

This is only the second time in a year that I have published a special edition of the COVID-19 Briefing. I did not sleep well last night as I considered the new CDC guidance. I did not think I could wait until Friday to share. So today I report on the new guidance and a companion publication in MMWR and an undated scientific brief from CDC.

It is true this variant behaves differently than previous variants. Per Dr. Walensky, "In rare occasions some vaccinated people infected with the Delta variant after vaccination may be contagious and spread the virus to others." This wave of the pandemic is being driven primarily by the unvaccinated. 97% of hospital admissions and 99% of deaths are in unvaccinated individuals. To be clear the current vaccines are remarkably effective against severe disease and deaths including the Delta variant. The FDA should move faster on final approval of mRNA vaccines. We have administered almost 400 million doses in the US. The FDA now has enormous data on the safety and efficacy so why haven't the vaccines received full approval? In addition, the stress on our healthcare workers cannot be understated. I do not mean the actual number of patients. I mean the emotional stress and burnout I witness every day. Many are leaving healthcare or retiring. What about the mental health of our children? I could go on, but the pandemic will leave many scars for years to come which is why we need a more coherent and consistent message based on truth and yes hope.

The impact of COVID-19 disinformation and misinformation has been immense. This disinformation and misinformation come from both sides of the political spectrum. One of the challenges from the beginning has been to have a coherent and coordinated message free of politics and fear. This has done more to undermine public confidence in the science and public health agencies including the CDC and FDA. Yes, there have been some missteps and science has rapidly evolved. The credibility of public health experts depends on their ability to offer the truth including admitting to uncertainties. Communication is so critical especially as new guidance is rolled out. The announcement yesterday was done on a phone call! Let us continue to denounce disinformation and misinformation and work together in partnership. We must hold ourselves to a higher standard of truth and accountability.

I want to end this commentary with something I had shared early the pandemic but still provides me with inspiration. I hope this inspires you as well.

*In the midst of tears, I found
there was, within me, an
invincible smile.*

*In the midst of chaos, I found
there was within me, an
invincible calm.*

*In the depth of winter, I finally
learned that within me, there
lay, an invincible summer. And,
that makes me happy.*

*For it says, that no matter how
hard the world pushes against
me, within me, there's
something stronger...*

-ALBERT CAMUS

CDC Strengthens COVID-19 Mask Guidance

CDC today strengthened mask recommendations once again, suggesting even vaccinated people in areas seeing high virus activity should resume wearing masks indoors.

Also, all schoolchildren, staff, and teachers should now wear masks when indoors, regardless of vaccination status, when the 2021-22 school year begins next month, the agency said.

The new data on breakthrough infections in vaccinated Americans caused by the Delta variant shows in rare cases, vaccinated people can transmit the virus, necessitating mask use in some instances.

The CDC said between June 19 and July 23, COVID-19 cases increased about 300% nationally, followed by increases in hospitalizations and deaths, driven by the Delta variant. Also, vaccine uptake has slowed nationally, with wide variation in coverage by state (3.9% to 67.2%). [Picking up in last week]

"Until vaccination coverage is high and community transmission is low, public health practitioners, as well as schools, businesses, and institutions (organizations) need to regularly assess the need for prevention strategies to avoid stressing health care capacity and imperiling adequate care for both COVID-19 and other non-COVID-19 conditions," the CDC said.

Though breakthrough infections can occur in vaccinated Americans, Walensky emphasized that all three vaccines in use in the United States are very effective in preventing severe illness and death from the Delta variant. Even though unvaccinated people represent the vast majority of cases of transmission, Walensky said, "we thought it was important for [vaccinated] people to understand they have the potential to transmit the virus to others."

The CDC tracks substantial and high-transmission rates through the agency's [COVID Data Tracker](#) site. Substantial transmission means between 50 and 100 cases per 100,000 people reported over 7 days and high means more than 100 cases per 100,000 people.

