

Issue # 223

Saturday, November 28, 2020

COVID-19 Report

Highlights

- The good:
 - Test volume exceeded 10M for the week the highest of any week during the
 pandemic and despite the abovementioned reporting delays. Volume has
 now doubled in the last ten weeks
 - The test-positive rate fell last week the first time this has occurred since the first week of October
 - The ratio of tests performed-to-new cases detected improved last week - for the first time since mid-September
 - Seven weeks into the 2020-21 flu season, it is proving to be a mild season (thus far): influenza visits are running behind the comparable weeks for each of the past five years . . . for the most recent week, these were 57% behind last year
- The bad:
 - Covid-19 patients occupied 28% of all inpatient beds in the U.S. last week doubling in the past 4 weeks
 - Covid-19 patients in the ICU increased for the ninth consecutive week - nearly doubling in the past four weeks
 - Covid-19 patients on ventilators increased sharply last week and have now increased eight consecutive weeks

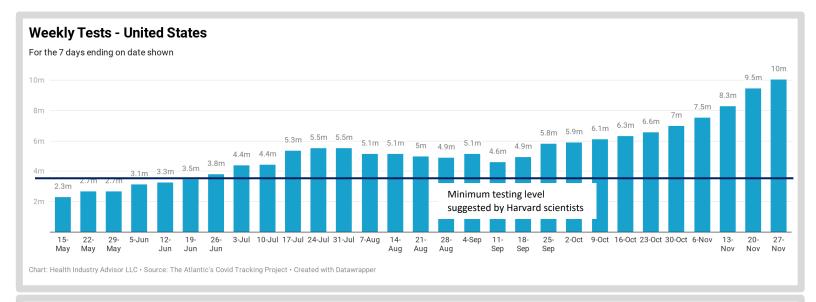
- For the second consecutive week, more than 10,000 Americans died with coronavirus. Deaths have increased now six consecutive weeks
- The Uncertain:
 - Notwithstanding the reporting delays around the holiday, the underlying trends in new case detection were improving: Through Wednesday, the weekover-week change in new cases had declined fifteen consecutive days (these continued to decline through yesterday but, the reporting delays raise questions about the relevance of the data for the past two days)
 - We should anticipate that state reporting will be caught-up in the next few days
 - Further, the impact of holiday gatherings on new cases may begin to become evident by the middle of next week. Will the holiday prove to reverse the positive trends since early November or simply serve as a pause?

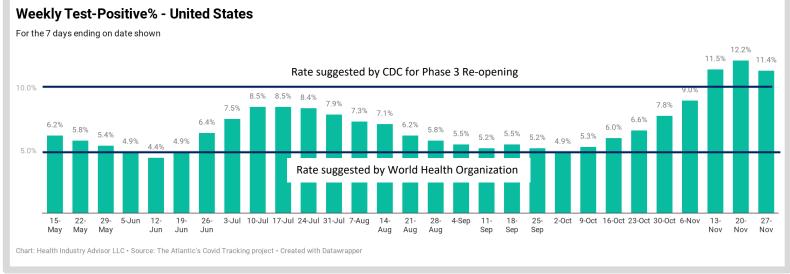


10 million tests were conducted last week - setting a record high for the tenth consecutive week

Testing has doubled in the last ten weeks

Test-positive rate fell last week – after increasing for seven consecutive weeks

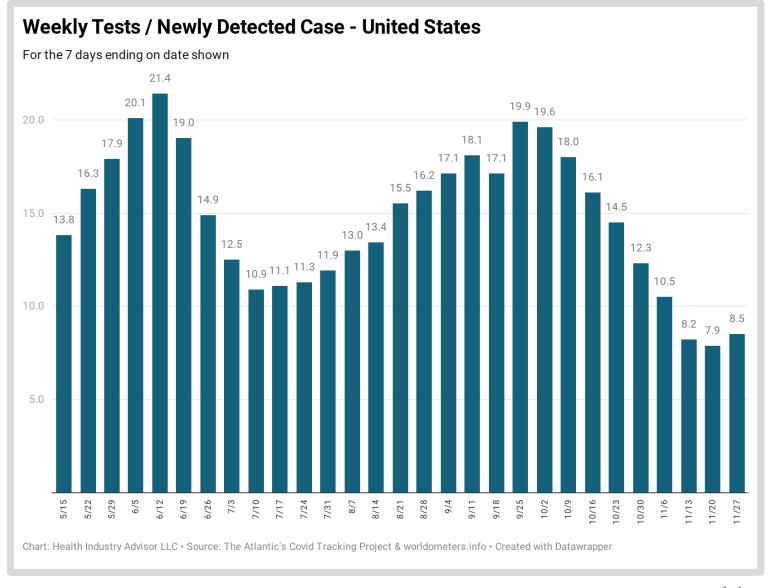






The ratio of tests performed to new cases detected has improved last week, after dropping eight consecutive weeks

