

Issue # 194

Saturday, October 24, 2020

COVID-19 Report

Highlights

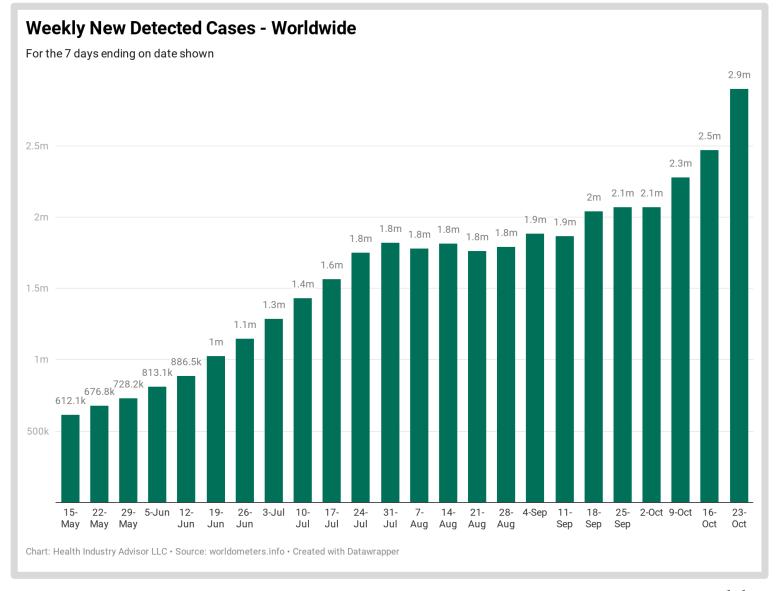
- Newly-detected cases grew sharply worldwide last week. Putting it into perspective, there were twice as many new cases in the past seven days as there were during any seven-day period through July 10
- Newly-detected cases in the U.S. increased for the sixth consecutive week; These new cases were 93% of the peak weekly new cases, which occurred July 18-24
- Test volume in the U.S. set a new high last week; it was the six consecutive weekly increase in test volume
- Despite the higher test volume, the test-positive rate increased for the third consecutive week
- Compared to July, when new cases were last surging, test volume was about nearly 20% higher and the testpositive % is two percentage points lower
- Texas, California and Illinois recorded both the most new cases last week, as well as the largest week-overweek increases in new cases; Wisconsin, Tennessee, Florida and Ohio also ranked high on both measures
- On a per capita basis, North Dakota, Rhode Island, Wyoming, South Dakota, Montana, Tennessee and Wisconsin reported the largest increases in new cases
- Inpatient Covid-19 census increased for the fourth consecutive week; This census, however, is 1/3 lower than its late-July peak; Further, the likelihood of an active Covid-19 case would be hospitalized is 1/2 what it was in July

- Eighteen states are experiencing Covid-19 census at or near the highest level experienced during the pandemic; Three of the four states that experienced the largest week-over-week increase in Covid-19 census, however, are well below their peak: Texas (46% of peak), Illinois (50%) and Pennsylvania (38%). Ohio, with the third largest week-over-week increase in Covid-19 census, is at the highest census experienced to-date
- Ventilator and ICU Covid-19 census both increased on successive weeks (ventilator census on three consecutive weeks; ICU census on four consecutive weeks); The % of Covid-19 inpatients in the ICU, as well as on ventilators, however, are essentially as low as they have been at any time during the pandemic
- Three weeks into the 2020-21 flu season, flu visits are running lower than they have during each of the past five years, however, its still early. In these prior years, visits accelerated from this time of year through early into the next year
- Deaths reported with the coronavirus increased last week - likely as result of the current case surge; The rate of deaths-to-new cases (4-week lag), however, has been relatively stable for the past month and was significantly lower than it was for most of June and July (1.9% v. 2.8-3.5%)



~ 2.9 million newly detected cases worldwide last week

There was a sharp increase (17%) in newlydetected cases worldwide in the past week