Below shows the uncoupling of new cases and admissions and deaths. [Deaths can be a lagging indicator, however]

Reported Cases

The current 7-day moving average of daily new cases (40,246) increased 46.7% compared with the previous 7-day moving average (27,443). The current 7-day moving average is 84.2% lower than the peak observed on January 10, 2021 (254,052), and is 250.6% higher than the lowest value observed on June 19, 2021 (11,480). A total of 34,248,054 COVID-19 cases have been reported as of July 21.

34,248,054
Total Cases Reported

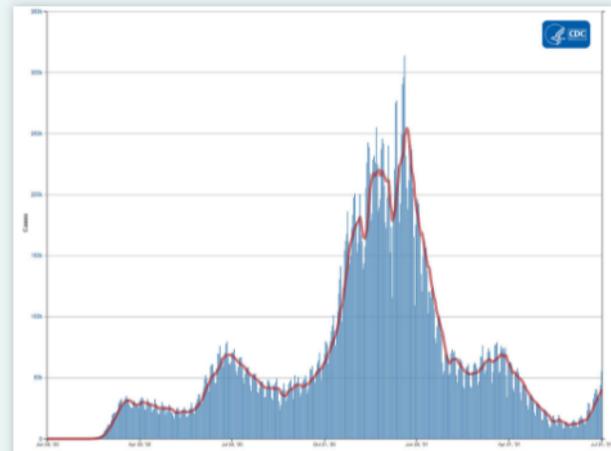
40,246
Current 7-Day Average*

27,443
Prior 7-Day Average

+46.7%
Change in 7-Day Average
since Prior Week

Daily Trends in COVID-19 Cases in the United States Reported to CDC

7-Day moving average



New Hospital Admissions

The current 7-day average for July 13–July 19 was 3,521. This is a 32.2% increase from the prior 7-day average (2,663) from July 6–July 12. The 7-day moving average for new admissions has consistently increased since June 25, 2021.

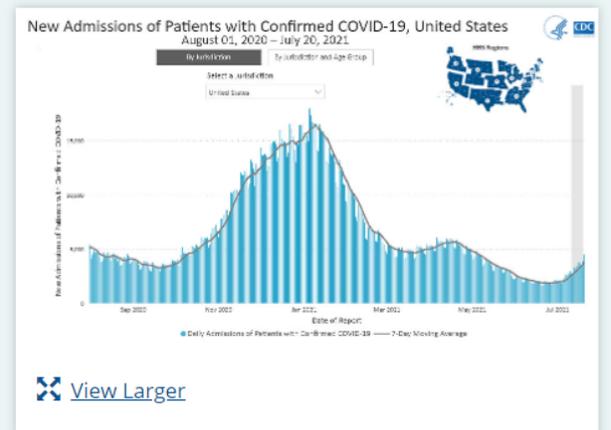
2,338,869
Total New Admissions

3,521
Current 7-Day Average

2,663
Prior 7-Day Average

+32.2%
Change in 7-Day Average

Daily Trends in Number of New COVID-19 Hospital Admissions in the United States



[View Larger](#)

Deaths

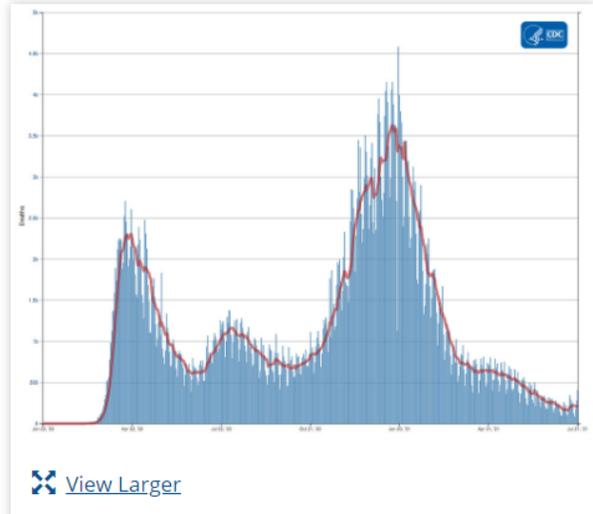
The current 7-day moving average of new deaths (223) has increased 9.3% compared with the previous 7-day moving average (204). As of July 21, a total of 607,684 COVID-19 deaths have been reported.

