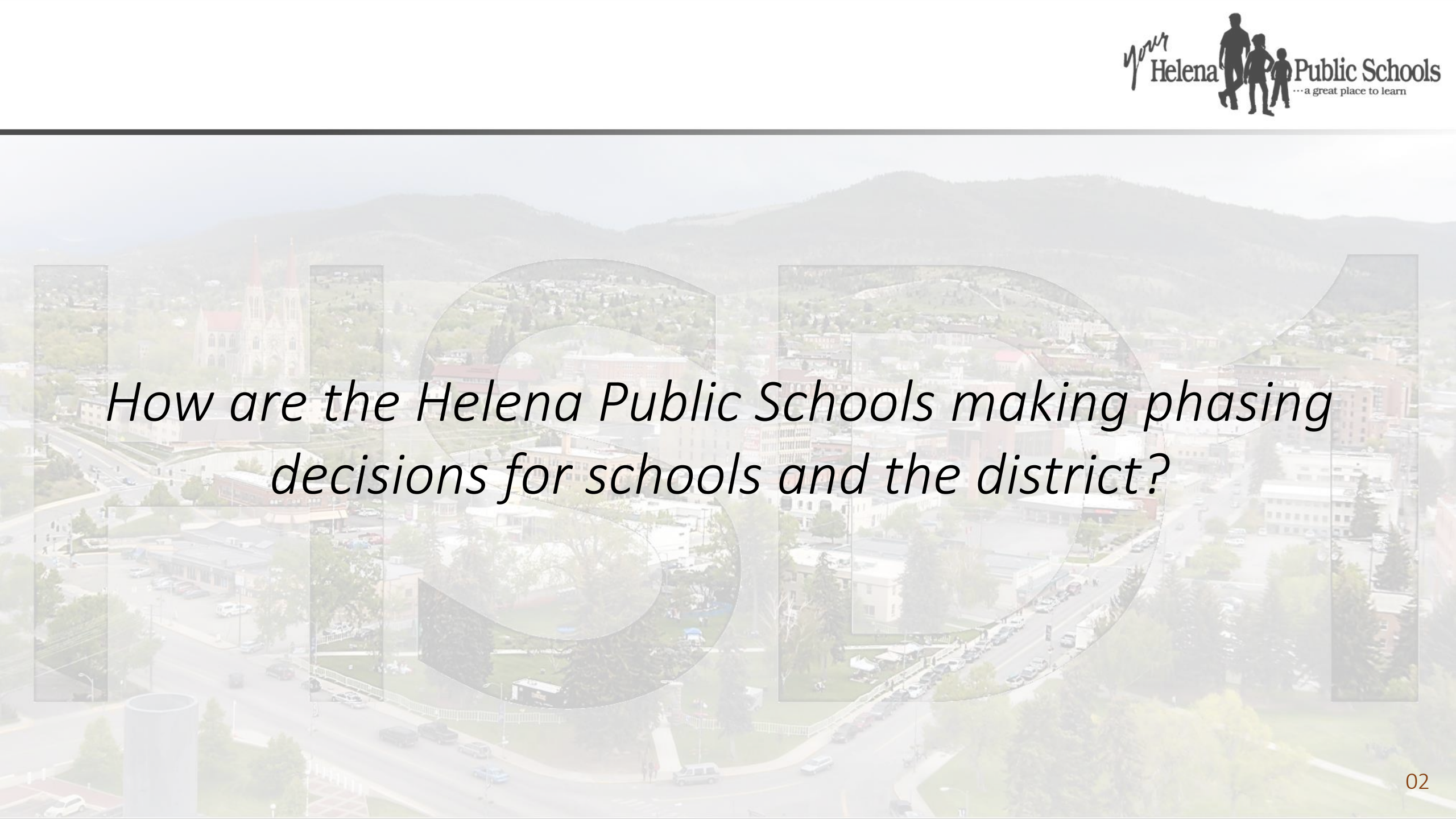




School Phasing Inputs

Data Sources Updated: October 23, 2020



How are the Helena Public Schools making phasing decisions for schools and the district?

