Summit County COVID-19 Dashboard

Current Transmission Level: High

Learn more about the statewide COVID-19 Transmission Index here

The Transmission level is a score given to each county in Utah based on 3 measures (7 day the average percent positive tests over the past 7 days; the rate of COVID cases per 100,000 population over the past 14 days; and the percent of statewide hospital Intensive Care Unit utilization). Each transmission level has corresponding health precautions. To learn more about this statewide designation, click on the link.

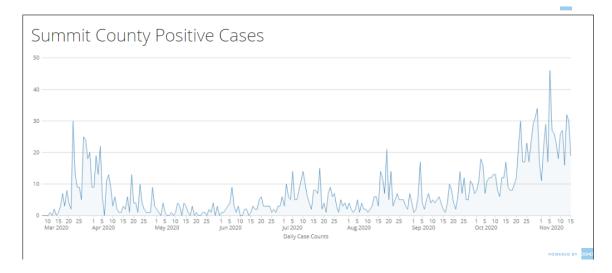
Total Cases	Total Hospitalizations	Total Deaths	14-Day Case Total
2,290	89	5	334

From Left to right:

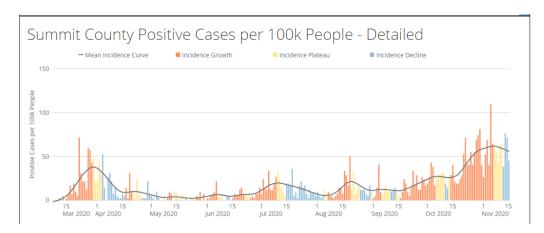
-Total Summit County COVID cases. This includes laboratory positive confirmed cases or probable cases*. This method of case counting is consistent with how positive cases are counted in Utah and with the CDC.

This can go at the bottom of each page or with each data note

- *Confirmed: A patient with a laboratory confirmed COVID-19 diagnosis. Probable: A patient without a laboratory confirmed COVID-19 diagnosis that has signs and symptoms compatible with COVID-19 and meets CSTE Probable definition.
- -Total hospitalizations due to COVID in Summit County residents, regardless of where the hospital is located.
- -Total deaths due to COVID in Summit County residents. Even if the person dies in another county, they are counted in the county of their primary residence.
- -The total number of cases in the past 14 days in Summit County. Unlike the other 3 numbers shared here, this is a rolling snap shot of current cases that are new within the past 2 weeks. While there may be slight delays with reporting, this can be used as a measure of the current burden of infectious persons since most people with symptoms will no longer be contagious by 10 days after symptom onset and resolution of fever for at least 24 hours, without the use of fever-reducing medications. For more information see https://www.cdc.gov/coronavirus/2019-ncov/hcp/duration-isolation.html



- -Total Summit County COVID cases. This includes laboratory positive confirmed cases or probable cases*.
- -Hover over the line to see the date and the case count for that date



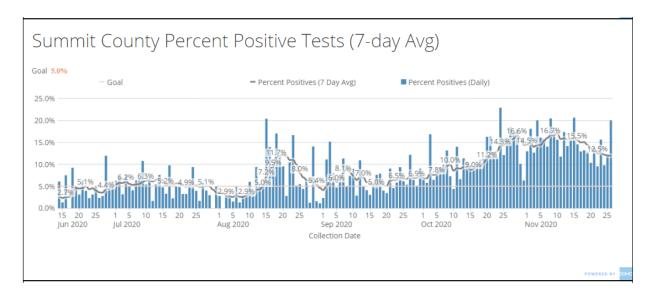
-Summit County Positive Cases per 100k people detailed with a line for mean incidence curve and the trend over time of the confirmed and probable* case rate. These are coded to show if the incidence rate is in a phase of growth, plateau or decline based on algorithms consistent with the state of Utah. This algorithm looks at how the trend in cases is changing over time and assigns a trend category to each day. This categorization is based on whether the three-day daily average of cases is increasing, staying stable, or decreasing. It is calculated by using the daily case incidence rate per 100,000people (represented by the bars), finding the three-day moving average of daily incidence rates (points on the grey line), fitting a smoothed curve to these incidence rates (the actual grey line), and looking at the slope of the curve of that grey line. Then the corresponding colors are assigned to the bars. If the slope of the curve is above 0, incidence is increasing and it will appear in orange. If the slope is about zero, incidence is at a plateau and will appear in yellow. If the slope is decreasing after at least five days of plateau, incidence is decreasing and will appear in blue.