607,684 Total Deaths Reported	223 Current 7-Day Average*
204 Prior 7-Day Average	+9.3% Change in 7-Day Average Since Prior Week

*Historical deaths are excluded from the daily new deaths and 7-day average calculations until they are incorporated into the dataset by their applicable date. Of 6,125 historical deaths reported retroactively, 15 were reported in the current week and 9 were reported in the prior week.

Daily Trends in Number of COVID-19 Deaths in the United States Reported to CDC

— 7-Day moving average



Comment: Masks will help us reduce spread, but vaccination is our best tool for ending this pandemic.

Guidance for Implementing COVID-19 Prevention Strategies in the Context of Varying Community Transmission Levels and Vaccination Coverage

MMWR published online July 27, 2021

Communities and organizations should update COVID-19 prevention strategies based on:

- Community spread
- Health system capacity
- Vaccination coverage
- Early detection of COVID-19 increases
- Populations at risk

High vaccination + Low community spread = Less need for masking and other prevention strategies

CDC.GOV bit.ly/MMWR72721 MMWR

Local decision making about masks should hinge on five factors: 1) level of SARS-CoV-2 community transmission; 2) health system capacity; 3) COVID-19 vaccination coverage; 4) capacity for early

detection of increases in COVID-19 cases; and 5) populations at increased risk for severe outcomes from COVID-19.

Level of SARS-CoV-2 Community Transmission

A person’s risk for SARS-CoV-2 infection is directly related to the risk for exposure to infectious persons, which is largely determined by the extent of SARS-CoV-2 circulation in the surrounding community. CDC recommends assessing the level of community transmission using, at a minimum, two metrics: new COVID-19 cases per 100,000 persons in the last 7 days and percentage of positive SARS-CoV-2 diagnostic nucleic acid amplification tests in the last 7 days. In areas of substantial or high transmission, CDC recommends community leaders encourage vaccination and universal masking in indoor public spaces in addition to other layered prevention strategies to prevent further spread.

TABLE. CDC core indicators of and thresholds for community transmission levels of SARS-CoV-2

Indicator	Transmission level			
	Low	Moderate	Substantial	High
New cases per 100,000 persons in the past 7 days*	0–9.99	10.00–49.99	50.00–99.99	≥100.00
Percentage of positive nucleic acid amplification tests in the past 7 days†	<5.00	5.00–7.99	8.00–9.99	≥10.00

* Number of new cases in the county (or other administrative level) in the past 7 days divided by the population in the county (or other administrative level) multiplied by 100,000.

† Number of positive tests in the county (or other administrative level) during the past 7 days divided by the total number of tests performed in the county (or other administrative level) during the past 7 days. <https://www.cdc.gov/coronavirus/2019-ncov/lab/resources/calculating-percent-positivity.html>

Health System Capacity

Data on usage of clinical care resources to manage patients with COVID-19 reflect underlying community disease incidence and can signal when urgent implementation of layered prevention strategies might be necessary to prevent overloading the health care system. Strains on critical care capacity can increase COVID-19 mortality [see COVID-19 Briefing July 20, 2021] while decreasing the availability and use of health care resources for non-COVID-19 related medical care.

