

Gallatin County Weekly COVID-19 Surveillance Report – December 18, 2020

As a supplement to the data provided on the [COVID-19 Dashboard](#), Gallatin City-County Health Department (GCCHD) will release this weekly surveillance report each Friday. The report includes additional epidemiologic data useful for understanding the current COVID-19 pandemic in Gallatin County, Montana.

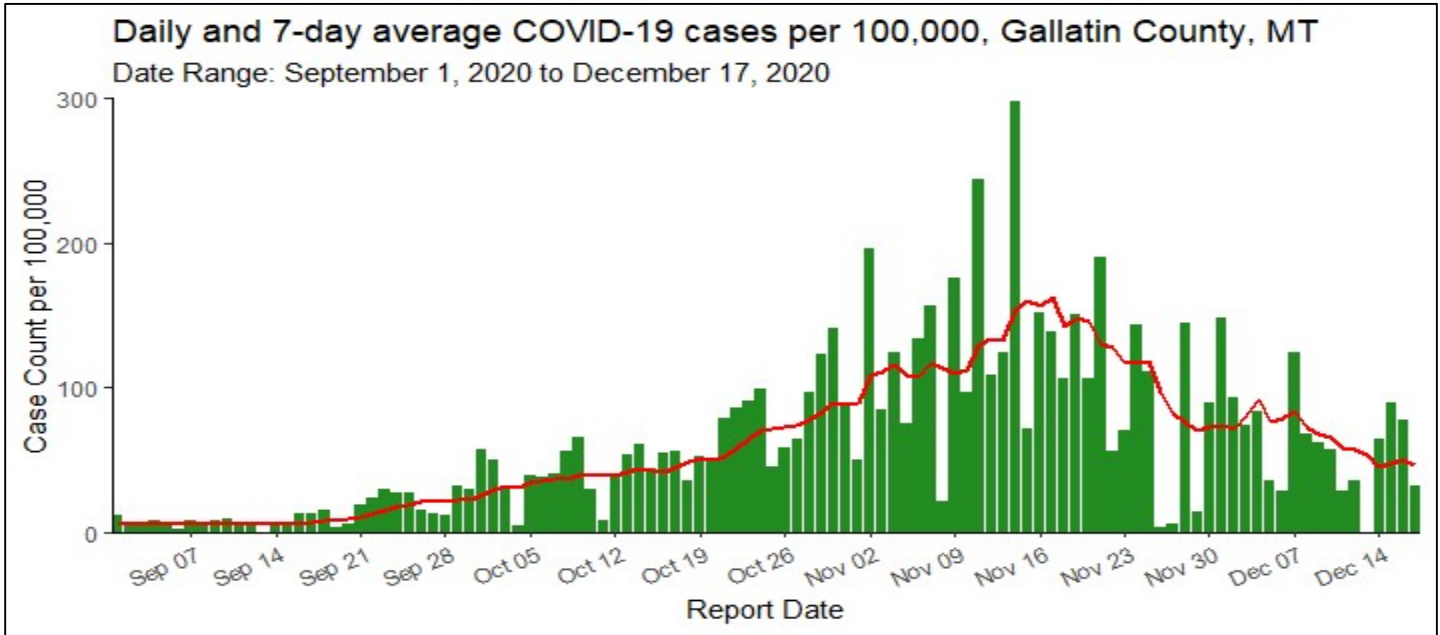


Figure 1. Describes the number of daily cases and 7-day rolling average of cases per 100,000 residents in Gallatin County. Green bars indicate daily case reports per 100,000 residents and the red line represents the 7-day rolling average of cases per 100,000 residents from 9/1/2020 to 12/17/2020. The 7-day rolling average of daily cases per 100,000 residents was 46.6 cases per 100,000 on 12/17/2020, a 29% decrease from 65.4 cases per 100,000 on 12/10/2020.