Contextual Decision Making:

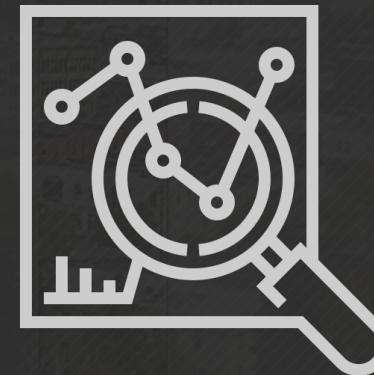
As a school district, the Helena Public Schools have adopted a process for considering phasing-up and phasing-down our schools that involves both qualitative and quantitative data.

Qualitative Data

Qualitative Data largely includes the feedback, insights, and recommendations of health professionals including health officials, doctors, and others working on healthcare's frontlines amidst this pandemic.



Quantitative Data



Quantitative data includes data-sets that provide numerical value to local health conditions. These include often-referenced indicators for assessing the health of our community especially with regards to the COVID-19 virus.

Contextual Decision Making:

By considering both qualitative and quantitative data, we will better understand local health indicators and what these values mean in terms of our schools.



Qualitative Data

+



Quantitative Data

=



Better Informed
Decisions

Quantitative Data:



Monitoring the Numbers

Pandemic Disclaimer:

Remaining Focused Yet Flexible

In seeking to utilize quantitative data to inform our decisions, we have been continually warned to remain flexible and open to new and developing metrics.

Weekly Health Metrics Monitoring

Since early June, the Helena Public Schools have worked to monitor the below metrics including data provided weekly by Lewis & Clark Public Health

	7/24	7/31	8/07	8/14	8/21	8/28	9/04	9/11	9/18	9/25	10/2	10/9	10/16	10/23	10/30
Positive county cases per day	3.8 (avg)	3.7 (avg)	4.5 (avg)	2.4 (avg)	2.4 (avg)	1.0 (avg)	0.7 (avg)	1.2 (avg)	1.1 (avg)	3.5 (avg)	11.8 (avg)	10.5 (avg)	18.7 (avg)	30.2 (avg)	39.5 (avg)
Positive county cases per day (per 100,000)	5.59	5.38	6.62	3.51	3.51	1.44	1.03	1.86	1.65	5.17	17.1	15.3	27.1	43.8	57.3
Positive county cases per week	27	26	32	17	17	7	5	9	8	25	83	74	131	212	277
Positive county cases per week (per 100,000)	39.1	37.6	46.3	24.6	24.6	10.1	7.2	13.0	11.6	36.2	120.2	107.2	189.8	307.2	401.4
Positivity rate for week*	1.3%	2.6%	1.7%	1.5%	1.6%	1.2%	0.9%	2.3%	3.6%	4.2%	7.5%	8.3%	19.0%	25.2%	TBD
Two-week trend in positive county cases	↑ (53)	↑ (53)	↑ (58)	↓ (49)	↓ (34)	↓ (24)	↓ (12)	↑ (14)	↑ (17)	↑ (23)	↑ (108)	↑ (157)	↑ (205)	↑ (343)	↑ (489)
Active county cases	93	53	53	55	44	40	14	10	17	41	124	152	276	483	743
Active county case ratio	1:746	1:1302	1:1302	1:1254	1:1568	1:1725	1:4928	1:6900	1:4058	1:1682	1:556	1:453	1:250	1:142	1:92
County Infection Rate	0.98	0.90	0.82	0.77	0.77	0.83	0.95	1.15	1.40	1.40	1.20	1.18	1.25	1.26	TBD

