United States at a Glance

Collapse

Trend in % Test Positivity	Trend in % Emergency Department Visits
+1.7% in most recent week	+1.8% in most recent week
Trend in Hospital Admissions	**Trend in % COVID-19 Deaths**
+9.7% in most recent week	+8.3% in most recent week
Total Hospitalizations 6,502,997	**Total Deaths** 1,155,145

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Variant Proportions

Monitoring Variant Proportions

SARS-CoV-2, the virus that causes COVID-19, is constantly changing and accumulating mutations in its genetic code over time. New variants of SARS-CoV-2 are expected to continue to emerge. Some variants will emerge and disappear, while others will emerge and continue to spread and may replace previous variants.

To identify and track SARS-CoV-2 variants, CDC uses genomic surveillance. CDC's national genomic surveillance system collects SARS-CoV-2 specimens for sequencing through the National SARS-CoV-2 Strain Surveillance (NS3) program, as well as SARS-CoV-2 sequences generated by commercial or academic laboratories contracted by CDC and state or local public health laboratories. Virus genetic sequences are analyzed and classified as a particular lineage. The proportions of SARS-CoV-2 variants in a population are calculated nationally, by HHS region, and by jurisdiction. The sequences analyzed through CDC's national genomic sequencing and bioinformatics efforts fuel the comprehensive and population-based U.S. surveillance system established to identify the emergence and spread of variants.

Rapid virus genomic sequencing data combined with phenotypic data are further used to determine whether COVID-19 tests, treatments, and vaccines authorized or approved for use in the United States will work against emerging variants.

Types of Variant Proportion Data

CDC provides estimates of variant proportions for two-week periods. These proportions are calculated in two ways: weighted estimates and Nowcast estimates.

Weighted Estimates (provided for all two-week periods except the most recent two, two-week periods) are variant proportions that are based on empirical (observed) genomic sequencing data. These estimates are not available for the most recent two-week periods because CDC uses these data to generate the sequencing data, including sample collection, specimen treatment, shipping, analysis, and upload into public databases.

Lineages with weighted estimates less than 1% of all circulating variants are combined with their parent lineage. When the weighted estimate of a lineage crosses the 1% threshold and has substitutions in the spike protein that could affect vaccine efficacy, transmission, or severity, it may be separated from its parent lineage and displayed on its own in the variant proportions data.

Nowcast estimates (provided for the most recent two two-week periods when the "Nowcast on" option is selected below) are model-based projections of variant proportions for the most recent two-week periods to enable timely public health action. CDC uses the Nowcast to forecast variant proportions before the weighted estimates are available for a given two-week period.

Projections for an emerging lineage with a high growth rate may have a higher degree of uncertainty (wider predictive interval) when it is just beginning to spread and still has low weighted estimates. Projections may also be biased during times of delayed reporting (e.g., around holidays). CDC performs frequent evaluations of Nowcast to inform performance improvements.

Nowcast estimates for a parent lineage include projected changes in its child lineages until a child lineage's weighted estimate crosses the 1% threshold. Once the weighted estimate crosses the 1% threshold for the two-week period with sequences available, the initial Nowcast projections for the child lineage proportion for the two recent two-week periods may be substantially higher than 1%.

CDC provides updated variant proportions for weighted estimates and Nowcast estimates every other week on Friday.

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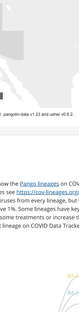
HHS Region: USA

Data for the 2-Week Period Ending on: 11/25/2022(Nowcast)

This shows weighted and Nowcast estimates for the United States. The table and map show estimates for the 2-week period ending on 11/25/2022(Nowcast) if available.

Weighted and Nowcast Estimates in United States for 2-Week Periods in 8/6/2022 – 11/25/2022

Move over (or tap in mobile) any lineage of interest to see the amount of uncertainty in that lineage's estimate.



Nowcast Estimates in United States for 11/12/2022 – 11/25/2022

SHO Variant	Lineage #	USA %Total	USA 95%PI
OTHERS		19.7%	[8.3%,35.7%]
	BA.2.75	7.7%	[3.3%,13.9%]
	BA.2.10	0.8%	[0.3%,1.6%]
	BL.1	1.2%	[0.5%,2.3%]
	BM.1.1	7.4%	[3.1%,13.5%]
	CA.1	1.2%	[0.5%,2.3%]
	CH.1.1	2.2%	[0.9%,4.1%]
	XBB.1.16.6	2.2%	[1.2%,3.6%]
	XBB.1.16.11	1.9%	[1.1%,3.1%]
	XBB.2.3	1.8%	[1.4%,2.3%]
	EG.5	6.4%	[4.9%,8.2%]
	EG.5.1	30.9%	[26.4%,35.5%]
	HK.3	12.7%	[9.8%,16.1%]
	XBB.1.9.1	0.2%	[0.1%,0.4%]
	XBB.1.9.2	0.1%	[0.0%,0.3%]
	XBB.1.16	1.5%	[0.8%,2.5%]
	FL.1.5.1	0.4%	[0.4%,0.5%]
	GK.1	0.3%	[0.4%,0.9%]
	XBB.1.16.1	0.2%	[0.2%,0.3%]
	GM.1.1	0.1%	[0.1%,0.2%]
	XBB.1.5.70	0.1%	[0.0%,0.2%]
	XBB.1.5.72	0.1%	[0.0%,0.2%]
	XBB.1.19	0.0%	[0.0%,0.1%]
	XBB.1.5.10	0.0%	[0.0%,0.1%]
	XBB.1.5.53	0.0%	[0.0%,0.1%]
	XBB.1.5.1	0.0%	[0.0%,0.1%]
	XBB.1.5.77	0.0%	[0.0%,0.1%]
	XBB.1.5.70.1	0.0%	[0.0%,0.1%]
	XBB.1.5.70.2	0.0%	[0.0%,0.1%]
	XBB.1.5.70.3	0.0%	[0.0%,0.1%]
	XBB.1.5.70.4	0.0%	[0.0%,0.1%]
	XBB.1.5.70.5	0.0%	[0.0%,0.1%]
	XBB.1.5.70.6	0.0%	[0.0%,0.1%]
	XBB.1.5.70.7	0.0%	[0.0%,0.1%]
	XBB.1.5.70.8	0.0%	[0.0%,0.1%]
	XBB.1.5.70.9	0.0%	[0.0%,0.1%]
	XBB.1.5.70.10	0.0%	[0.0%,0.1%]
	XBB.1.5.70.11	0.0%	[0.0%,0.1%]
	XBB.1.5.70.12	0.0%	[0.0%,0.1%]
	XBB.1.5.70.13	0.0%	[0.0%,0.1%]
	XBB.1.5.70.14	0.0%	[0.0%,0.1%]