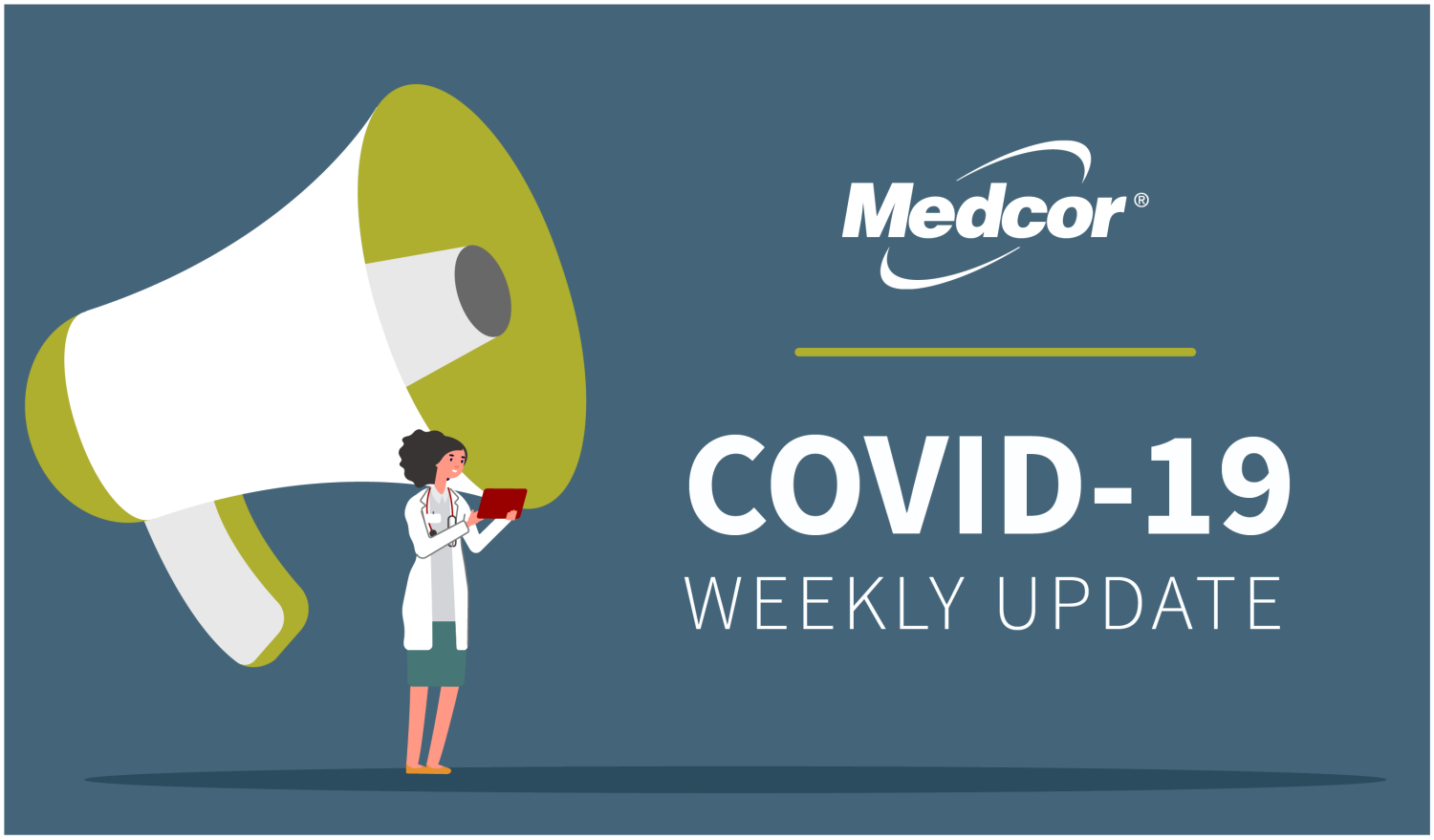


Trend Update for the United States: Declining Cases

Cases
New Cases (Daily Avg)
39,036

Case Trends

Sep 2022 Oct 2022

Deaths
New Deaths (Daily Avg)
338

Death Trends

Sep 2022 Oct 2022

Hospitalizations
New Admissions (Daily Avg)
3,294

Admission Trends

Sep 2022 Oct 2022

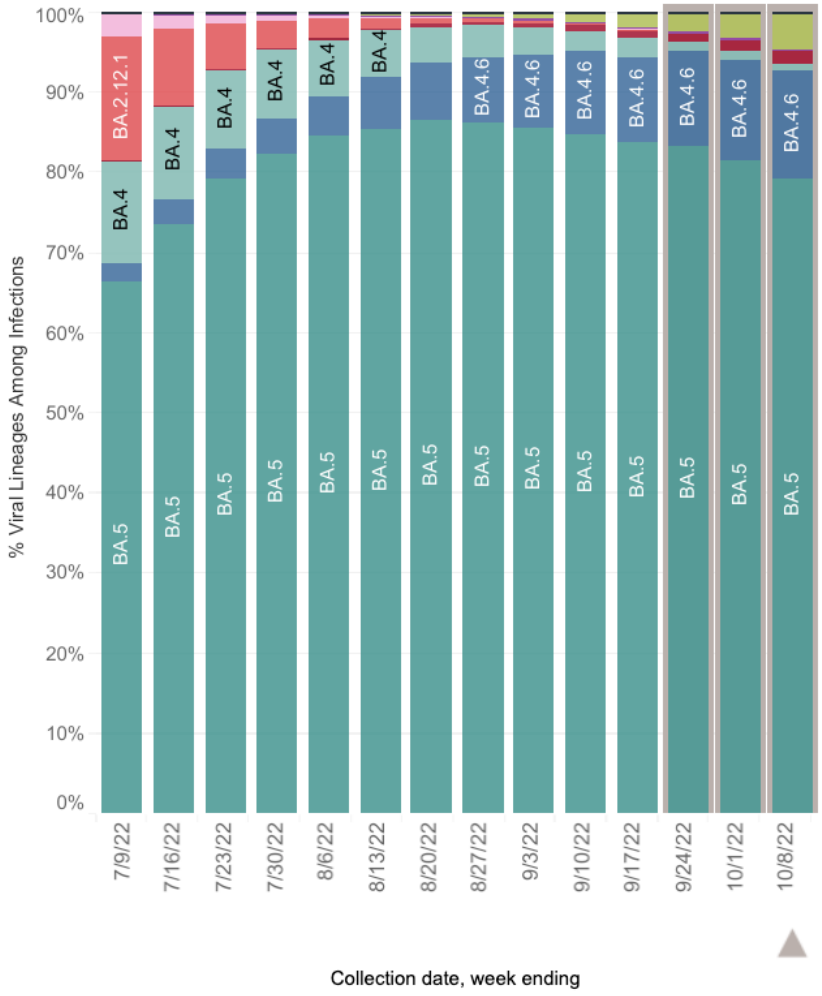
Total Cases	Total Deaths	Current Hospitalizations
96,534,688	1,057,504	19,005

There continues to be a decline in deaths and hospitalizations related to COVID-19, confirming a trend that started several weeks ago.

Vaccination has proven effective at preventing severe illness, death, and hospitalization from the COVID-19 virus. A new "bivalent" booster appears to be more specific for Omicron mutations and is strongly encouraged for all those eligible. (over age 5).

Vaccination for influenza ("the flu") is compatible with COVID-19 boosters. Both can safely be given simultaneously. Predictions are for a more severe flu season, however the flu vaccine is predicted to have excellent coverage.

Prominent Variants in the United States and Worldwide



USA

WHO label	Lineage #	US Class	%Total	95%PI
Omicron	BA.5	VOC	79.2%	77.5-80.7%
	BA.4.6	VOC	13.6%	12.4-14.9%
	BF.7	VOC	4.6%	3.9-5.4%
	BA.2.75	VOC	1.8%	1.4-2.4%
	BA.4	VOC	0.8%	0.7-0.9%
	BA.2.12.1	VOC	0.0%	0.0-0.0%
	BA.2	VOC	0.0%	0.0-0.0%
	B.1.1.529	VOC	0.0%	0.0-0.0%
	BA.1.1	VOC	0.0%	0.0-0.0%
Delta	B.1.617.2	VBM	0.0%	0.0-0.0%
Other	Other*		0.0%	0.0-0.0%

* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.

** These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

AY.1-AY.133 and their sublineages are aggregated with B.1.617.2. BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75 and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, sublineages of BA.5 are aggregated to BA.5. Sublineages of BA.1.1 and BA.2.75 are aggregated to the parental B..

All U.S. strains are "Omicron" related variants—which is encouraging. They are highly contagious and spread easily, often avoiding immunity from previous infection. Fortunately, they tend to cause less hospitalization and death.

BA.5: remains the most common variant/mutation and has been circulating widely since early summer. It has decreased slightly, but still accounts for 80% of U.S. infections.

BF.7: subvariant of BA.5, initially spread in China and now gaining foothold in Europe (esp. Belgium) and U.S.

XBB (BA.2.10): evolved from the BA.2 Omicron subvariant ("Stealth"), spreading in Far East, especially Singapore, where it accounts for more than 50% of infection. Like most variants, it is highly transmissible, but not likely to cause severe disease.

Currently, there are no new recommendations for prevention and treatment of COVID-19 in light of current or emerging variants. As new variants emerge, cases may increase, but current protections remain effective.