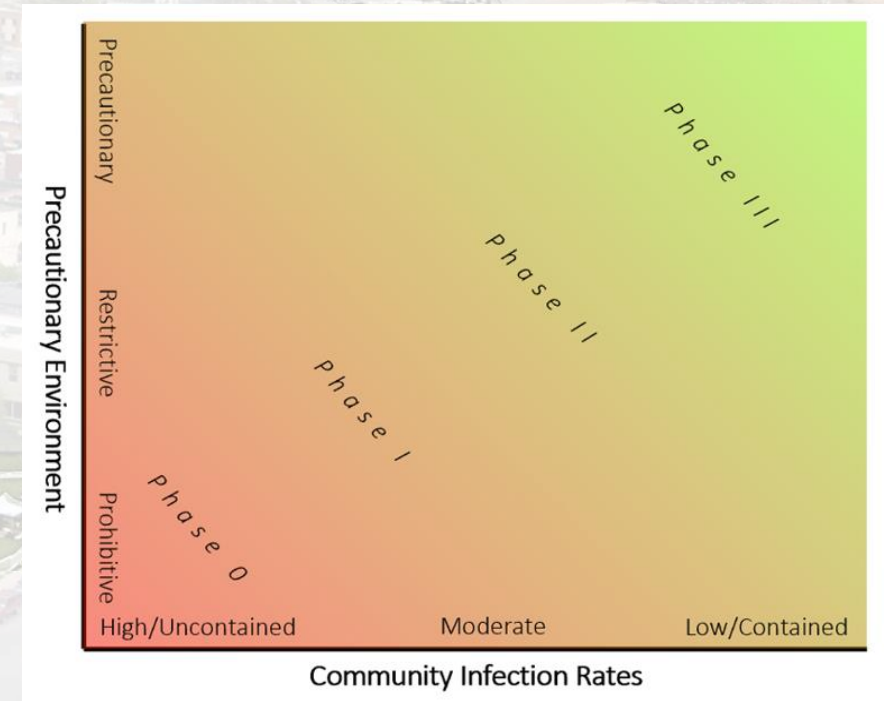
- Trending Negatively
- Trending Positively
- No Distinguishable Trend

Note: Data is derived from weekly data updated provided by [Lewis & Clark Public Health](#)
Data recorded Friday to Thursday, capturing positive cases from the day prior.

Seeking Relevant Data:

While valid data related to local health conditions has increased in both quality and quantity since March, we need to understand which of these data points are most relevant to making school-related decisions.

More specifically, how do we know when conditions are good, bad, and otherwise?



Seeking Relevant Data:

To better understand what metrics matter most in terms of making school specific decisions, we sought local, state, and national guidance.

Research and public reporting largely utilizes two commonly-cited indicators.



Cases Per Day/Week
(Per 100,000 Residents)



Positive Case Rates
(positive tests v. all tests)

Seeking Relevant Data:

Numerous national and state organizations weight health indicators to provide context as to when conditions are considered favorable or concerning.



	Tier IV	Tier III	Tier II	Tier I
Cases Per Day/Week (Per 100K residents)	≥ 25.0 ≥ 175.0	24.9 to 10.0 174.9 to 70.0	9.9 to 1.1 69.9 to 7.1	≤ 1.0 ≤ 7.0



	Tier IV	Tier III	Tier II	Tier I
Testing Positivity Rates (7-day average w/ 7-day lag)	$>10\%$	9.9% - 6%	5.9% - 2%	$<2\%$

Primary Indicators:



Per day/week, per 100,000 resident data is readily available and reported both daily and weekly by both the State (DPHHS) and locally through Lewis & Clark Public Health.

Phase (Risk Level)	Phase 0 (Prohibitive)	Phase I (Restrictive)	Phase II (Cautionary)	Phase III (Precautionary)
Per 100K (Daily) Per 100K (7 Day)	≥ 25.0 ≥ 175.0	24.9 to 6.0 174.9 to 42.0	5.9 to 0.70 41.9 to 5.0	≤ 0.69 ≤ 4.9