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

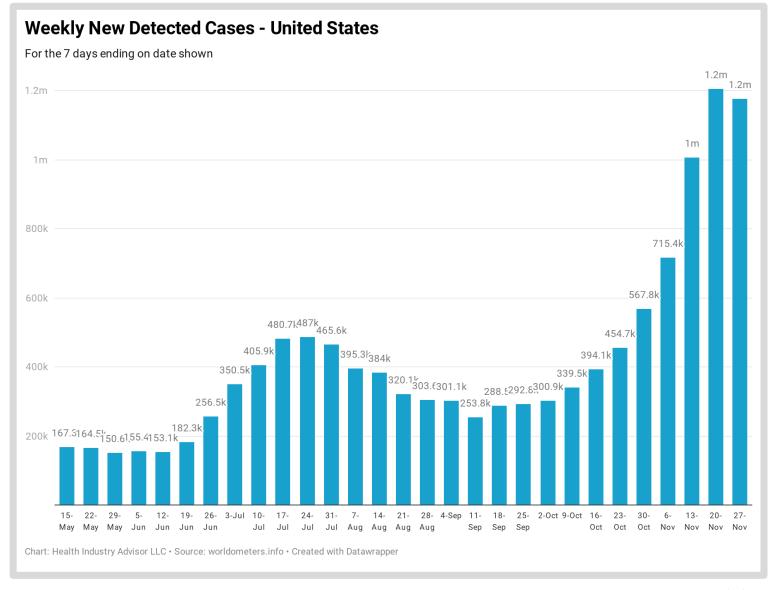




Thanksgiving reporting-delay impact?

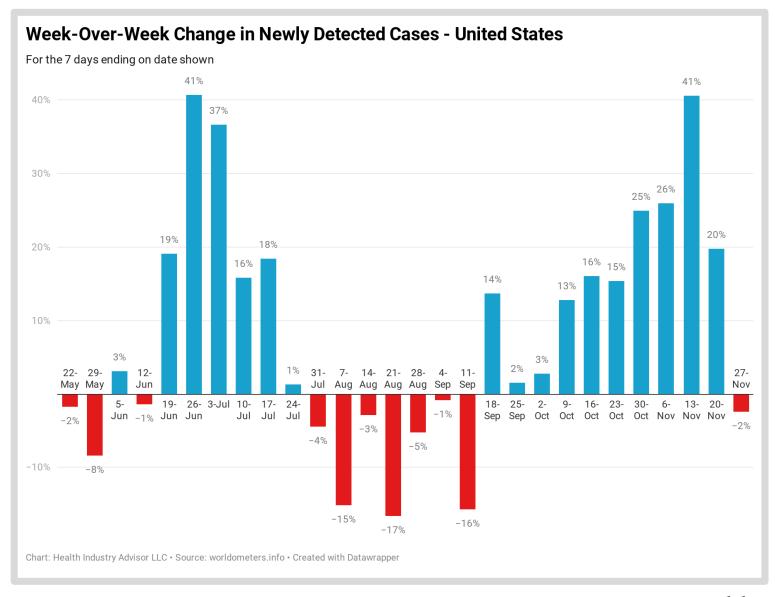
Newly detected cases declined last week, after increasing each of the ten preceding weeks

1.2M new cases were detected in the past seven days



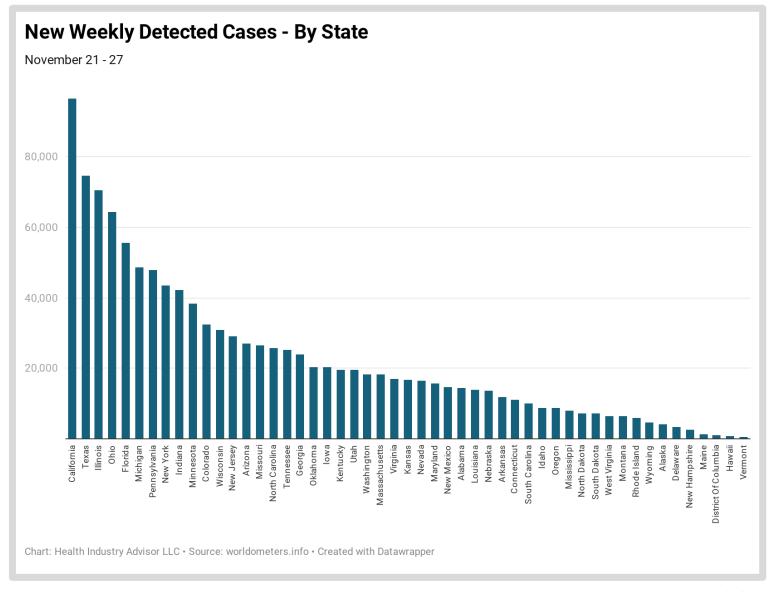


There were fewer new cases detected this week than last, likely because of reporting delays around the Thanksgiving holiday