Note: Recent increases or decreases in testing can lead to retrospective changes in daily incidence. Epidemic curve status can fluctuate from day to day so trends need to be interpreted cautiously and in conjunction with other

-Hover over the smoothing line to view the case count for the day, and the mean incidence

surveillance data.

-Hover over the colored bars to view others in the same phase (for example to highlight all the incidence growth phases) as well as the case count for the day, and the mean incidence,



The gray line shows the average percent of positive tests done over the past 7-days in Summit County. The individual daily percent of positive test are shown in the blue bars. The tests are de-duplicated so test from an individual are counted only once even if they are tested multiple times. For example if 100 people were tested and 16 of them were positive it would be a percent positivity of 16% for that day.

The goal for our percent positivity is to be get below 5%, as indicated in red in the upper left corner.

Why does percent positivity matter? It is an indicator of the breadth of the testing in our community. If not enough tests are being done we see a high percent positivity. This is because the positive tests we see in the numerator (top of the fraction that makes up the percent) account for only the most severe patients who were tested and the denominator (bottom of the fraction) that represents the total tests done, is small. So drawing on the example above, if 1000 people were tested and 16 people were positive that would be a 1.6% positivity. More likely if we have 1000 tests being done we will find asymptomatic cases which may have been missed if only 100 tests were performed. The bottom line is increasing testing helps us identify and stop the transmission from asymptomatic positive cases.

Hover over a bar to see the values and date. For example:

Percent positive (daily): 15.4% Daily tests (7 day avg): 152.1

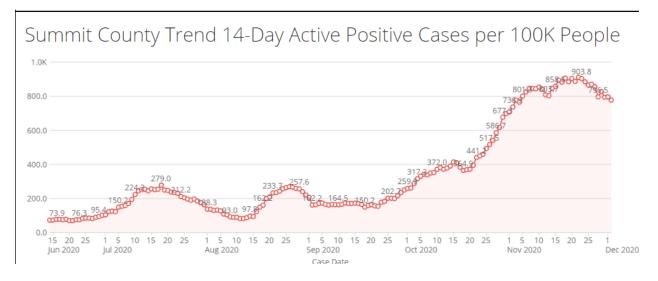
2020-11-10

And hover over the line to see value that created the 7 day average for example:

Percent Positives (7 Day Avg): 16.9%

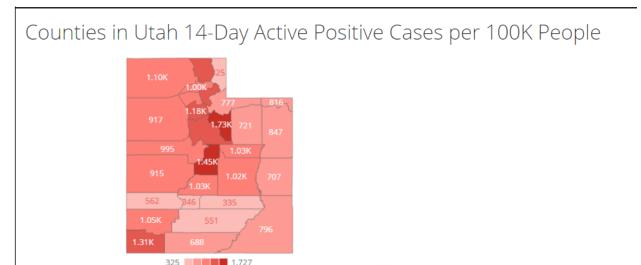
Daily Tests (7 day avg): 152.1

2020-11-10



Summit County Trend 14-Day Active Positive cases per 100K people.

The two-week cumulative incidence rate summarizes new cases reported in the past 14 days per 100,000 people. It looks at the recent burden of cases in an area given its population. Areas with elevated incidence rates will have a higher burden of ill people who may be infectious and/or currently accessing healthcare. Hover over the circle to see the rate for the day



The counties in Utah Trend 14-Day Active Positive cases per 100,000 people.

The two-week cumulative incidence rate summarizes new cases reported in the past 14 days per 100,000 people. It looks at the recent burden of cases in an area given its population. Areas with elevated incidence rates will have a higher burden of ill people who may be in the infectious period of the illness and/or currently accessing healthcare.

NOTE the two small areas will not add up to the total for the county frequently due to delays in determining the zip code of the case.