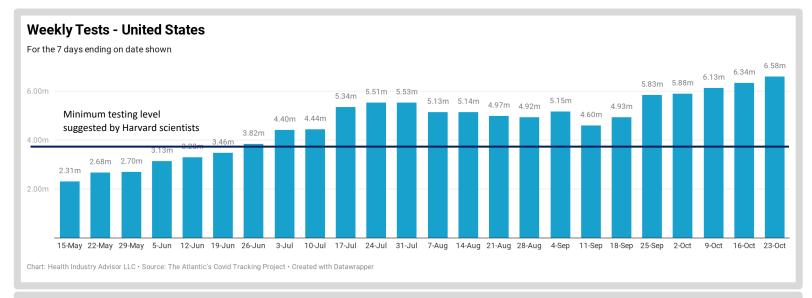


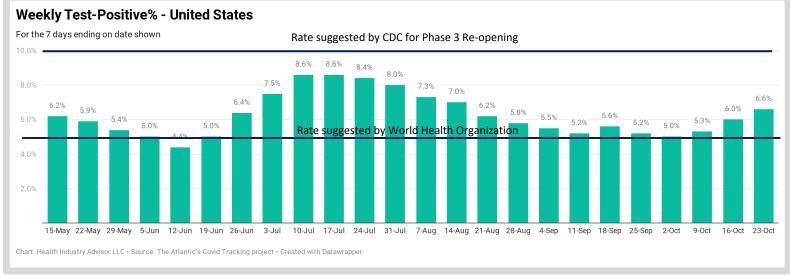


Test volume set a record high for the fourth consecutive week; has increased six consecutive weeks

Test-positive rate has increased three consecutive weeks; it is above the WHO target and well below the CDC target for Phase 3 reopenings

Compared to July case surge, test volume is 19+% higher, test-positive% is 2 percentage points lower





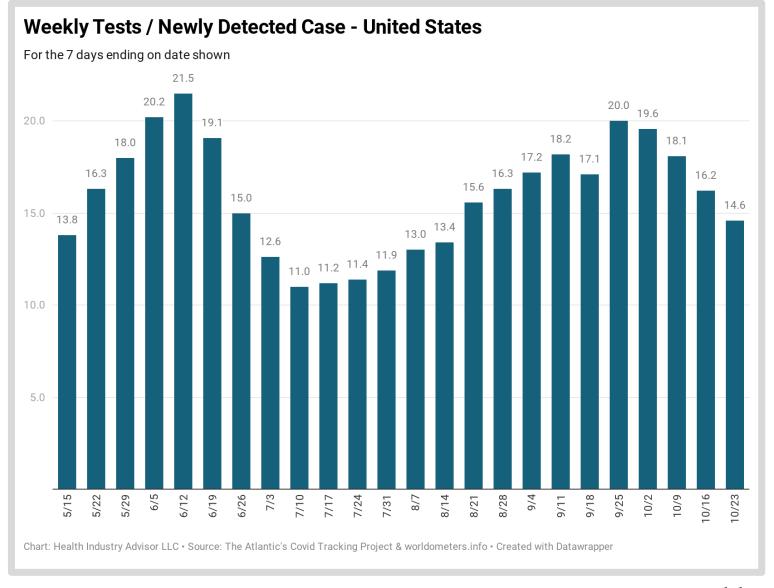


The ratio of tests performed to new cases detected is a fair measure of the adequacy of testing and spread of the virus

The higher this ratio, the more adequate testing is at identifying spread; a low measure suggests that testing isn't keeping pace

This ratio has dropped four consecutive weeks

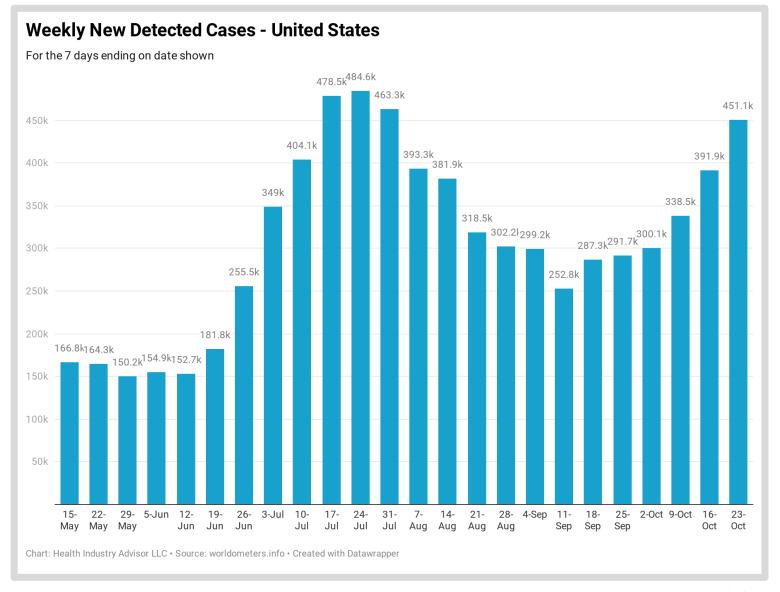
This rate remains stronger, however, than it was during the July case surge





Newly detected cases* increased for the sixth consecutive week (Saturday – Friday)