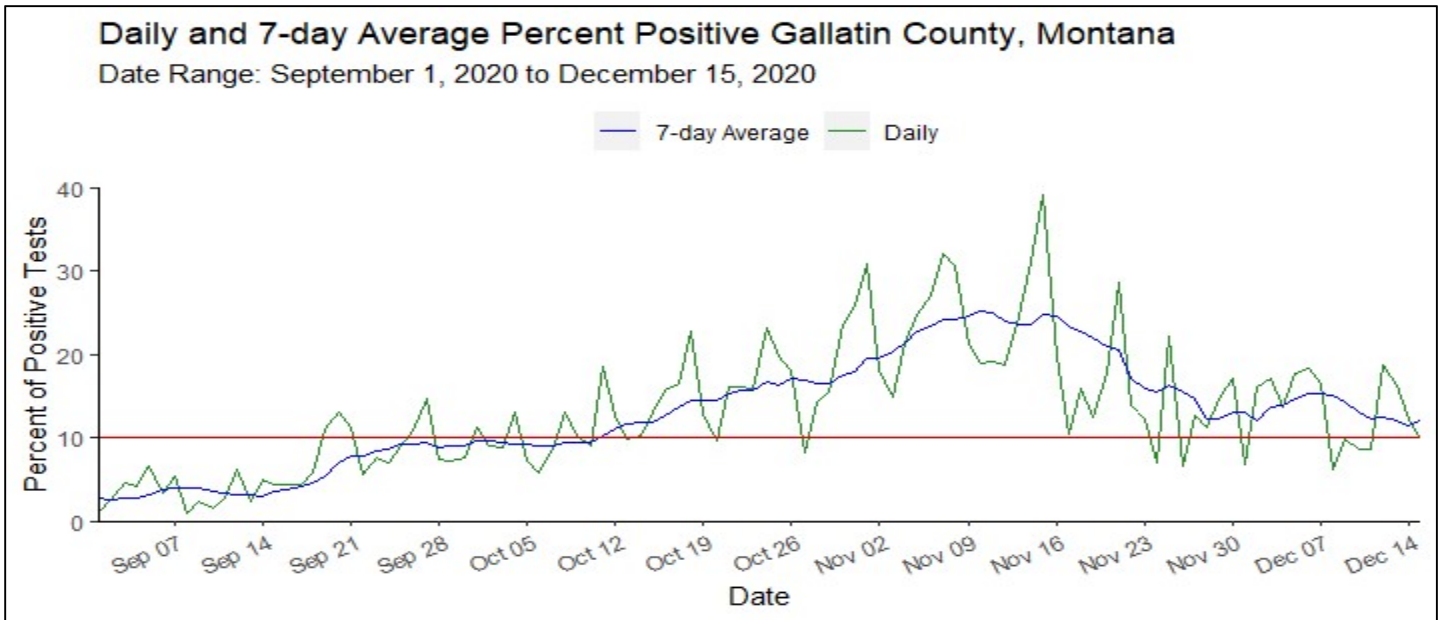


Figure 2. Describes the percent of positive tests by day and a 7-day rolling average of the percent of positive tests. The World Health Organization recommends a test positivity rate below 5% as a criteria for re-opening businesses. Public health experts say a positivity rate above 10% (red line) may mean more testing is necessary in order to avoid missing a significant number of cases in the community. The 7-day rolling average of percent positive was 12.1% on 12/15/2020, a 20% decrease from 15.1% reported on 12/8/2020.