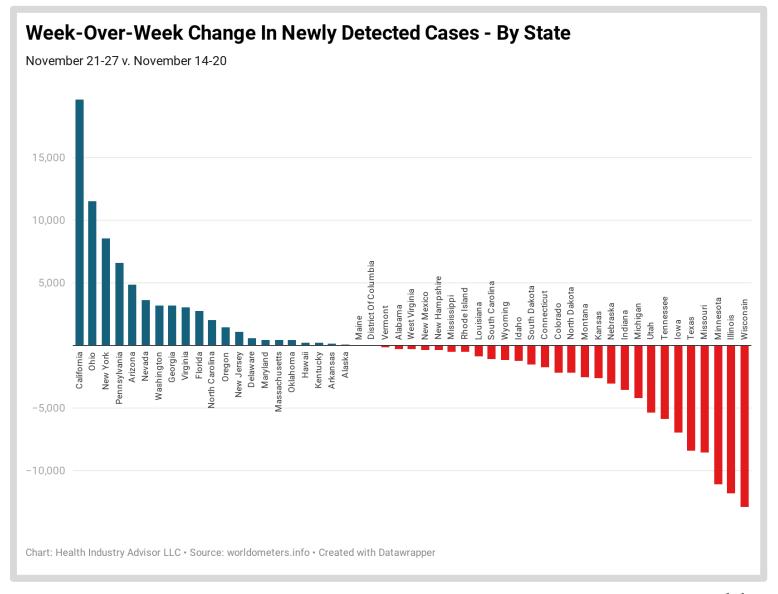
California, Illinois, Ohio and Texas recorded the highest number of newly detected cases over the past seven days





California experienced the largest increase in new cases relative to the prior week

Most states experienced declines in the number of new cases this week – how much of this is due to the Thanksgiving holiday?

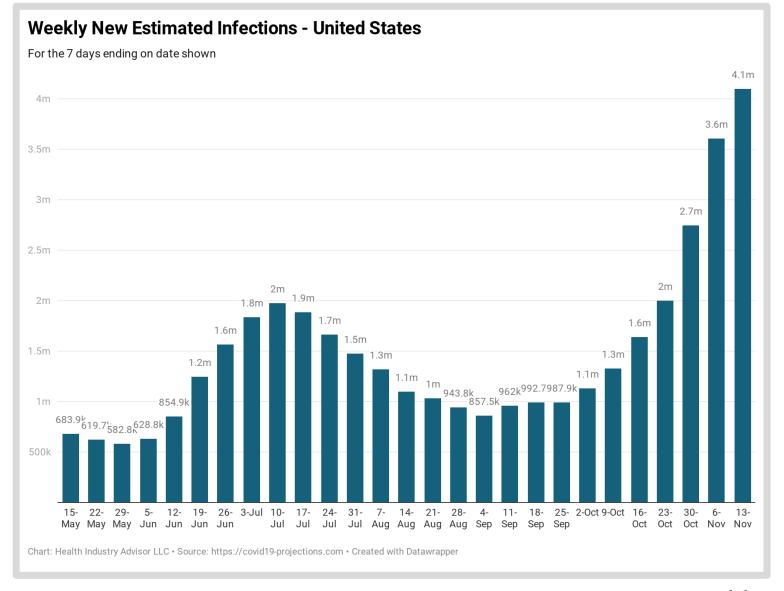




Gu* estimates there were 4.1M new infections (detected + undetected) during the week of November 7-13

These estimated new infections have been rising each week since the end of August