New cases were higher during this 7-day period than any comparable period since July 25-31, and are 93% of the peak level posted July 18-24

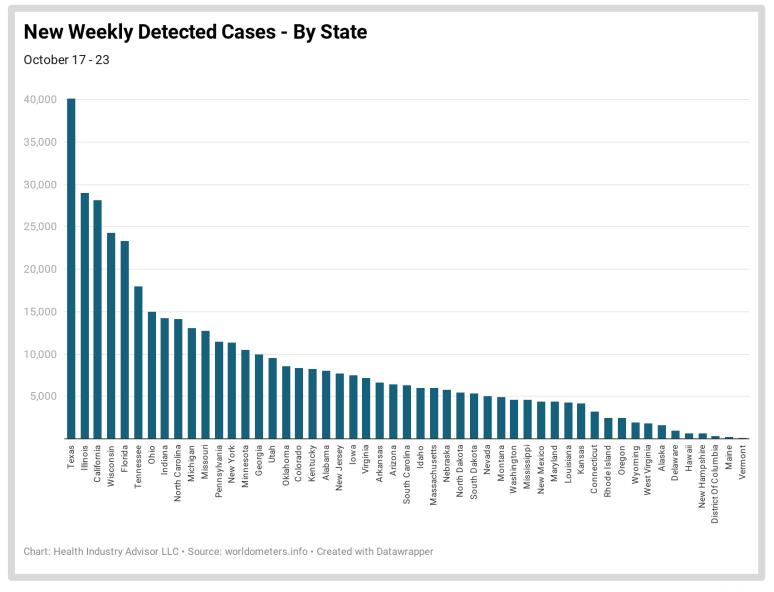




Texas, Illinois, California, Wisconsin and Florida, in order, recorded the highest number of newly detected cases over the past seven days (same order as last week)

Of the ten states with the most newly-detected cases, seven rank in the top ten by population

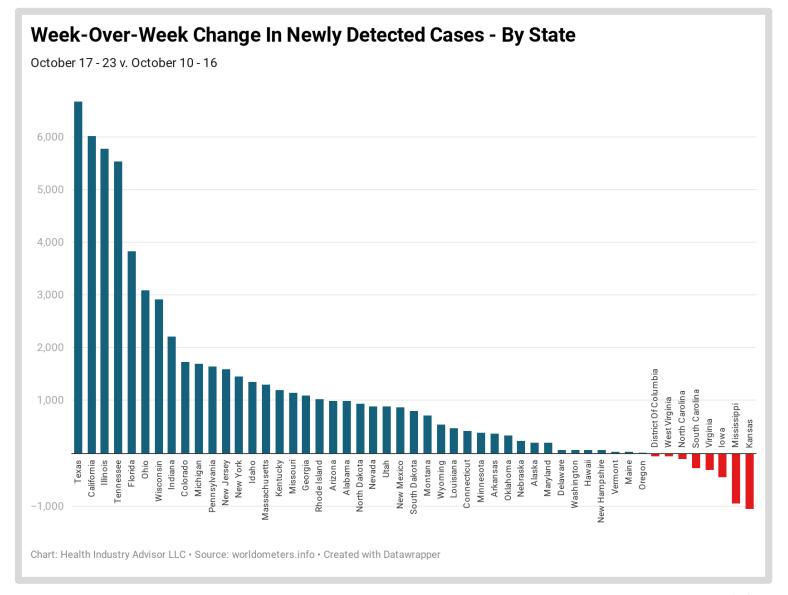
Wisconsin, Tennessee and Indiana stand out on this list, given its relatively low population





Texas, California, Illinois and Tennessee experienced the largest increases in new cases relative to the prior week

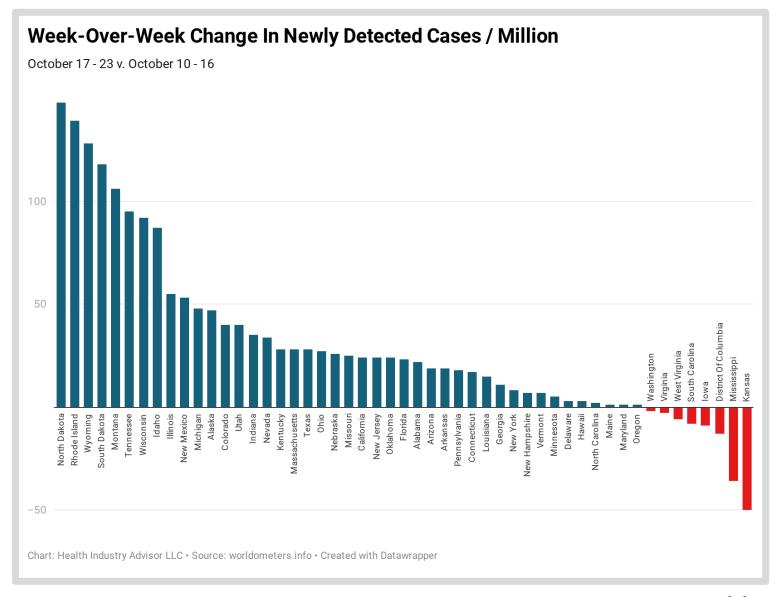
Only seven states – Kansas, Mississippi, Iowa, South Carolina, North Carolina and West Virginia – experienced fewer newly detected cases this past week v. the prior week