COVID-19 Vaccination Coverage

Monitoring vaccination coverage in communities and organizations is recommended by CDC to gauge progress, focus vaccination efforts on populations whose coverage is low, and inform the need for additional prevention strategies. As of July 23, 2021, the proportion of the total U.S. population who is fully vaccinated is 48.9. Only 14% of counties report >50% vaccine coverage. Vaccination coverage is <40% in 1,856 (63.0%) and 40%-49.9% in 672 (22.8%); only 417 (14.2%) of counties reported ≥50% COVID-19 vaccination coverage. Primary vaccination efforts should be accelerated in counties with low vaccination coverage.

Capacity for Early Detection of Increases in COVID-19 Cases

CDC considers the capacity to monitor COVID-19 incidence in the following populations particularly useful due to their high risk of exposure or severe illness: students and staff members of kindergarten-grade 12 schools and institutions of higher education, health care workers, residents and staff members of long-term care facilities, incarcerated persons, homeless persons, and workers in high-density work sites. Serial screening testing is an effective method to monitor for the early introduction and spread of COVID-19. Rising case detection rates can serve as an early warning signal that prevention strategies need to be strengthened or added in the facility and the broader community. In addition, strategic serial

testing can help stop transmission by rapidly identifying asymptomatic cases, which are estimated to be the source for at least 50% of SARS-CoV-2 transmission. With rapid identification, infectious persons can be isolated and contact tracing and quarantine can be promptly initiated to control further SARS-CoV-2 transmission.

Populations at Risk for Severe Outcomes from COVID-19

CDC recommends additional prevention strategies to safeguard populations at highest risk for severe outcomes from COVID-19, particularly in the context of the highly transmissible Delta variant. Unvaccinated persons remain at risk for infection, severe illness, and death. Advanced age, pregnancy, and an increasingly well-defined set of underlying medical conditions increase the risk for serious outcomes from COVID-19 among unvaccinated persons. In addition, long-standing systemic health and social inequities have put members of certain racial and ethnic minority groups at increased risk for serious illness and mortality from COVID-19. Persons taking immunosuppressive medications, persons with hematologic cancers, and hemodialysis patients, among others, have shown reduced immunologic responses to COVID-19 mRNA vaccination and might remain at increased risk for severe COVID-19 following vaccination. As reported in yesterday's Briefing, the CDC recommends unvaccinated persons should continue following all prevention strategies, including wearing a mask, until they are fully vaccinated. Immunocompromised persons should continue to take all recommended precautions until advised otherwise by their health care provider. Emerging evidence suggests that fully vaccinated persons who do become infected with the Delta variant are at risk for transmitting it to others. (See below)

CDC Science Brief: COVID-19 Vaccines and Vaccination

July 27, 2021 Highlights

- All COVID-19 vaccines currently authorized in the United States are effective against COVID-19, including serious outcomes of severe disease, hospitalization, and death.
- Available evidence suggests the currently authorized mRNA COVID-19 vaccines (Pfizer-BioNTech and Moderna) are highly effective against hospitalization and death for a variety of strains, including Alpha (B.1.1.7), Beta (B.1.351), Gamma (P.1), and Delta (B.1.617.2); data suggest lower effectiveness against confirmed infection and symptomatic disease caused by the Beta, Gamma, and Delta variants compared with the ancestral strain and Alpha variant. Ongoing monitoring of vaccine effectiveness against variants is needed.
- A growing body of evidence indicates that people fully vaccinated with an mRNA vaccine (Pfizer-BioNTech or Moderna) are less likely than unvaccinated persons to acquire SARS-CoV-2 or to transmit it to others. However, the risk for SARS-CoV-2 breakthrough infection in fully vaccinated people cannot be completely eliminated as long as there is continued community transmission of the virus.
- Studies are underway to learn more about the effectiveness of Johnson & Johnson vaccine.
- At this time, there are limited data on vaccine effectiveness in people who are immunocompromised. People with immunocompromising conditions, including those taking immunosuppressive medications, should discuss the need for personal protective measures after vaccination with their healthcare provider.
- This updated science brief synthesizes the scientific evidence supporting CDC's guidance for fully vaccinated people and will continue to be updated as more information becomes available.