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HOSPITALIZED COVID-19 PATIENTS HAVE A 35% HIGHER RISK OF DEATH COMPARED TO FLU PATIENTS LAST SEASON

During the 2023-2024 **respiratory virus season,** hospitalized COVID-19 patients in the U.S. had a 35% higher risk of death from any cause compared to those hospitalized for the flu, down from a 61% higher risk in the previous season.

Researchers extracted electronic medical records from the U.S. Department of Veterans Affairs across all 50 states to analyze data on COVID-19 and flu patients hospitalized from October 2023 to March 2024. The study period included the emergence of the JN.1 SARS-CoV-2 variant in December 2023. The follow-up period was 30 days or until death, with causes of death not examined.

A total of 8,625 patients were hospitalized for COVID-19 (unadjusted death rate, 5.70%), and 2,647 were hospitalized for the flu (unadjusted death rate, 3.04%).

COVID-19 patients were more likely to die within 30 days compared to **flu** patients (adjusted death rate, 5.70% vs. 4.24%; adjusted hazard ratio -HR- 1.35). The difference between the two groups was not significant before and during the predominance of the JN.1 variant (adjusted mortality rate, 5.46% vs. 5.82%; adjusted HR, 1.07). Compared to another study using the same database and methods, the **30-day mortality rate** was 5.97% in 2022-2023 vs. 5.70% in 2023-2024 for **COVID-19** and 3.75% in 2022-2023 vs. 4.24% in 2023-2024 for the flu. Both adjusted HRs were statistically significant, with an HR of 1.61 in 2022-2023 and 1.35 in 2023-2024, with overlapping 95% confidence intervals (CI).

Mutations in the COVID-19 or flu virus and/or the use of **vaccines** and antiviral drugs influence the relative risk of death.

Additionally, the results should be interpreted in the context of nearly twice as many hospitalizations for COVID-19 compared to the flu during the 2023-2024 respiratory virus season.

Statistically, the risk of death was not significantly different between the COVID-19 and flu **cohorts** during the dominant JN.1 period, suggesting that the JN.1 variant may have a severity profile similar to that of variants that emerged immediately before.

Given that the majority of participants were older men, the results may not be applicable to the general population. Vaccination protection for vulnerable groups against both infections should be expanded to avoid the effects of possible new mutations.

Adapted after Mary Van Beusekom, 15 May 2024