Based on Youyang Gu's Covid Projection Mode Last update: November 26

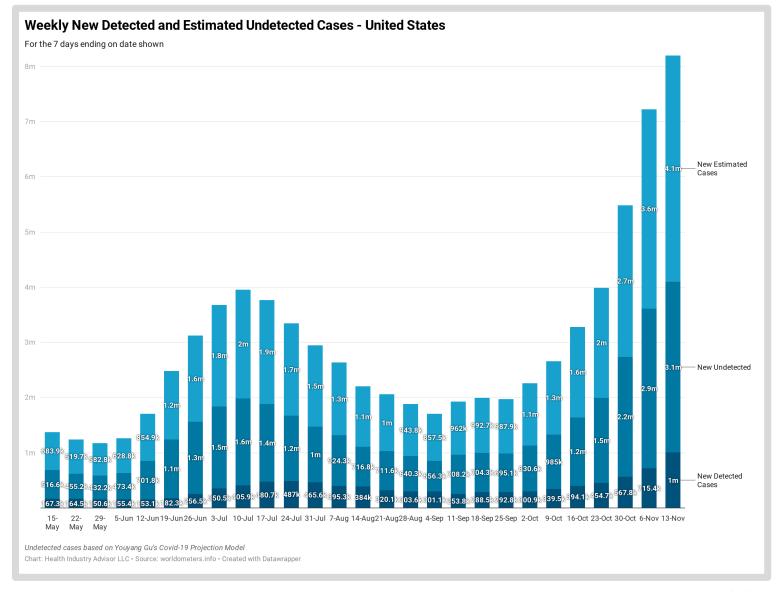




Undetected cases are significantly greater than cases detected via testing

Note: this graphic uses Youyang Gu's estimates of true infections

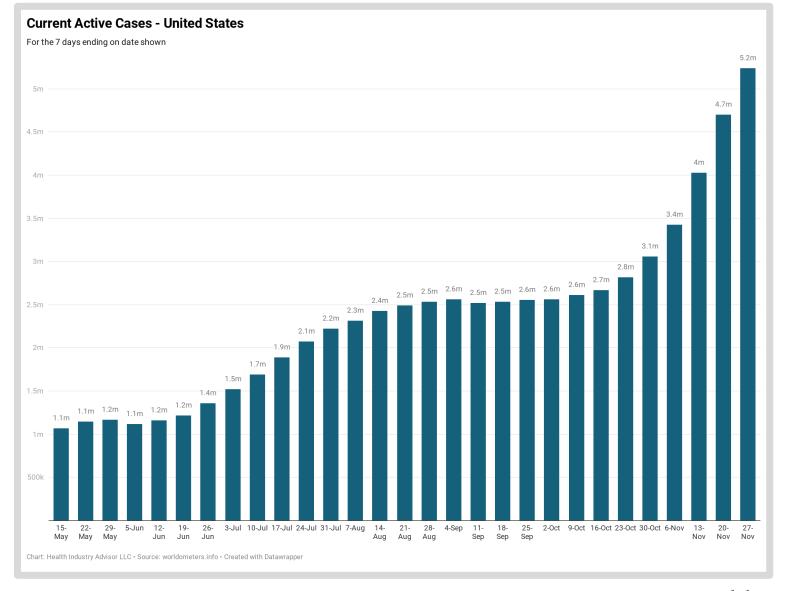
Gi estimated that undetected cases outnumbered detected cases by 3:1 during the week of November 6-13, down from 4:1 the prior week





There are an estimated 5.2 million people in the U.S. currently recovering from detected Covid-19 infections

The estimated number of active, detected cases in the U.S. increased for the 8th consecutive week, following six weeks of relative stability

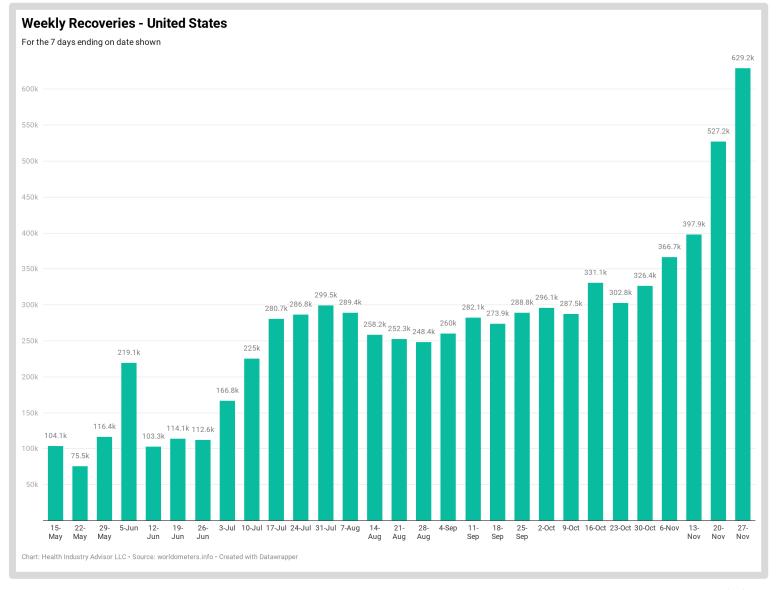




There were more than 630k people that recovered from a detected SARS-CoV-2 infection in the U.S. last week

Recoveries from detected infections in the U.S. increased each of the past five weeks