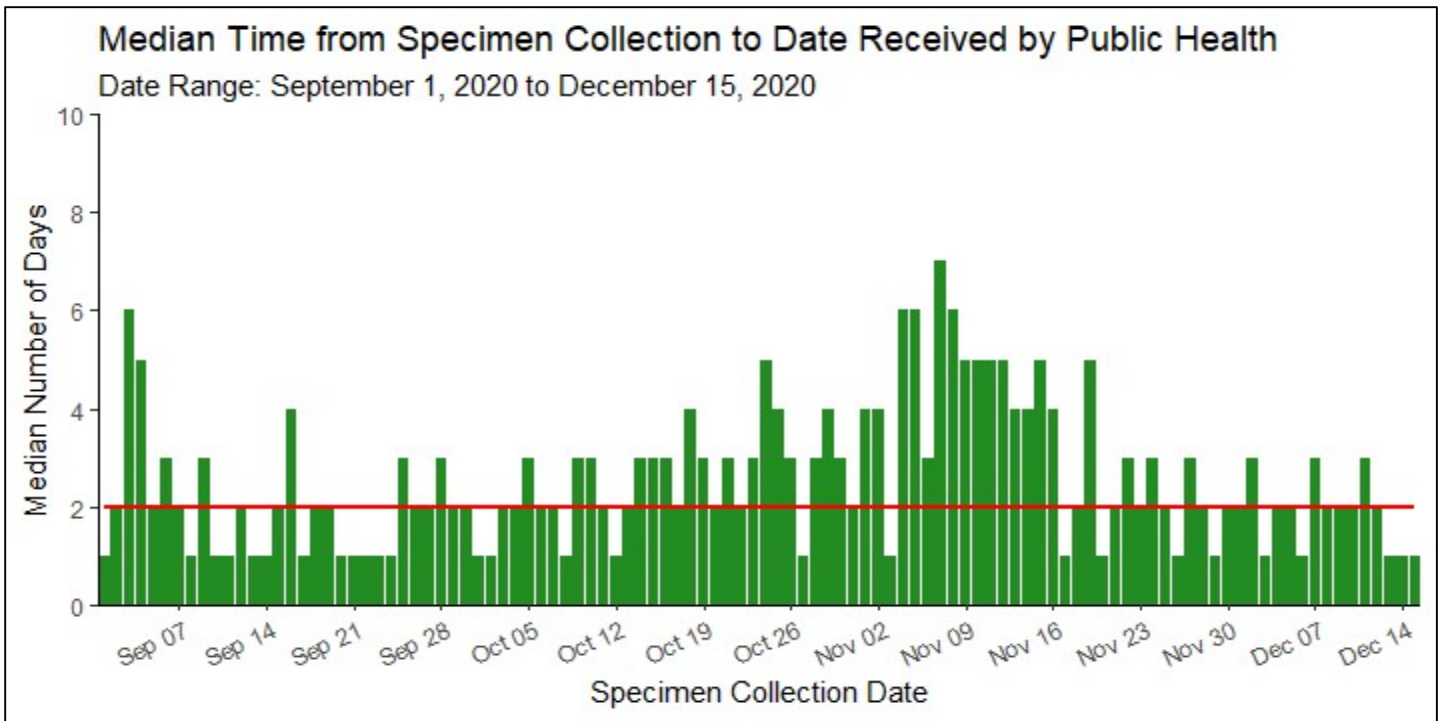


Figure 3. Describes the median number of days it takes a specimen collected until the result of the laboratory test is sent to GCCHD. The red line in the figure above denotes 2 days. These data only include laboratory tests transmitted electronically via the Montana Infectious Disease Information System (MIDIS). Ideally, local health departments receive test results within 24-48 hours of specimen collection. Consistent delays greater than that make it more difficult to slow spread of the disease through isolation and quarantine. For cases reported during the period 11/24/2020 to 12/15/2020 the median time from specimen collection to report to public health was 2 days.