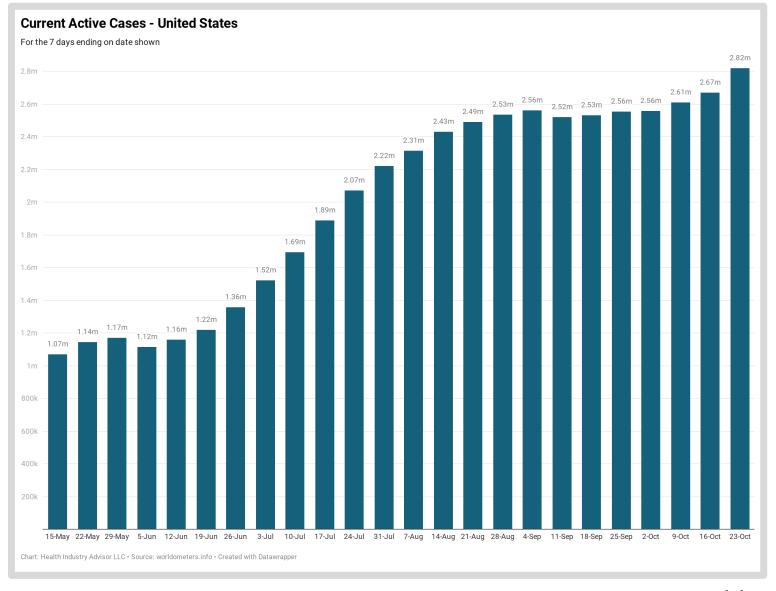
Eight states experienced the most significant week-over-week increases new infections rates: in order, North Dakota, Rhode Island, Wyoming, South Dakota, Montana, Tennessee and Wisconsin

Kansas and Mississippi experienced significant declines in this rate





The estimated number of active, detected cases in the U.S. increased for the 3rd consecutive week, following six weeks of relative stability

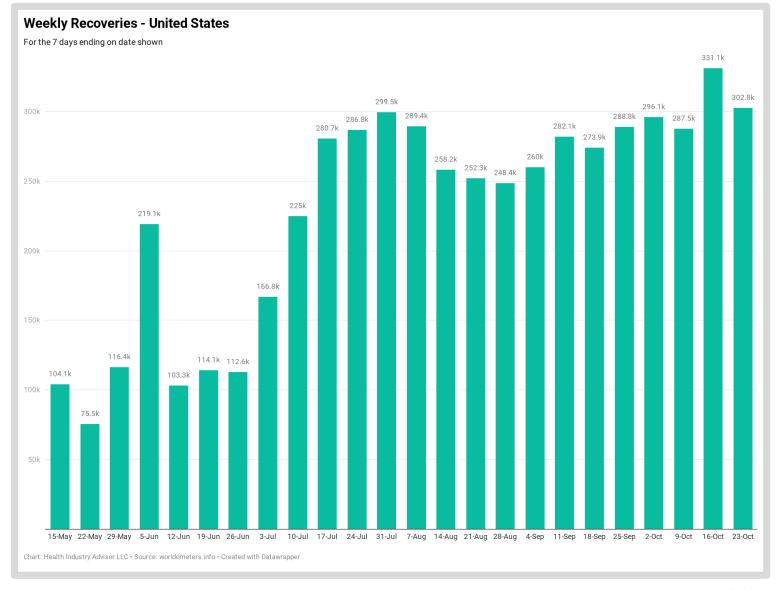




Recoveries from detected infections in the U.S. declined significantly from the prior week

Nearly 5.7M people in the U.S. have recovered from a detected SARS-CoV-2 infection