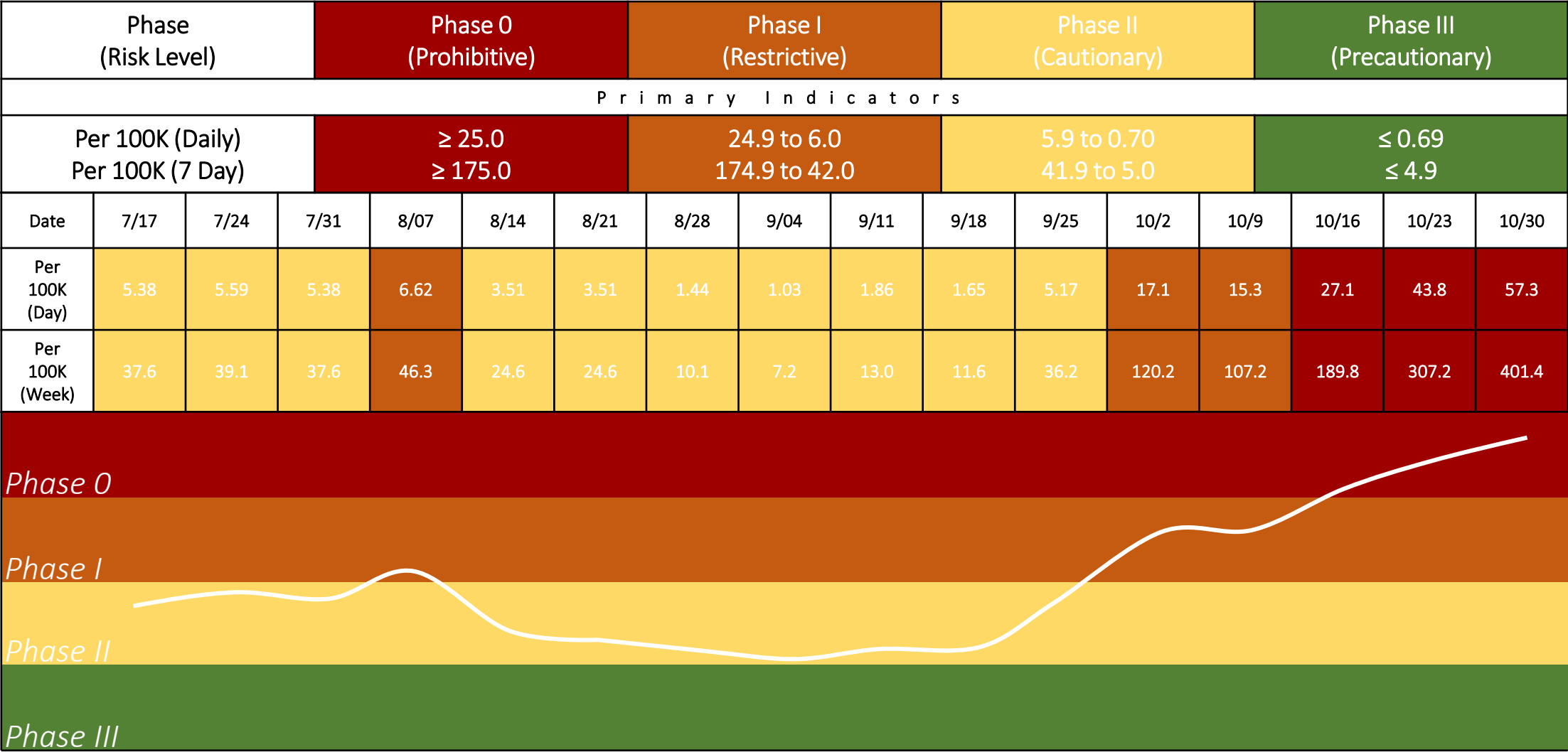
NOTE: Some numbers rounded for consistency and ease of use

The Helena Public Schools are currently utilizing thresholds that are similar to those recommended by the Harvard Global Health Institute ([link](#))⁽¹⁾.

 Currently, the threshold between Phase I and Phase II is being considered as six (6) cases per day (per 100,000) has been questioned as being overly restrictive.

(1) For additional information on plans studied/considered, please see the information and links in the appendix (A1)

When applied to actual, week-by-week data, phase-by-phase thresholds indicate relative stability prior to the rise in cases beginning in late September and early October.



Secondary Indicators:

Secondary measures add context to further inform needed phase-by-phase decisions.

Phase (Risk Level)	Phase 0 (Prohibitive)	Phase I (Restrictive)	Phase II (Cautionary)	Phase III (Precautionary)
S e c o n d a r y I n d i c a t o r s				
Active Case Ratio Thresholds	1:350 or less	1:351 to 1:2000	1:2001 to 1:4000	1:4001 or more
Positivity Rates (1) (7 Day)	≥ 10.0%	9.9% to 6%	5.9% to 2.0%	≤ 1.9
Local Hospital Capacity (2)	at/above 100% utilization	99% to 90% utilization	89% to 70% utilization	at/below 69% utilization
Reassessment Thresholds (3) Per 100K (7 Day)	NA	Phase 0 (+10)	Phase I (+10)	Phase II (10)
Active Case Trend (14 Day)	Is the general active case trend increasing or decreasing?			
School Associated Cases (7 Day)	How active are school-associated cases? Are school associated cases increasing or decreasing?			

