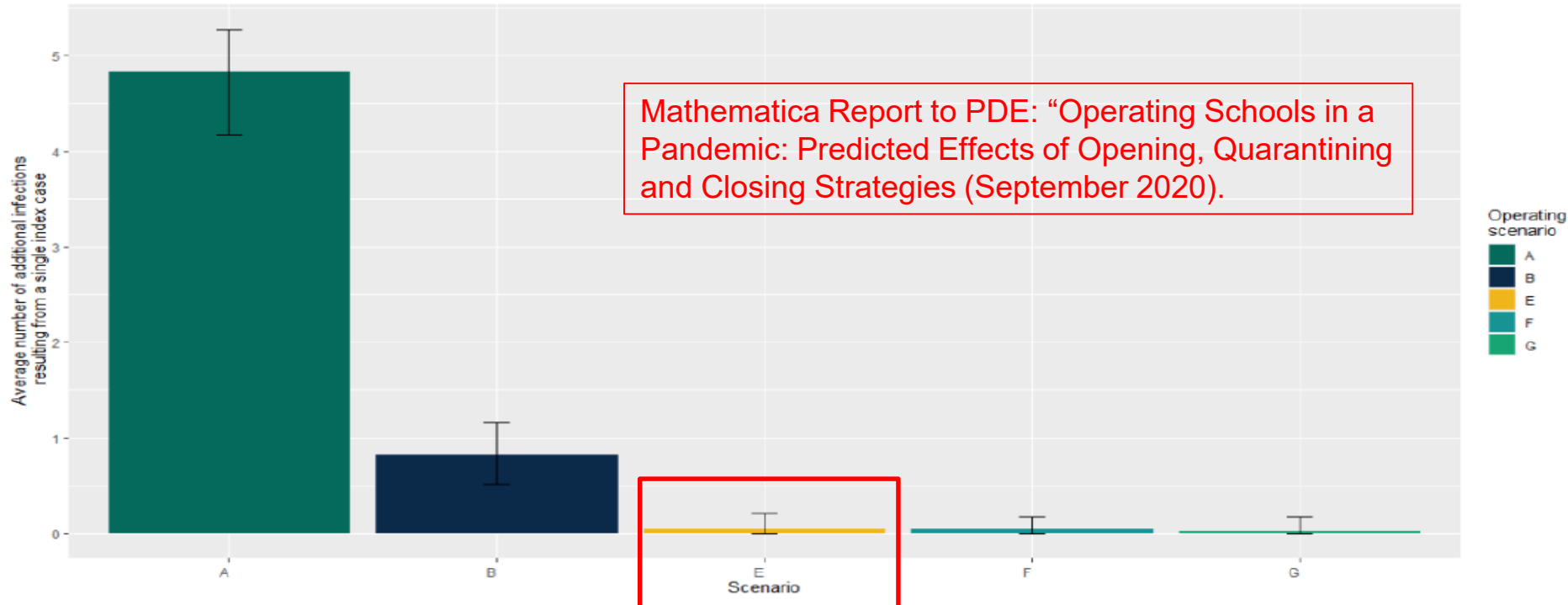
Figure 2. Relative cumulative infections among students and staff, by community incidence (per 100,000 population over seven days) and operating scenario, in a typical Pennsylvania secondary school



Mathematica Report to PDE: "Operating Schools in a Pandemic: Predicted Effects of Opening, Quarantining and Closing Strategies (September 2020)."

Note: The whisker lines for each bar show the range of expected outcomes from the 5th to the 95th percentile. These simulations assume that COVID-19 test results are returned in two days and that detected infections lead schools to quarantine close contacts but not to shut down. Scenario A represents a "business as usual" approach with full-time attendance and no changes to operations except quarantining of infected individuals and their close contacts.

Figure 3. Average number of additional infections among students and staff for each infection coming from outside the school, by operating scenario, in a typical Pennsylvania secondary school



Note: The whisker lines for each bar show the range of expected outcomes from the 5th to the 95th percentile. These simulations assume that COVID-19 test results are returned in two days, that the reported community infection rate is 50 per 100,000 per week, and that detected infections lead schools to quarantine close contacts but not to shut down. Scenario A represents a “business as usual” approach with full-time attendance and no changes to operations except quarantining of infected individuals and their close contacts.



Progressive Shift From “V” to “H”



We have been deliberate in model thus far. **We want to minimize “back and forth” between “V” and “H.”** Some transitions will be needed. However, a progressive and evidence-based strategy, such as returning to “H” in K – 6 prior to the full return of K – 12, may be considered.