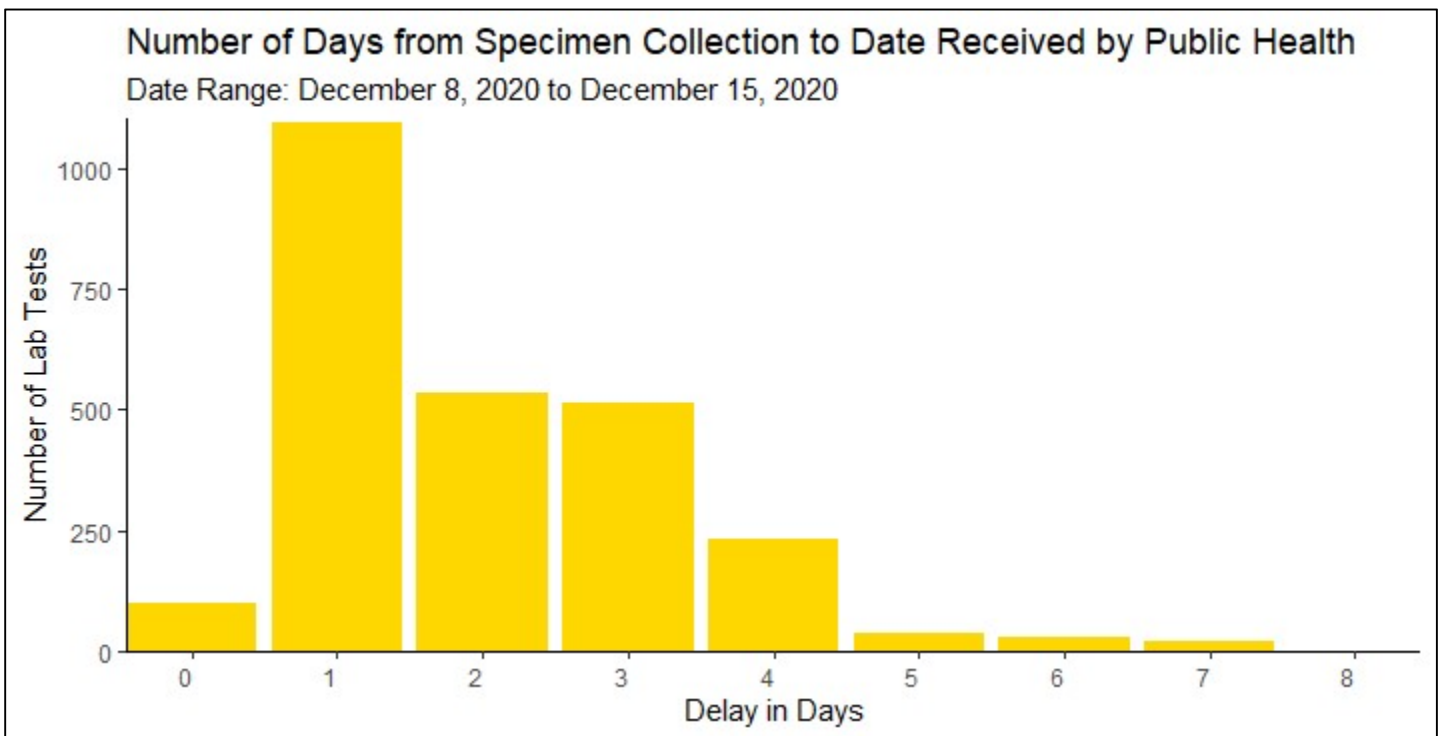


Figure 4. Describes the number of days it takes public health to receive the results of laboratory tests for COVID-19 from December 8, 2020 to December 15, 2020. These data only include laboratory tests transmitted electronically via the Montana Infectious Disease Information System (MIDIS). The median number of days between specimen collection and report to public health during this period was 2 days.