Notes:

1. Data pertaining to Positivity Rates is available intermittently. As a result, we utilize this commonly cited metric as a secondary indicator instead of a primary indicator ([LCPH link](#))
2. Data related to Local Hospital Capacity is provided weekly as part of a statewide report ([DPHHS link](#))
3. When met, Reassessment Thresholds necessitate active (weekly) school phasing-down discussions with health officials

When similarly applied to week-by-week data, secondary indicators suggest an equally concerning situation in relation to the local health conditions of Lewis & Clark County

Phase (Risk Level)	Phase 0 (Prohibitive)	Phase I (Restrictive)	Phase II (Cautionary)	Phase III (Precautionary)
S e c o n d a r y I n d i c a t o r s				
Active Case Ratio Thresholds	1:350 or less	1:351 to 1:2000	1:2001 to 1:4000	1:4001 or more
Actual (10/30)	The active case ratio is currently 1:92			
Positivity Rates (7 Day)	≥ 10.0%	9.9% to 6%	5.9% to 2.0%	≤ 1.9
Actual (10/20)	The most recently reported positivity rate for Lewis & Clark County was most recently measured at 19.0%			
Local Hospital Capacity*	at/above 100% utilization	99% to 90% utilization	89% to 70% utilization	at/below 69% utilization
Actual (10/29)	St. Peters Health was most recently listed as being “at/above 90% utilization” as of the 10/29 DPHHS report			
Active Case Trend (14 Day)	Is the general active case trend increasing or decreasing?			
Actual (10/30)	With 743 active cases as of 10/30, Lewis & Clark County has nearly doubled our active cases for each of the last four consecutive weeks			
School Associated Cases (7 Day)	How active are school-associated cases? Are school associated cases increasing or decreasing?			
Actual (10/30)	School associated cases increased this week with 23 new cases reported since Friday, 10/23. This represents our largest single week increase to date.			

Qualitative Data:



Contextual Understanding

Qualitative Data:

Seeking the Advice of Professionals

As an educational system, we have limited built-in capacity to assess health indicators in relation to how our schools should be functioning.

school/district phases

Therefore, we are thankful for the insights and recommendations provided by our School Nurses (Registered Nurses) and our partners, Lewis & Clark Public Health and St. Peter's Health.



Qualitative Data:

As we consider local health conditions and positive, school-associated* cases, we seek the insights and advice of health professionals including, but not limited to, the below areas of inquiry.

- Do confirmed cases have school-related contacts?
- Should a classroom/school be closed temporarily for contact tracing?
- Are schools/work environments an active source for virus transmission?
- Given local health conditions, should schools phase-up or phase-down?
- What is the current state of testing, tracing and hospital capacity?
- How can school/district health and safety practices be continually modified and/or improved?

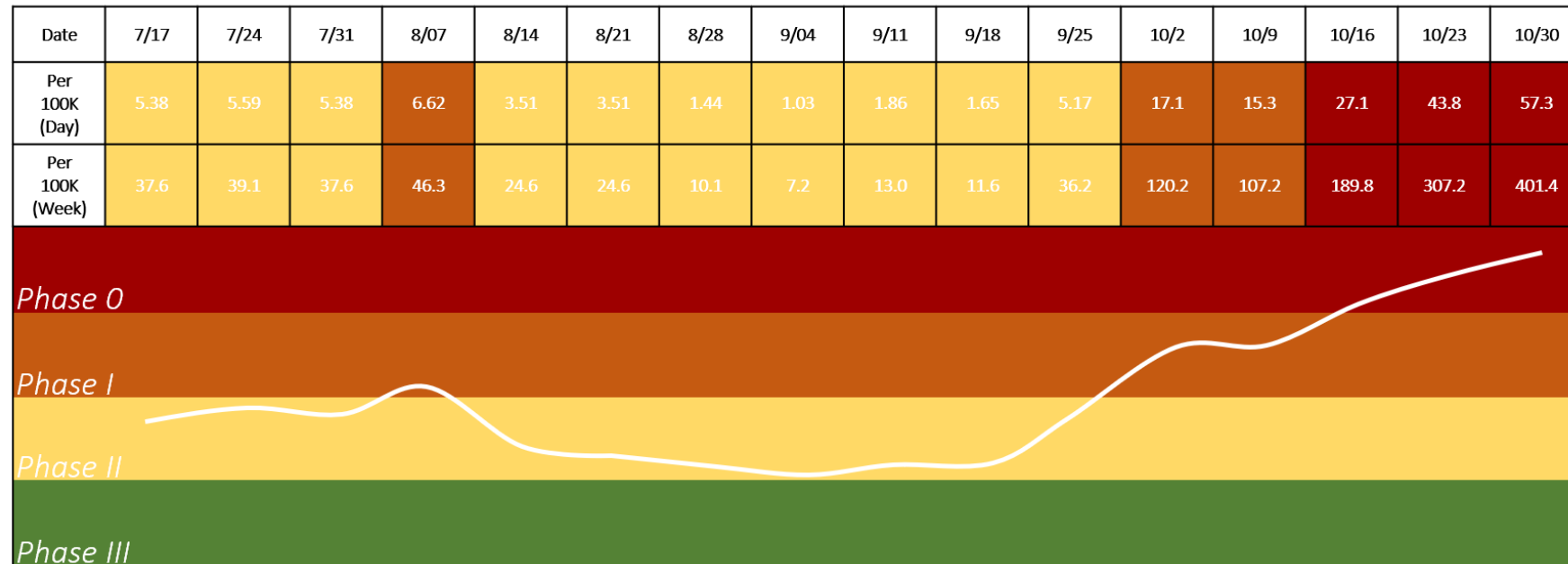
*A school-associated case is defined as a lab-confirmed, positive test for COVID-19 connected with a student and/or employee of the school district. A school-associated case does not denote whether virus transmission occurred within a school/work environment or within the community. School-associated cases are reported daily, Monday through Friday at