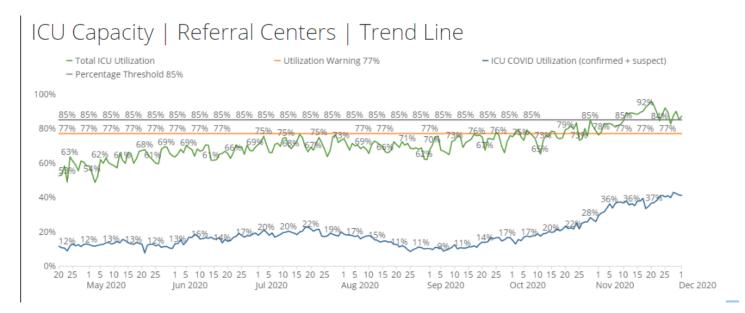
East and West Summit County 14-Day Active Positive Cases per 100K People



East and West Summit County 14-Day Active Positive Cases per 100K

East and West are the small are designations for Summit County. The East part of the county includes Park City and Snyderville Basin, the West includes the rest of Summit County. The two-week cumulative incidence rate summarizes new cases reported in the past 14 days per 100,000 people. It looks at the recent burden of cases in an area given its population. Areas with elevated incidence rates will have a higher burden of ill people who may be in the infectious period of the illness and/or currently accessing healthcare.

NOTE the two small areas will not add up to the total for the county due to timing issues in determining the zip code of the case.



-State level ICU Utilization Percentage in referral centers.

Referral Centers are the 16 hospitals in Utah with the capability to provide the best care for patients with COVID-19. Because most patients are transferred to these facilities, their utilization is the best reflection of the true hospital capacity in Utah when looking at ICU beds

Note about ICU Utilization: The UDOH receives reports about the total number of available ICU beds in the state. However, this reporting does not reflect the number of staffed beds able to care for patients. At about 69% overall ICU

utilization, ICUs in Utah's major hospitals with the ability to provide best care for COVID-19 patients begin to reach staffing capacity.

Seventy-two percent use among all hospitals and 77% in Referral Center hospitals creates major strains on the healthcare system. This is represented on the graph with the yellow dashed Utilization Warning line at 77%. When 85% capacity is reached, Utah will be functionally out of staffed ICU beds, indicating an overwhelmed hospital system. This is represented by the red dashed Utilization Threshold line at 85%.

ICU COVID (confirmed) + ICU COVID (suspect) = ICU COVID Occupied beds are depicted by the blue solid line in the ICU utilization graph

Total percent ICU utilization (COVID + non-COVID) = ICU COVID Occupied beds are depicted by the green solid line in the ICU utilization graph

Note: Both confirmed and suspect* patients were identified as part of the COVID utilization numbers since suspect COVID patients require the same resources and treatment as confirmed COVID cases, and therefore from a hospital perspective the impact is represented by combining both confirmed & suspect patients. In addition, we wanted to ensure the counts were not dependent on testing process and times and can represent those patients that are "in process" of being confirmed. Lastly, the UHRMS dataset does not retroactively update once a case becomes confirmed, so this was deemed the best way to capture those that are likely going to be confirmed via the definition above.

State-Level Hospitalization Rate



Proxy transmission level is shown on the dark blue line

Hover over the bars to see the counts of hospitalized cases for the state of Utah each day

The State Level Hospitalized Rate is approximated by the change of representative active cases over one reproductive cycle of the virus. The following is a breakdown of this statement:

- Reproductive Cycle: One cycle is currently defined as 14-days since this is the current guidance for the duration necessary to ensure an infection is no longer incubating or active.
- Representative Active Cases: An active case is represented using hospital admissions of cases. Hospitalizations are less dependent on testing than case counts. Admission dates are obtained through public health investigations. Note that not all new hospitalization dates are reported if a case had previously been investigated by public health.
- Change: Ratio between the current value and the value at the beginning of the 14-day cycle.

The values can be interpreted in the following way:

- A value above 1.0 indicates that the virus is still growing.
- A value below 1.0 indicates that the virus is decreasing.