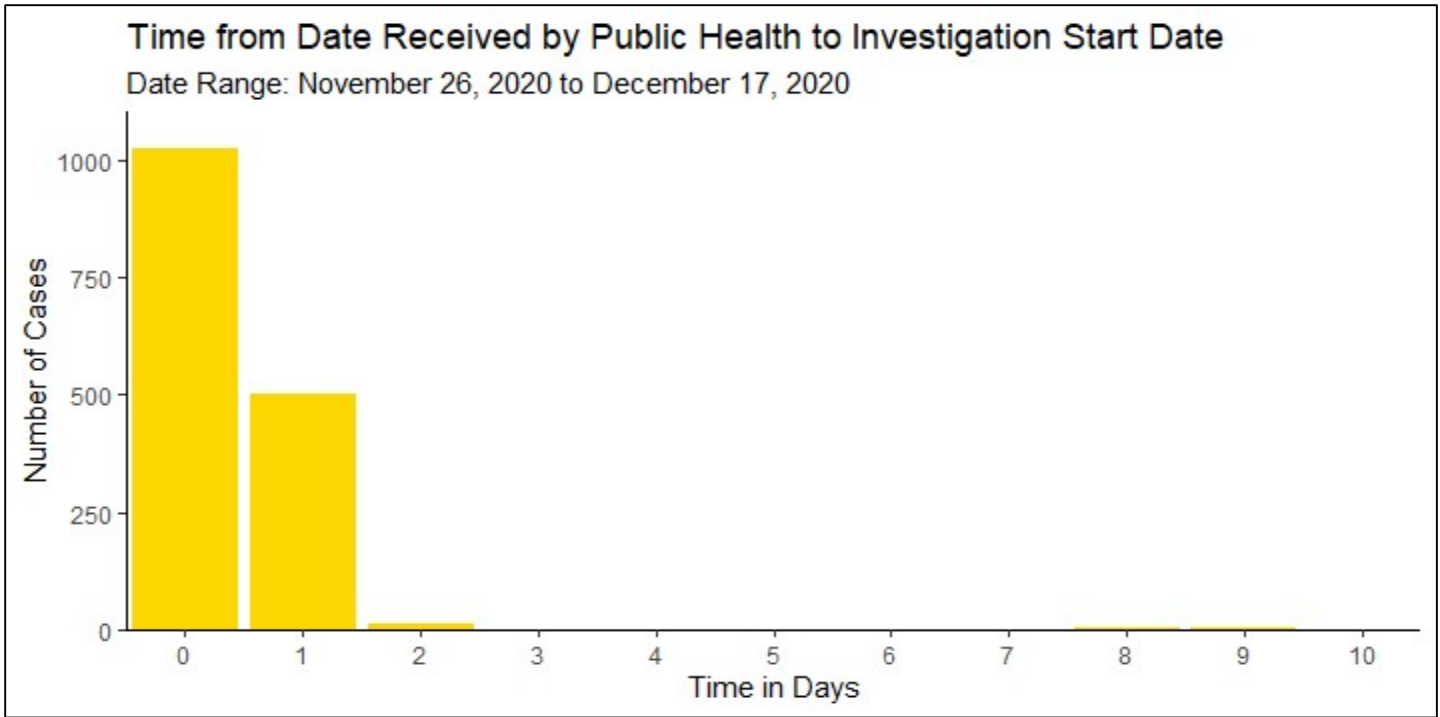


Figure 5. Describes the number of days from the time GCCHD is notified of a positive COVID-19 case and an investigation is started. Most COVID-19 case investigations (n=1024) during the time frame referenced above were initiated in less than 24 hours after notification is received, as evidenced by the first gold bar in the figure above. Delays longer than 24 hours may be an indication that case numbers are outstripping contact tracing capacity. The median time from date received to investigation start date for the week ending 12/18/2020 was less than 1 day, unchanged from the previous week. For cases reported during the period 11/26/2020 to 12/17/2020, the median time from report to public health to start of investigation was less than 1 day.