<https://helenaschools.org/covid-19-cases-in-our-schools/>

Qualitative Data:

Current Context

With our indicators “in the red” for the past three weeks, we continually assess our current school model (Phase I) to consider whether schools should be physically open.



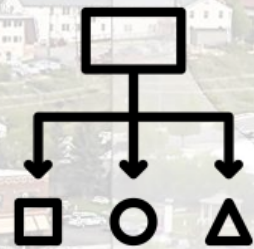
Qualitative Data:

Current Context

Feedback from our health partners continues to stress the below:

- Schools and work environments associated with the Helena Public Schools have not been determined to be an active source of virus transmission.
- Current health/safety practices including universal masking and physical distancing have proven, thus far, to reduce virus transmission within schools and minimize the number of school-related contacts requiring quarantine.
- Given the minimal association between COVID-19 transmission and the Helena Public Schools, health partners are unanimously recommending that our schools remain open at this time.

Methodology:



Making Decisions

Methodology:

As we consider school-related decisions within this ongoing pandemic, the Helena Public Schools commit to making balanced decisions that collectively considers quantitative data (data-informed decisions) and qualitative data (professional insight).



Qualitative Data

+



Quantitative Data

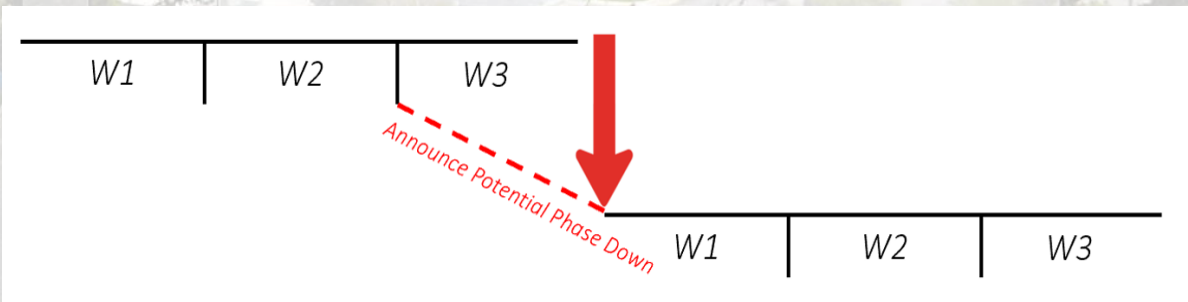
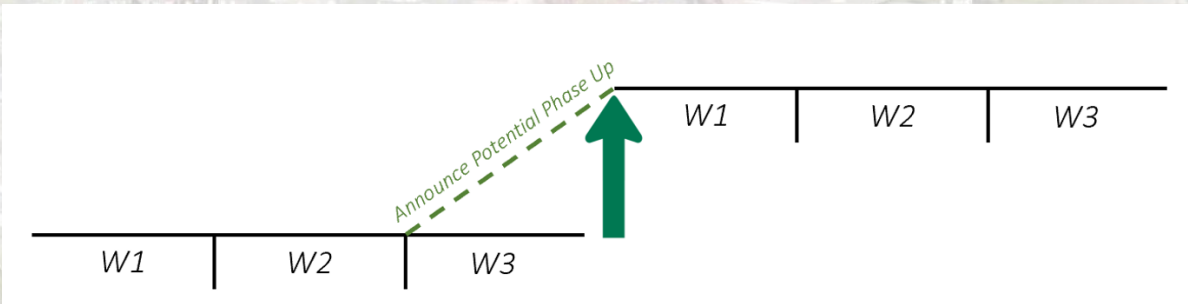
Methodology:

Assessing Trends

Analyzing and considering trends in local case data allows for our model to appropriately respond to periodic increases and subsequent declines in localized virus activity.