GENERAL DATA NOTES:

14-Day Incidence Rate: As of September 21, 2020, the crude rate map by jurisdiction was replaced with a map showing 14-Day Incidence by county. The two-week cumulative incidence rate summarizes new cases reported in the past 14 days per 100,000 people. It looks at the recent burden of cases in an area given its population. Areas with elevated incidence rates will have a higher burden of ill people who may be infectious and/or currently accessing healthcare.

* The number of recovered persons is estimated by the number of cases whose first positive laboratory test was reported at least 21 days ago, excluding deaths.

Laboratory: The Utah Department of Health (UDOH) is currently reporting PCR and antigen test results and will begin reporting serology results in the coming weeks. Positive test results are reported immediately; negative test results may not be reported for 24-72 hours. Results prior to March 19, 2020 may be under-reported. Laboratory positives may not match confirmed cases due to ongoing investigations and confirmatory testing. When available, laboratory data is shown by the date a sample was tested. If unavailable, it is shown by the date reported to public health. Laboratory data are shown as both the total number of people tested, and as total number of tests performed. For the total number of people tested, one test per person is included by their earliest positive result. If there are no positive tests, their earliest negative result is used.

Case Dates: As of April 15, 2020, case data are displayed by both the date the first positive laboratory result (FPLR) is reported to public health and the self-reported symptom onset date. Previously, this was reported by the first day a person was reported (through laboratory results or contact tracing) to public health. The FPLR date will provide a more stable estimate of the new cases reported to public health; however, there will be small differences in cases by date as public health receives additional information. Onset date is taken preferentially from the following dates when available:

1) self-reported date of first symptoms, 2) date diagnosed by a clinician, 3) date first positive specimen was collected, 4) first report to public health. The actual number of cases in Utah is higher than what is reported due to mild cases not feeling ill enough to seek care, clinician judgment for testing, and expanding laboratory capacity. For more information on how COVID-19 deaths are registered in the state of Utah, visit coronavirus.utah.gov/COVID-19-deaths.

Death Counts: Deaths reported by UDOH include confirmed and probable cases as defined by the Council of State and Territorial Epidemiologists (CSTE) case definition. This includes: 1) confirmed cases with a positive COVID-19 PCR result and no alternative cause of death noted on the death certificate or reported by the Office of the Medical Examiner (OME), 2) probable cases where the death certificate lists COVID-19 disease or SARS-CoV-2 as a cause of death or a significant condition contributing to death and no alternative cause of death reported by the OME, and 3) probable cases with COVID-19 symptoms and close contact to a laboratory confirmed case and no alternative cause of death reported by the OME or the death certificate. Death counts are provisional and subject to change as investigations are completed.

Test Types

<u>PCR Tests</u>: COVID-19 PCR tests detect viral genetic material and are used to diagnose active infections.

<u>Antigen Tests</u>: COVID-19 antigen tests are rapid diagnostic tests that detect specific fragments of the virus. Like PCR tests, they are very specific to the SARS-CoV2 virus and detect active infections. Antigen tests can often be performed at point-of-care facilities. While all test results must be reported, as of July 10, 2020 some facilities had not yet fully implemented reporting for all negative antigen tests.

<u>Antibody Tests</u>: COVID-19 antibody tests, also called serological tests, detect the presence of antibodies to the virus in blood samples. They are typically used to identify people with prior infections. There is a lag between infection and antibody production by the immune system, so antibody tests usually cannot be used to detect active infections.

Case Definitions: UDOH assigns case status following the <u>national case definition</u>, with the exception of considering antigen positive tests as evidence of a confirmed case. A confirmed case is any person with a positive SARS-CoV2 PCR or antigen test.

Percent Positivity Calculation: CDC proposes three methods for calculating percent positivity. The UDOH uses the third method of number of people tested positive over the number of people tested. For a person who has taken more than one test, their first positive result is used and any future positive or negative results are not. If there is no positive result for that individual, then their first negative result is used. If a person is tested again and it has been at least 90 days after their last test, the UDOH will create a new record for the person and their most recent test result will also be included in the percent positivity calculations. If a person has two positive tests with at least 90 days between tests they will be investigated as a possible reinfection.