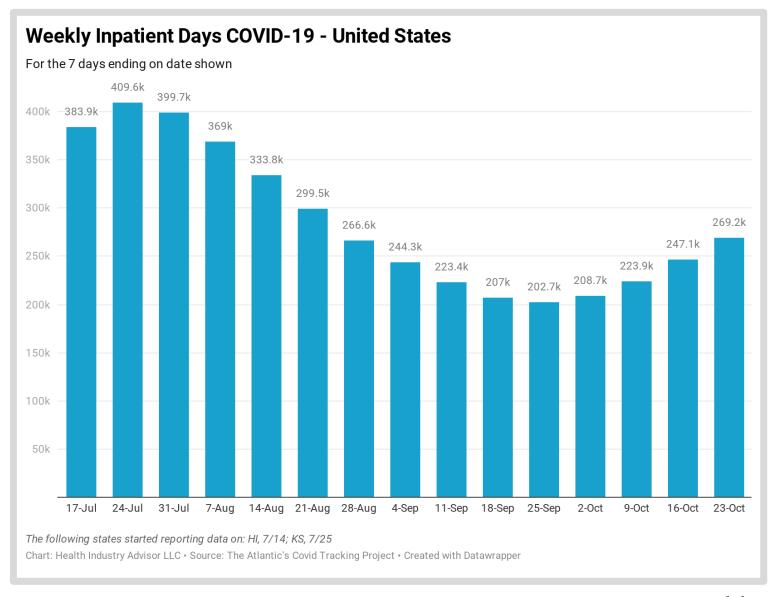
There are 2x as many persons recovered from the virus as those that have an active infection





Inpatient COVID-19 census increased last week, for the fourth consecutive week; it is now back to its late-August level

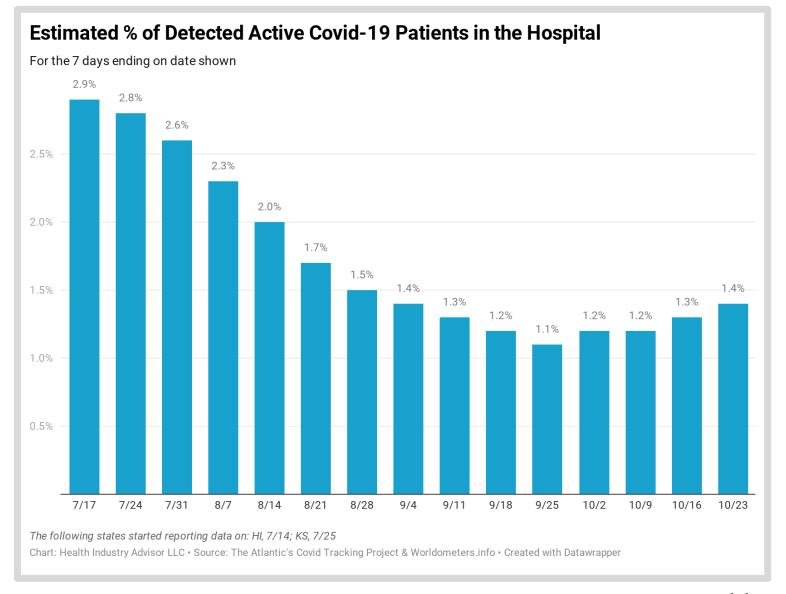
This census remains 1/3 lower than its July 18-24 level





Only about 1.4% of activelyinfected persons are in the hospital

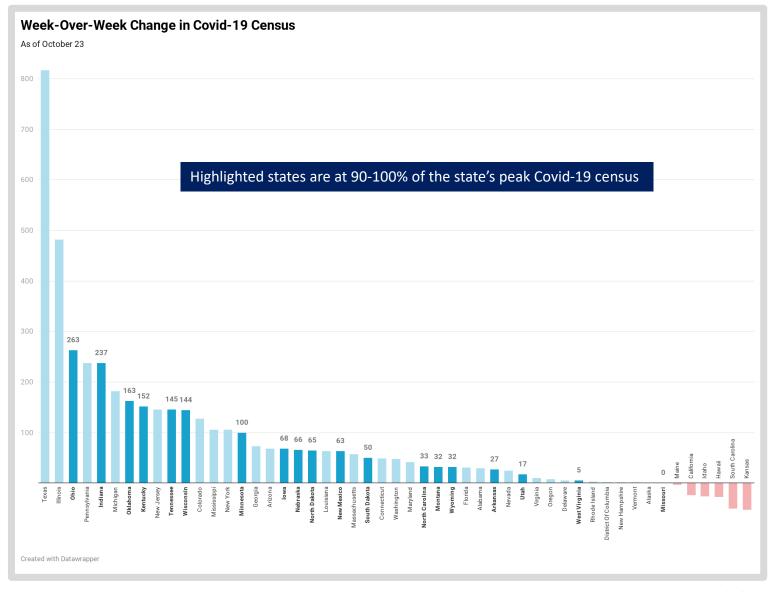
Despite the recent increase in Covid-19 inpatients, the likelihood of a detected & actively-infected person being in the hospital is less than 1/2 what it was in mid-July