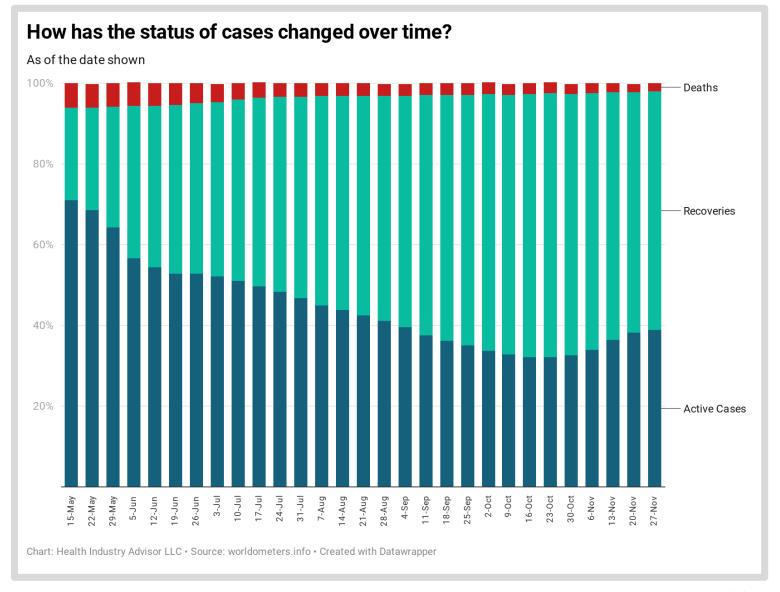
Nearly 8M people in the U.S. have now recovered from a detected SARS-CoV-2 infection





Over time, more –andmore persons infected by the SARS-CoV-2 virus have successfully recovered

The number of active cases, as a % of all detected cases, have recently increased

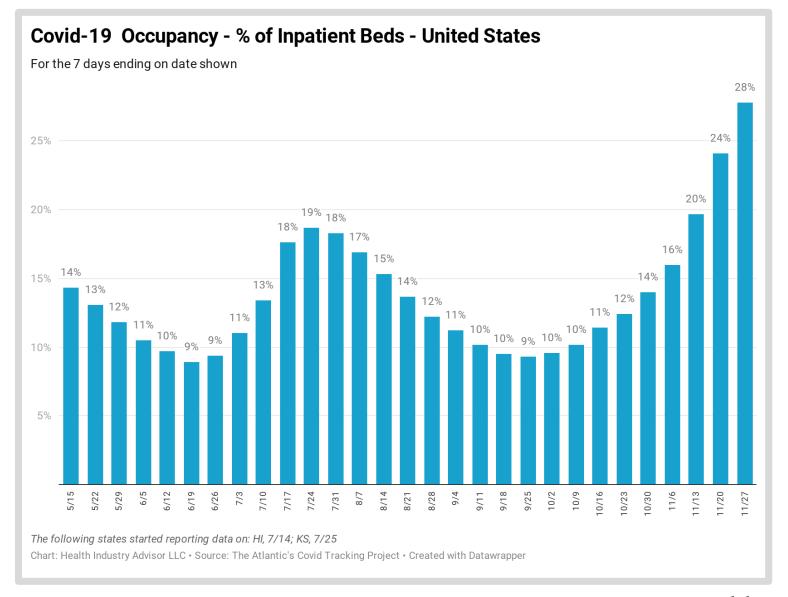




In the United States, Covid-19 patients occupied 28% of available inpatient beds last week

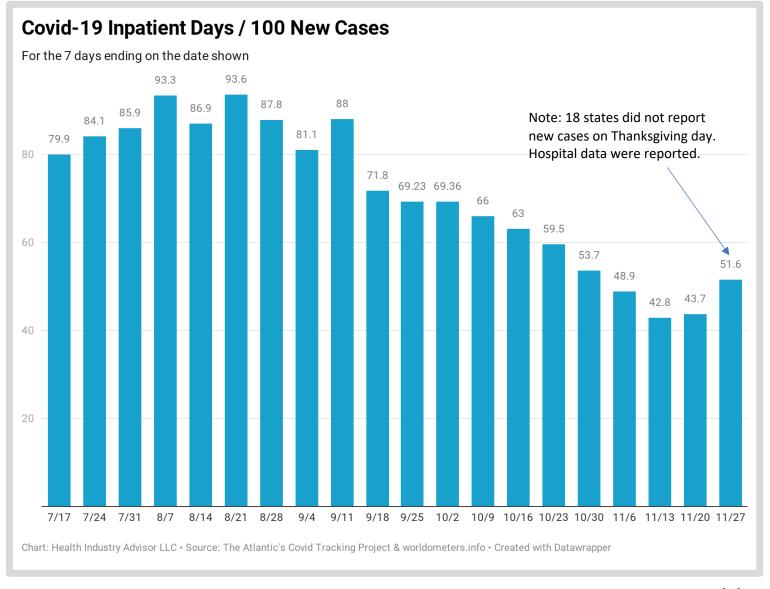
This occupancy rate has increased each week since the end of September