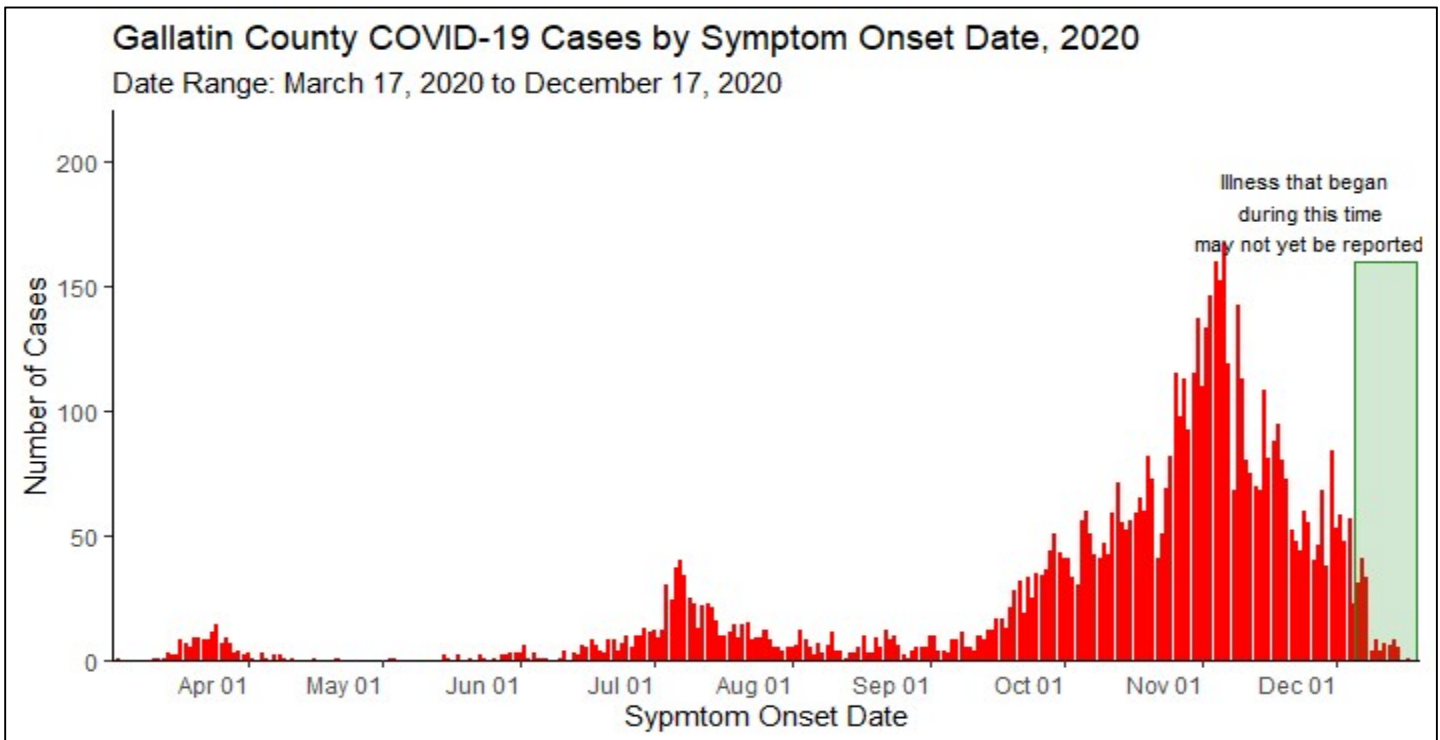


Figure 6. Epidemic curve of cases residing or recovering in Gallatin County at the time of COVID-19 diagnosis displayed by date of symptom onset. Data only includes cases (n=6607 with onset date information reported to GCCHD between 3/17/2020 to 12/17/2020. Onset date data may be unavailable because the COVID-19 case was asymptomatic, unable to determine when symptoms started, onset date is not yet reported or the case was not responsive to public health outreach.