Texas and Illinois experienced the largest week-over-week increase in Covid-19 census; Both states are at ~ 50% of the peak census experienced during the pandemic

Eighteen states are with 10% of the peak Covid-19 census the state has experienced during the pandemic

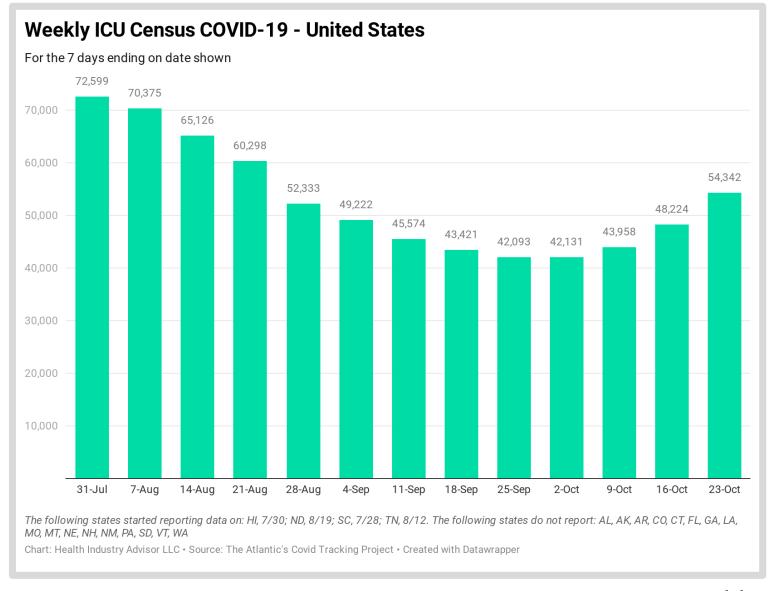




ICU census of COVID-19 patients has increased four consecutive weeks

This census has returned to late-August levels

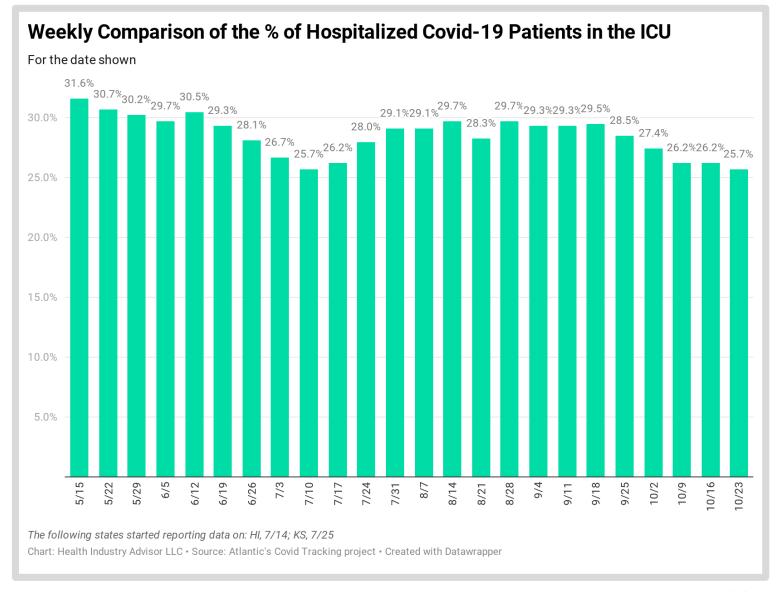
Still, this census is 1/4 lower than the week of July 25-31





About a ¼ of Covid-19 inpatients were in the hospital last week, slightly lower than last week

The likelihood that a patient hospitalized with a SARS-CoV-2 infection would be in the ICU is a low as it has ever been