Multiweek models account for trends as opposed to knee-jerk reactions associated with sudden “spikes” temporary “drops.”

Trend analysis allows us with the opportunity to announce a potential phase change days or weeks in advance.



Methodology:

Board-Approved Decisions

Whenever possible, the Helena Public Schools Board of Trustees will review, consider and potentially approve district phasing decisions. However, intermittent school closures may occur without Board Action due to emergency situations involving available staffing, contact tracing, concerns related to in-school virus transmission, and/or other virus-related challenges.

Methodology:

Quantitative Data



Current Context: Data-Informed Decisions

Current health conditions indicate wide-spread virus transmission across Lewis & Clark County. Our primary indicators and several secondary indicators are currently within the Phase 0 thresholds. School-associated cases have been continually confirmed for six consecutive weeks.

Qualitative Data



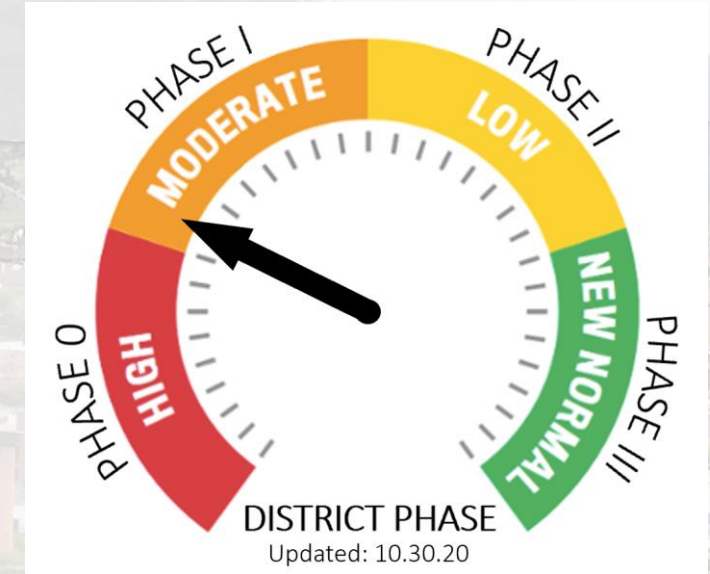
Current Context: Professional Insight

While concerned about the degree of virus transmission within our community, health partners cite that our Helena Public Schools are not a source of active virus transmission. They remain confident and encouraging of our health/safety practices including universal masking and physical distancing to the greatest extent possible.

Methodology:

Current Context

Currently, the Helena Public Schools remain in Phase I. However, staffing challenges and the continued increase of cases within Lewis & Clark County continue to hinder our efforts to keep our schools sustainably open, safe, and healthy.



In the coming weeks, the Helena Public Schools need the following to occur

- Sustained, week-by-week reductions in daily/weekly cases
- Reductions in employees impacted by 14-day quarantines
- Reductions in school-associated cases

Next Steps



Next Steps:

- Actively monitor both qualitative and quantitative data as we consider school-related decisions
- Consider needed updates, edits, additions, and deletions to current metrics model
- Post weekly metrics updates specific to current data and school phasing decisions



your

Helena

Public Schools

...a great place to learn

Appendix:

Several sources were considered in modeling our primary and secondary indicators and thresholds. These include recommendations from the [Harvard Global Health Institute](#) and the [Centers for Disease Control](#).

Other plans considered include state education/health plans from [North Dakota](#), [Minnesota](#), [Washington](#), [Idaho](#), [Arizona](#), [Oregon](#), [California](#), [Pennsylvania](#), and [Indiana](#).

Recommendations from the Council of the Great City Schools ([link](#)), AFT ([link](#)), NEA ([link](#)), and the National Academy of Sciences, Engineering, and Medicine ([link](#)) were also considered.