This rate has doubled in just four weeks





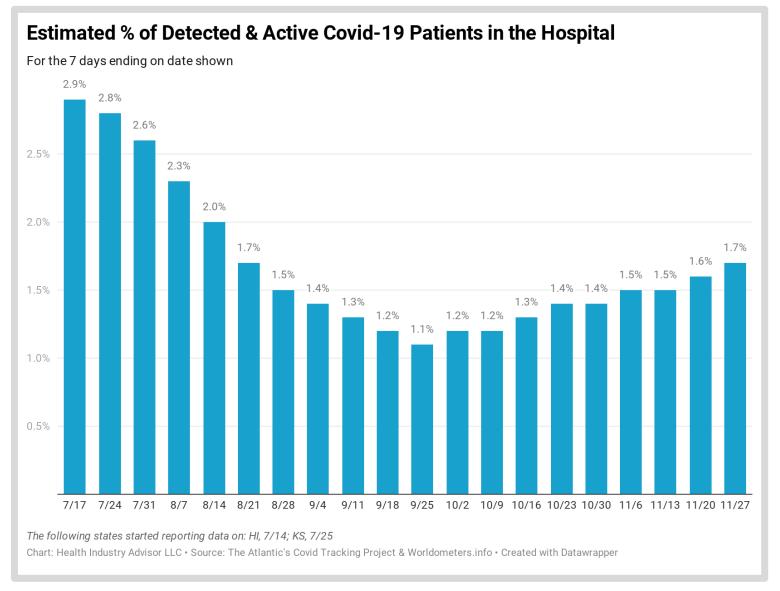
Covid-19 inpatient days per 100 new cases increased last week, partially due to delays in new case reporting over the Thanksgiving holiday





Only about 1.7% of activelyinfected persons are in the hospital – slightly higher than the past several weeks

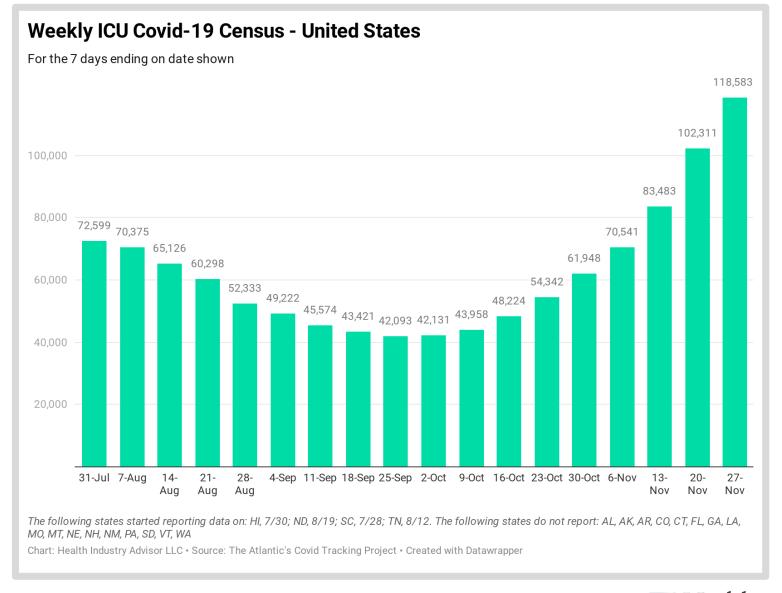
Despite the recent increase in Covid-19 inpatients, the likelihood of a detected & actively-infected person being in the hospital is significantly lower than what it was in mid-July





Covid-19 patients collectively spent more than 118,000 days in the ICU last week

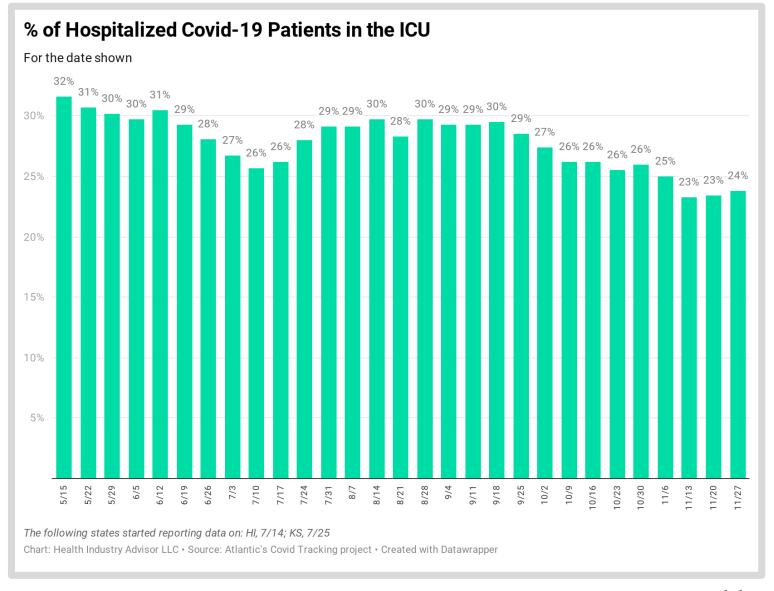
Covid-19 ICU census has now increased nine consecutive weeks nearly doubling in four weeks