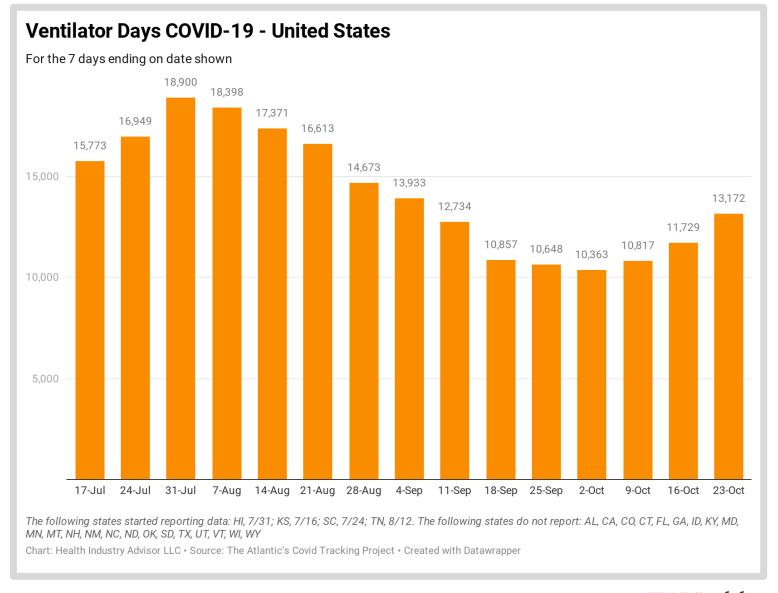




Census of COVID-19 patients on ventilators increased last week – the third consecutive week-over-week increase

This census had declined for the preceding nine weeks

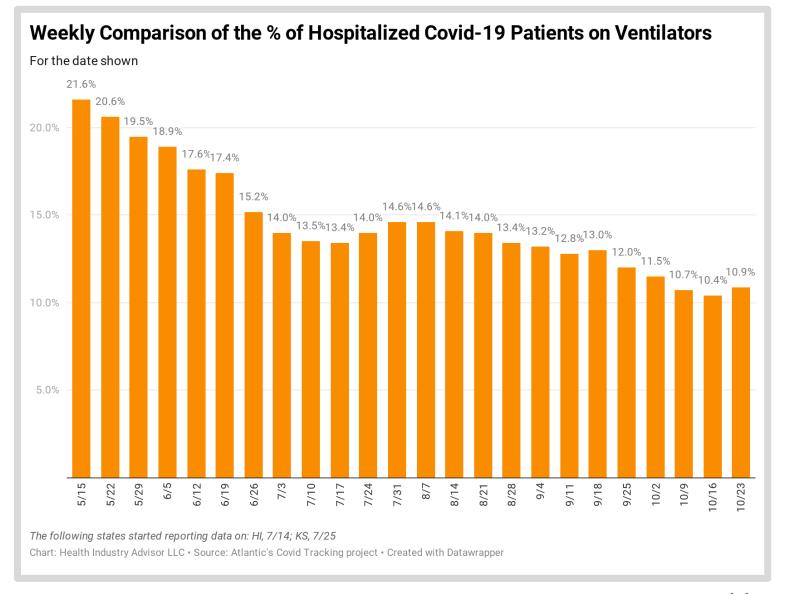
This census is 30% lower than during it's late-July peak





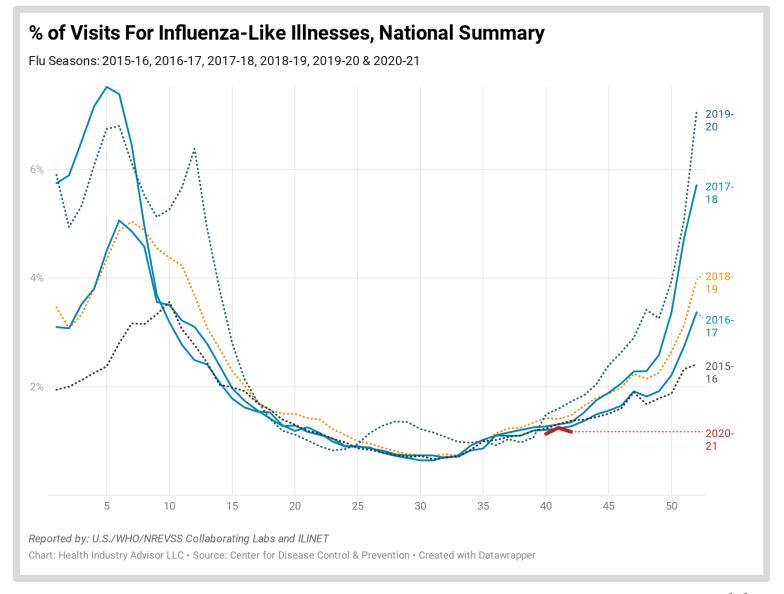
About 10% of Covid-19 inpatients were on a ventilator last week

