



Supplementary K-12 School Information – October 16, 2020

In addition to the data provided in the Weekly Surveillance Report, Gallatin City-County Health Department (GCCHD) will provide schools with the data necessary to measure where our community stands in regard to the CDC’s “Indicators for Dynamic School Decision Making.”

CDC Guidance for School Operations

In issuing its [“Indicators for Dynamic School Decision Making” document](#), the CDC stated that its guidance is intended as recommendations that are based on CDC’s current knowledge of COVID-19 in the United States. The CDC guidance is intended to assist local schools officials in making decisions rather than establishing regulatory requirements.

The document recommends three “core” indicators to help school officials decide whether to open, close, or re-open schools. These core indicators include two measures of community disease burden (number of new cases per 100,000 persons in the past 14 days; and percentage of RT-PCR tests that are positive during the last 14 days) and one self-assessed measure of school implementation of key mitigation strategies. GCCHD will attempt to provide the best local data available for the two community-level disease burden indicators identified by CDC.

These metrics are intended to provide local schools administrators and trustees the most current local data relevant to the CDC guidance. It is important to note that the CDC guidance also recommends these metrics be considered in conjunction with mitigation measures being taken in schools, staffing capacity, and case numbers among staff and students.

New cases per 100,000 persons in the past 14 days: This measure is similar to the daily cases per 100k tracked in our local surveillance report, with two important differences. First, this measure tracks cumulative cases reported over a two-week period. In Gallatin County, our best local data shows that we have 549 new cases per 100,000 persons during the 14 days that ended on 10/15/2020.

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



The risk category assigned to this number of cases is the second, and arguably more significant, difference from our local surveillance report. You will note that the CDC assigns a risk category tied to the “risk of transmission in schools”. The CDC seems to be saying that based on our local epidemiology it presumes a “highest risk” of disease transmission in schools.

It is important to note that the CDC’s risk criteria above differs somewhat from our local metrics. In reporting our rolling 7-day average, the health department risk criteria are related to our local ability to keep up with contact tracing. Currently, our staff is keeping up with isolation of new cases. However, the rising case numbers are concerning and have placed significant stress on our contact tracing system, particularly our ability to place close contacts of cases in quarantine in a timely manner. Ideally, we would like to see daily cases per 100k at or below 10 per day. When daily cases rise between 10-25 cases per day, we are still be able to handle contact investigations with some stress on the system. Once the 7-day rolling average rises above 25 cases per day we begin to worry about the capacity of our staffing and the diminished returns on contact tracing overall. The Health Department received 44 confirmed cases on Thursday, Oct. 15 and 175 cases over the past 72 hours that ended Oct. 15. Some of those cases have had many close contacts, which is making it difficult to reach close contacts who could be quarantined in order to prevent further infections. This may impact our ability to make direct contact (phone calls) to parents in a timely manner if their child is identified as a close contact to a known case. This may also place additional stress on schools staff working to manage cases and close contacts.

One way to interpret this combined guidance is that while locally we may have the capacity to respond to the current number of cases, CDC regards our current number of cases as a highest risk for disease transmission in schools. This is consistent with our local situation, where we have enough cases in the community to make it a reasonable assumption that we will have cases in schools. Cases in schools will lead to isolation of persons with the disease and quarantine of close contacts. The more students that are in a school, the more likely it is that we will have cases and the virus will spread.

Once we have cases with exposure in schools, we would expect to see greater numbers of students and staff that need to be in quarantine in schools that have greater numbers of students in classrooms. This trend will likely accelerate as we have cold weather and more students have symptoms and are tested for COVID-19. During the current school year, we have seen significantly fewer close contacts per case in two high schools using the blended learning model in which not all students are in school at once. This is at least partly due to density of students in classrooms or because the case patient was not in school while contagious.

Percentage of RT-PCR tests that are positive during the last 14 days: For this measure, there is less difference between the CDC thresholds and our local measures. In Gallatin County, our test positivity rate for two week period that ended 10/14/2020 was 8.1%. And like our local surveillance thresholds, the CDC data regards this as a higher risk category. It is worth noting that this metric has been rising, with a 7-day rolling average at 10.9% for the week-long period that ended October 14. Public health experts say a positivity rate above 10% may indicate a significant number of cases in the community that are not being detected.



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%

Secondary CDC indicators: The CDC also identifies a number of secondary indicators. These include the percent change in new cases per 100,000 population during the last 7 days compared with the previous 7 days. This is a measure designed to gauge the trajectory of our local epidemiology, whether our local case numbers are rising or falling. In Gallatin County, the most recent 7-day period (ending 10/15/2020) produced 42.1 cases per 100,000 residents. That was 16% higher than the prior 7-day period. Under the CDC guidance, that puts Gallatin County in the “highest risk of transmission” risk category.

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
SECONDARY INDICATORS					
Percent change in new cases per 100,000 population during the last 7 days compared with the previous 7 days (negative values indicate improving trends)	<-10%	-10% to <-5%	-5% to <0%	0% to ≤ 10%	>10%

The CDC guidance also refers to the presence of localized community/public setting outbreaks, characterized as a sudden increase in the number of COVID-19 cases in a localized community or geographic area as determined by the local and state health department. Locally, we have experienced rapidly rising case numbers in the past 10 days, recording a total of 487 cases as of 10/15/2020. We continue to see ongoing clusters of cases impacting organizations throughout Gallatin County, including in assisted living facilities, day care settings, the university, and now K-12 schools. It would be reasonable, and perhaps advisable, for all schools officials to expect and plan for similar events and increasing cases in those settings.

Finally, the CDC guidance also refers to a number of measures of local capacity within hospital and intensive care units. While we agree that hospital capacity is an extremely important metric to track, it is worth noting that our community has only one major hospital (Bozeman Health Deaconess Hospital) and that assessing hospital capacity is more complex than the



number of beds occupied. We are in frequent and regular contact with Bozeman Health and we review their census figures regularly. Day to day, Deaconess Hospital's intensive and critical care and overall census may exceed 80% to 90% of capacity. As of October 9, Gallatin County has nine hospitalizations related to COVID-19 and the overall hospital census includes 65% occupancy of critical care beds and 58% of non-critical care beds (Bozeman Health Deaconess Hospital and Big Sky Medical Center). This can change quickly, though, in a community with one twenty-bed critical care unit and it is important to note that bed occupancy and capacity changes daily based on admits and discharges. For now, Bozeman Health believes it has adequate capacity to handle additional COVID-19 inpatient cases. The two figures below describe the percentage of occupied and open critical care and non-critical care beds at Bozeman Health Deaconess Hospital and Big Sky Medical Center as of 10/15/2020. It is important to note that current hospitalizations due to COVID-19 are as high as ever and ongoing outbreaks within long term care facilities in Gallatin County could change these metrics quickly and dramatically.