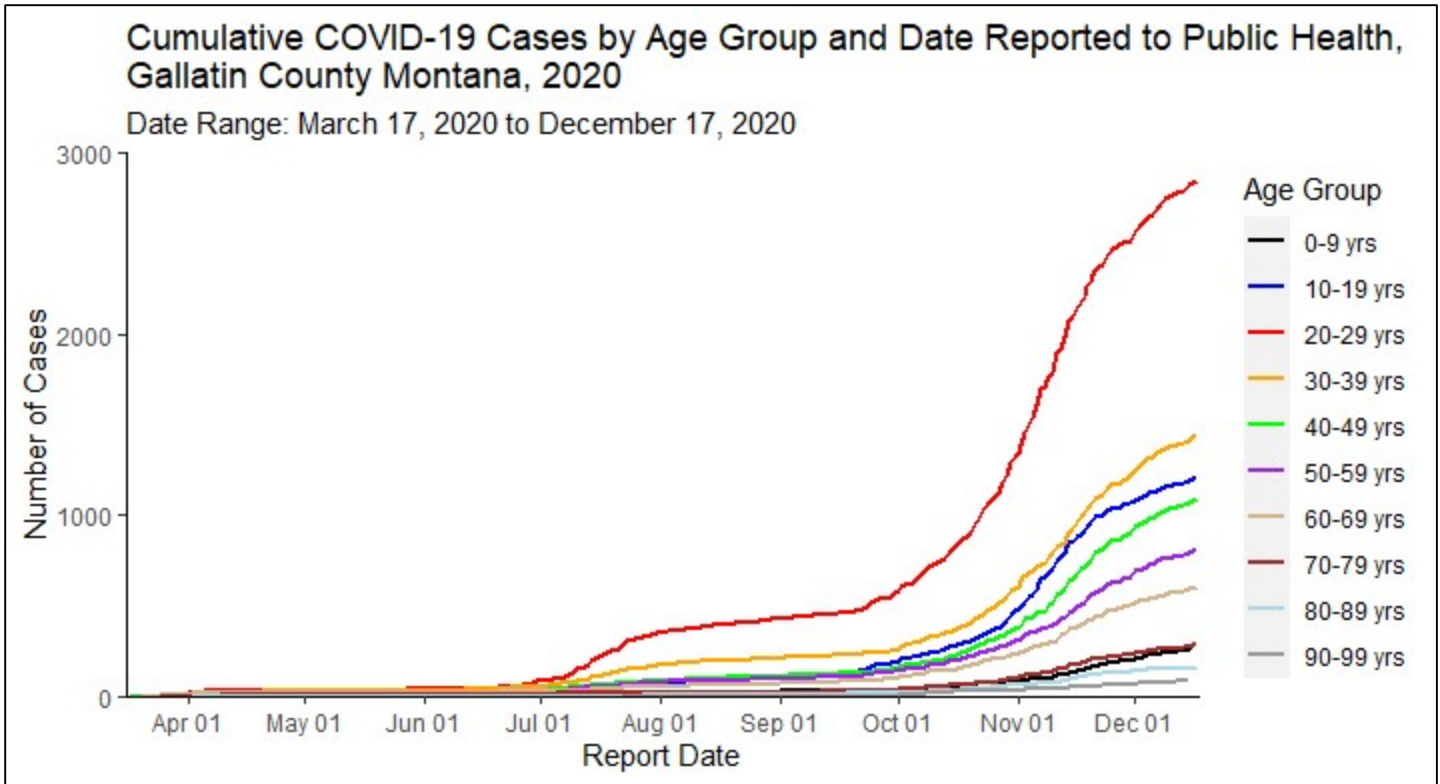


Figure 7. Describes the cumulative increase of COVID-19 cases over time among each ten-year age group from 3/17/2020 to 12/17/2020. Most recently, rapid increases in the 20-29 year age group have outpaced the other age groups. However, each age group has seen increases in case counts over the past few weeks.

Table 1. Describes new, active and cumulative COVID-19 cases among persons associated with Montana State University, Bozeman, Montana.

Reporting Period End Date	New Cases During Reporting Period	Cumulative Cases Reported Since August 1, 2020	% Change in Cumulative Cases from Previous Week	**Total Recovered Cases Since August 1, 2020	*Number of Active* cases on Last Day of Reporting Period	% Change in Active Cases from Previous Week
9/3/2020		38		32	6	
9/10/2020	3	41	+ 8%	38	3	-50%
9/17/2020	7	48	+ 17%	41	7	+ 133%
9/24/2020	66	114	+ 138%	62	52	+ 643%
10/2/2020	43	157	+ 38%	115	42	- 19%
10/8/2020	60	217	+ 38%	183	34	- 19%
10/15/2020	65	282	+ 30%	227	55	+ 62%
10/22/2020	99	381	+ 35%	310	71	+ 29%
10/29/2020	132	513	+ 35%	409	104	+ 46%
11/5/2020	212	725	+ 41%	597	128	+ 23%
11/12/2020	265	990	+ 37%	827	163	+ 27%
11/19/2020	203	1193	+ 21%	1034	159	- 2%
11/25/2020	105	1298	+ 9%	1206	92	- 44%
12/3/2020	39	1337	+ 3%	1309	28	-70%
12/10/2020	42	1376	+ 3%	1344	32	+14%
12/17/2020	24	1400	+2%	1377	23	-28%

* An "active" case means a person is diagnosed with COVID-19 and is in isolation while they may be contagious.
 ** A "recovered" case means a person tested positive for COVID-19 and is out of isolation because they are no longer considered contagious. It is important to understand that although a person is no longer in isolation, they may continue to feel the effects of COVID-19 infection after being released from isolation.

Table 2. Describes the number of active COVID-19 cases at K-12 schools, both public and private, in Gallatin County, Montana. Data are current as of 12/17/2020. Cumulative counts of COVID-19 cases in schools can be found on the Montana Department of Public Health and Human Services website [here](#).

School Name	Active Cases
Amsterdam Elementary	1
Anderson School	1
Belgrade High School	3
Belgrade Middle School	2
Belgrade Middle School OL	1
Bozeman High School	7
Bozeman High School OL	1
Chief Joseph Middle School	1
Gallatin Gateway School	3
Gallatin High School	3
Heritage Christian School	1
Hyalite Elementary	1
Lone Peak High School	1
Manhattan 5-8	1
Manhattan Elementary	1
Manhattan High School	5
Monforton 6-8	2
Morning Star School	1
Petra Academy	1
Ridge View Elementary	1
Sacajawea Middle School	3
Saddle Peak Elementary	1
Whittier School	2

*Cases counts include students and staff

Figure 8. Describes critical care bed occupancy at Bozeman Health Deaconess Hospital and Big Sky Medical Center as of 12/18/2020.

