New omicron subvariant surges to 40.5% as COVID hospitalizations rise

With a new year, a new omicron subvariant is here to drive up cases, hospitalizations.

Beth Mole - Jan 3, 2023 5:18 pm UTC



Enlarge / Revelers celebrate New Year's Eve in Times Square on January 1, 2023, in New York City. This year's New Year's Eve returned to pre-COVID-19 pandemic numbers, with around 1 million people estimated to fill Times Square. Getty | Alexi Rosenfeld

A new omicron coronavirus subvariant dubbed XBB.1.5 now accounts for an estimated 40.5 percent of all US COVID-19 cases amid a winter wave that is driving up hospitalizations, particularly in places where XBB.1.5 is most prevalent.

Nationwide, new reported cases are hovering around 59,000 per day, which is still relatively low compared with previous waves. But case data has become murkier over the 3-year-old pandemic, with fewer testing sites available now and the results of common at-home tests going unreported. Additionally, data reporting generally lags around end-of-year holidays, meaning case reports may jump in the coming days as backlogged data rolls in.

Hospitalizations, however, are clearly rising, with an average of around 45,000 hospitalized per day, according to data tracking by The New York Times. National hospitalization rates now rival those from the peak over this past summer driven by bygone omicron subvariants, federal data shows. Some of the areas seeing the large upticks in hospitalizations are those where the new subvariant, XBB.1.5, is most prevalent. For instance, in the Northeast (federal health region 1), XBB.1.5 has the highest regional proportion, accounting for 75 percent of cases, and

hospitalizations have risen 16 percent over the prior seven days, the largest region-specific rise, according to data from the Centers for Disease Control and Prevention.

Wave factors

This does not mean XBB.1.5 is causing more severe disease than previous variants. Hospitalizations can increase due to a variety of reasons as a yet more-transmissible subvariant takes off. That includes waning immunity and the abysmal uptake of the bivalent booster, particularly among older adults, who are most vulnerable to severe disease. Currently, only 15 percent of Americans age 5 and over have gotten their bivalent shot, and only 37.5 percent of people age 65 and over have been boosted. In December, the CDC quietly expanded access to the bivalent vaccine to children ages 6 months to 5 years, but just 3 percent of that population has completed a primary series.

Meanwhile, people are traveling, gathering, and spending more time indoors amid holidays and cold weather—all things that can boost transmission. Some places where XBB.1.5 has yet to take off are also seeing rises in hospitalizations. For instance, in the South (health region 4), XBB.1.5 only accounts for about 19 percent of cases, with BQ.1.1 still accounting for 41.5 percent. Hospitalizations in the region have increased by nearly 14 percent over the prior week's data.

XBB.1.5 has a clear transmission advantage over other omicron subvariants and is expected to continue spreading throughout the country. The virus is a sublineage of omicron XBB, which is a combination of two BA.2-sublineages that merged: BJ.1 (BA.2.10.1.1) and BA.2.75. XBB.1.5 has three additional notable mutations compared with the original XBB.

Though early research has suggested that XBB.1.5 is even more immune-evasive than its predecessors, data published late last month in the New England Journal of Medicine offered some good news in regard to vaccine protection. The data indicated that people boosted with the BA.5-targeting bivalent vaccine used in the US had stronger neutralizing antibody activity against XBB than those who had only received the original booster.



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