A reflection of changing treatment protocols, the likelihood of a person hospitalized with a SARS-CoV-2 infection has been cut by more than ½ since mid-May





Three weeks into the 2020-21 flu season, flu visits are trending lower than each of the past five years (but, its still early)

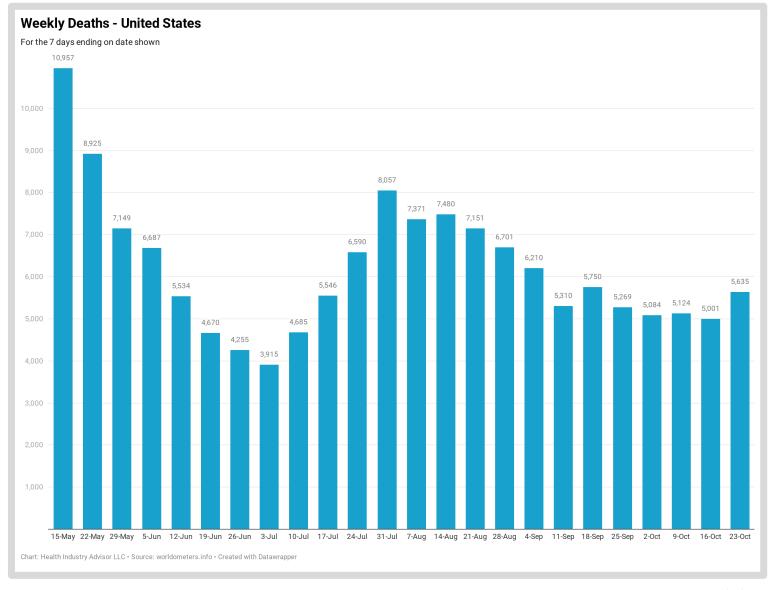




Deaths reported with the coronavirus in the U.S. rose sharply last week – likely a result of the recent case surge

There were more deaths last week than for all except one week since September 4

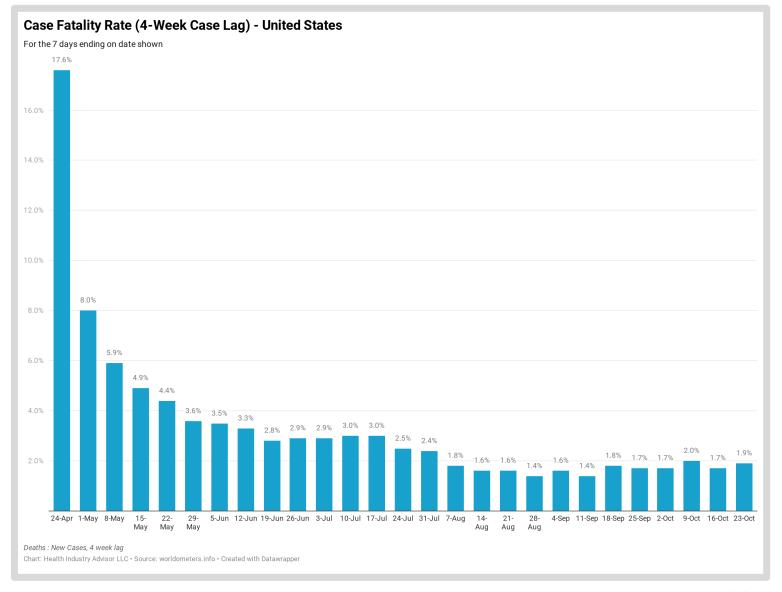
There were fewer deaths, however, than were reported from the July cases surge





The rate of deaths per new case (4-week lag) has been relatively stable for the past month

This rate is at least a full percentage point lower than it was for most of June and July





Data Sources

The following data sources are accessed on a daily or weekly basis:

- The Atlantic's Covid Tracking Project: https://covidtracking.com
- Worldometers.info: https://www.worldometers.info/coronavirus/
- Centers for Disease Control, National, Regional, and State Level Outpatient Illness and Viral Surveillance https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html
- Centers for Disease Control, COVID-19 Laboratory-Confirmed Hospitalizations https://gis.cdc.gov/grasp/COVIDNet/COVID19 5.html
- Centers for Disease Control, COVID Data Tracker https://www.cdc.gov/covid-data-tracker/index.html#mobility
- Institute for Health Metrics and Evaluation, COVID-19 estimate downloads http://www.healthdata.org/covid/data-downloads
- New York Times, Covid-19 data https://github.com/nytimes/covid-19-data
- COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University https://github.com/CSSEGISandData/COVID-19
- COVID-19 Projections Using Machine Learning, https://covid19-projections.com