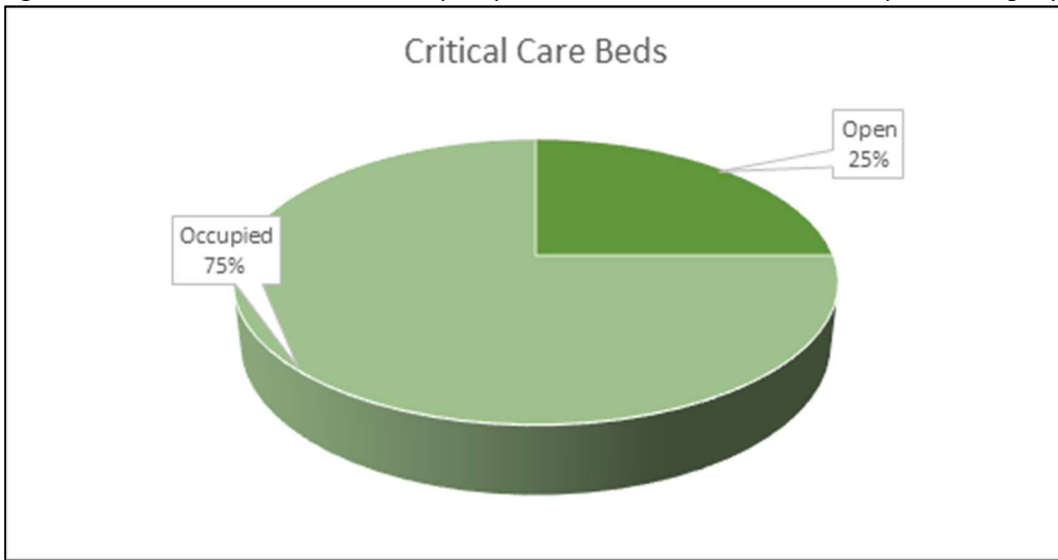
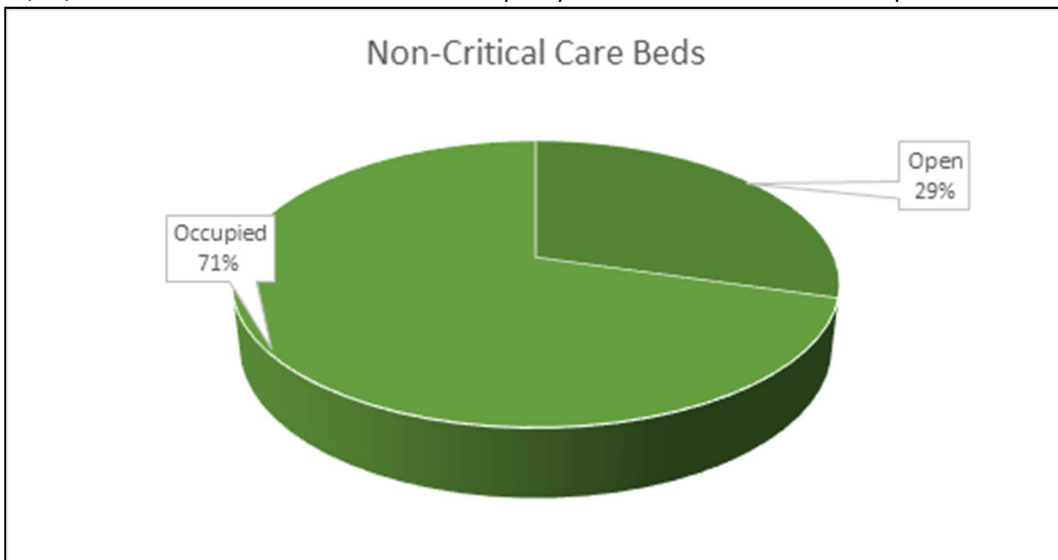


Figure 9. Describes non-critical care bed occupancy at Bozeman Health Deaconess Hospital and Big Sky Medical Center as of 12/18/2020. This level of non-critical bed occupancy is not uncommon and similar patient loads are managed on a regular basis.



Please note the data contained in the report above are subject to change as more information regarding cases and lab tests become available through contact tracing or information sharing. GCCHD reserves the right to edit the format and content of the weekly surveillance report.