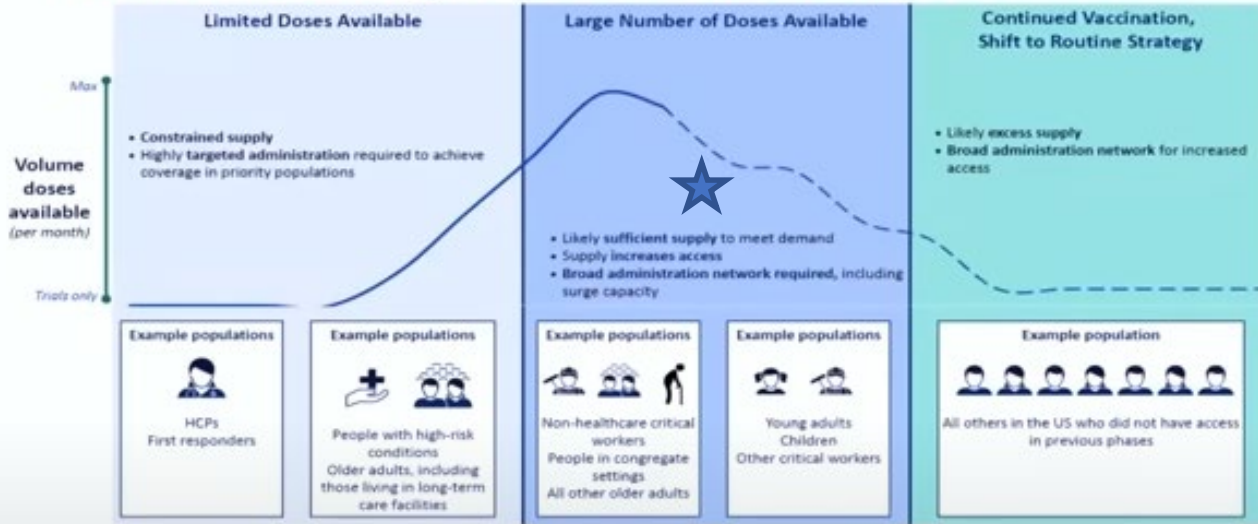
Treatment and Prevention

- Scientific evidence has suggested that [multilayer, cloth face coverings are most effective](#) to protect self and others (vs. face shields with gaps). Physical distancing and sanitizing support face coverings as the continued Big 3.
- Hospitalization and Healthcare Capacity
- Treatment Protocols and Therapies
- Vaccine Development and Emergency Use Authorization
 - Deployment and Prioritization



Sample U.S. Vaccine Distribution Schedule

Distribution will adjust as volume of vaccine doses increases



Phase 1A

From: K Dooling, ACIP Mtg 10/27/20



*Cited from UCSF presentation on COVID-19 and schools shared by a PRSD Healthcare Leadership Council expert.



Next Steps and Emerging Recommendation

- Through continued study and consultation with public health officials, we will continue to assess the essential questions in this presentation.
- For factors similar to the decision to move to full virtual instruction after Thanksgiving, we are planning a minor extension to the period of full virtual instruction via announcement next Monday night, December 14th.
- For clarity and communication:
 - It is possible that full virtual instruction will extend further for some or all grade levels. **A communication would be sent to the community by January 4th.**
 - It is possible that a return to hybrid instruction may occur for some grade levels. If this occurs, elementary grades will likely serve as the first students to return given the continued scientific literature about younger students.
- **Creative staffing and supervision strategies will be further developed for eventual return-to-hybrid.**



Essential Question(s) and Condition Parameters

The essential question facing school systems and districts:

“Are schools safe for staff and students if appropriate precautions are implemented in a highly disciplined and regulated manner?”

*“Does the answer change if we are in substantial community transmission?
If so, at what level of transmission?”*

A corollary question might be *“Does community transmission increase when we remove tens of thousands of students and staff from the highly regulated school environment?”*



Healthcare Leadership Council Membership

Senior Leadership Team: Dr. Miller (Superintendent); Dr. Pasquinelli (Asst. Superintendent); **Dr. Justus (Asst. Superintendent); Mr. Noel Hustwit (Director of Student Services & Special Education); Ms. Hathorn (Director of Communication); Mr. Brian Glickman (Director of Human Resources);** Mrs. Kirk (Director of Financial & Operational Services); Mr. Shawn Stuebener (Director of Technology)

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Staff: Mr. Chris Vins (PREA President); Mr. Brian DeVinney (PREA Secondary Vice-President); **Mrs. Danielle Kehowski (PREA Elementary Vice-President); Mrs. Patti Noble (ESPA President);** Mrs. Michelle Schonbachler (School Nurse Department Chair); Mrs. Kim Charney (Transportation & Facility Use Coordinator); **Mrs. Barbara Williams (Administrative Support); Ms. Margo Kohler** and Mr. Jim Bichler (Building Level Technology Coaches)

Governance: Mrs. Christine Misback (PRSD School Board)

Students: Executive Board Pres: Zeyad Amr; Class of 2021 President: Gaby Stone.

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