Fewer than a ¼ of Covid-19 inpatients were in the ICU last week

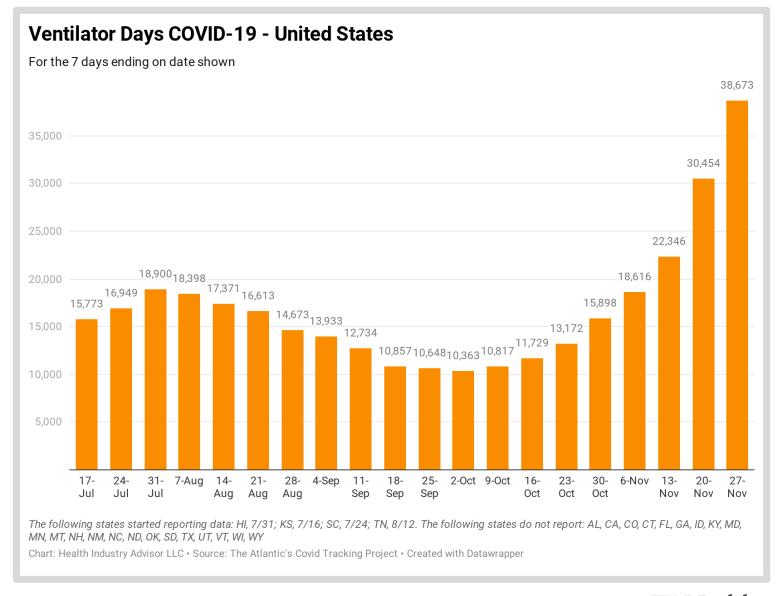
This % is slightly higher than the prior two weeks yet, significantly lower than it was through September





Covid-19 patients on ventilators increased sharply last week, totaling more than 38,000 days on ventilators last week

This census of COVID-19 patients on ventilators increased for the eighth consecutive week

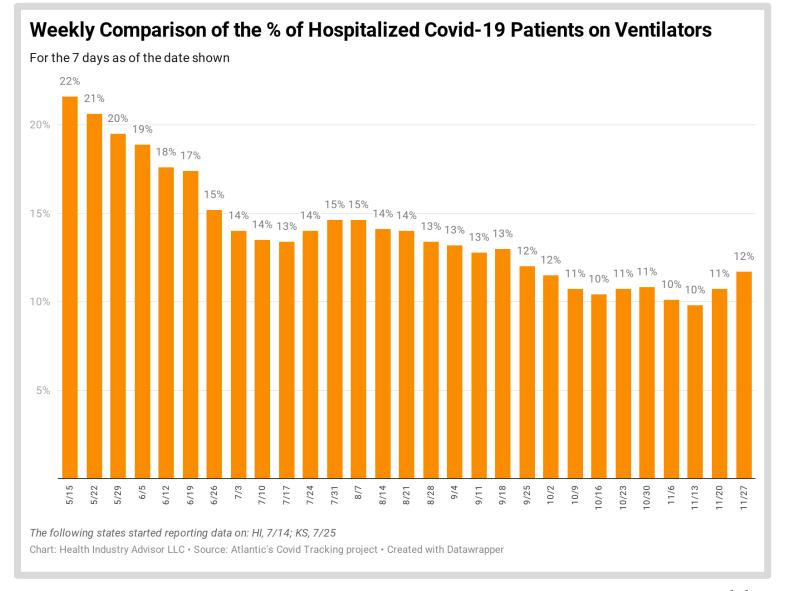




The likelihood of a hospitalized Covid-19 patient would be on a ventilator increased slightly each of the past two weeks

Nearly 12% 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 nearly in ½ since mid-May

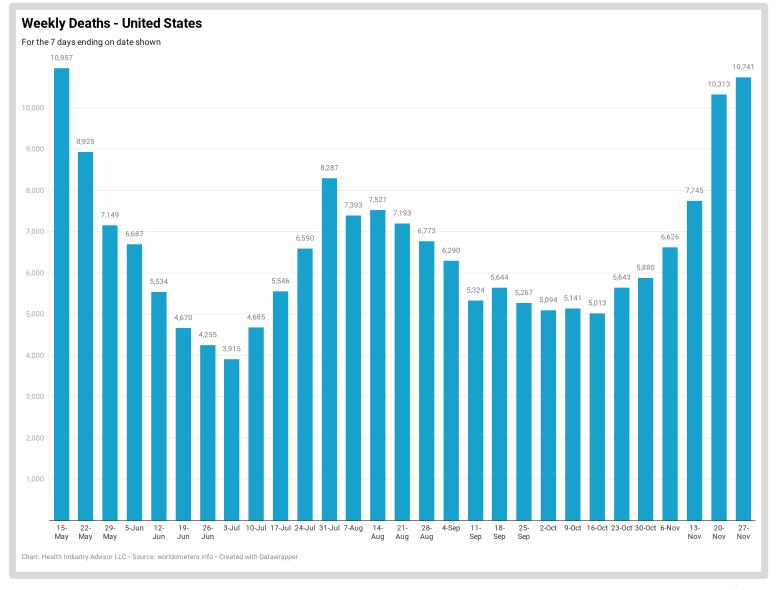




Tragically, more than 10,000 people died with the coronavirus in the U.S. for the second consecutive week

Deaths reported with the coronavirus in the U.S. increased for the sixth consecutive week—likely a result of the recent case surge

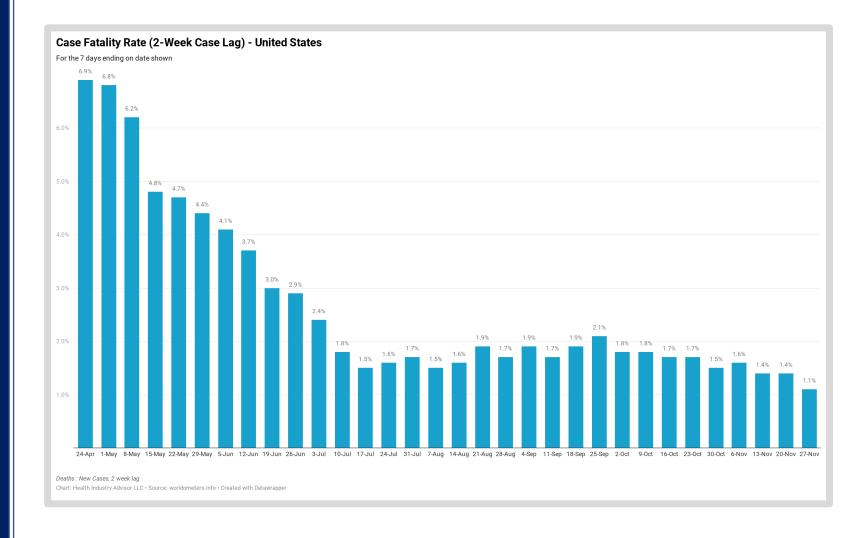
There were more deaths last week than any week since May 9-15





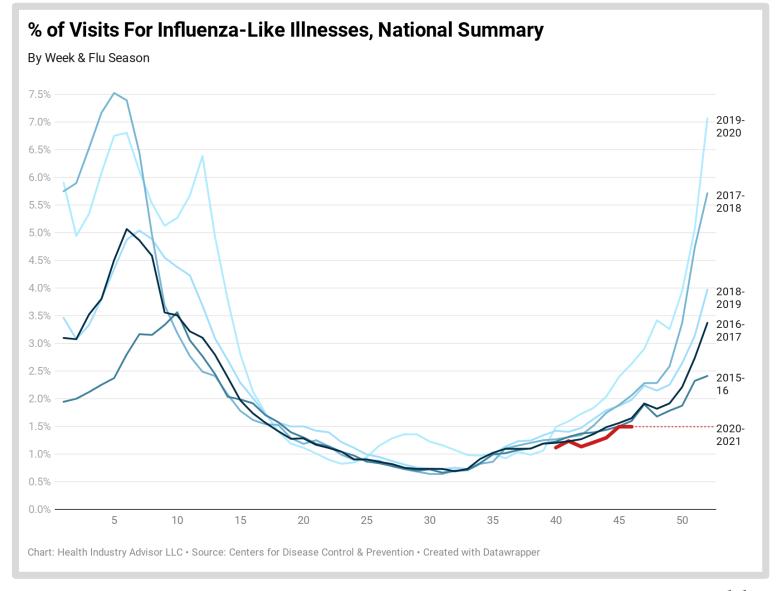
The case fatality rate has declined modestly since late-September

Last week's decline is likely impacted by delays in state reporting of deaths during the Thanksgiving holiday





Now seven weeks into the 2020-21 flu season, flu visits are trending lower than each of the past five years - and, currently 57% lower than last year





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
- Oliver Wyman Pandemic Navigator, <u>https://pandemicnavigator.oliverwyman.com/forecast?mode=country®ion=United</u>
 ed%20States&panel=mortality

