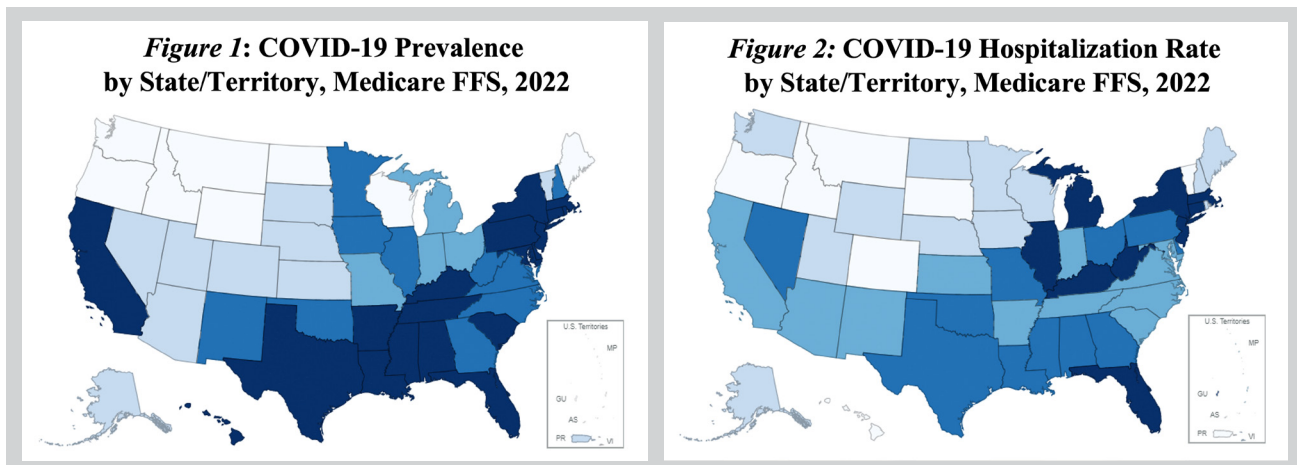


## Chronic Condition Prevalence among Medicare Fee-For-Service Enrollees with COVID-19

The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), more commonly known as COVID-19, is a highly transmissible virus that emerged in 2019. The virus quickly resulted in a global pandemic. As of January 2024, more than one hundred million cases of COVID-19 and more than one million COVID-19-related deaths in the United States have been reported to the Center for Disease Control and Prevention (CDC).<sup>1</sup> People with COVID-19 may experience a wide array of both physical and mental symptoms, ranging from mild symptoms to severe illness.<sup>2</sup> People with chronic conditions have a higher risk of severe illness from COVID-19. According to CDC, many chronic conditions, such as heart conditions, diabetes, chronic lung disease, chronic kidney disease, obesity, and cancer can increase the risk of severe illness from COVID-19.<sup>3</sup> The impact of COVID-19 also varies by racial and ethnic groups, with African American, Hispanic, and Native American individuals bearing a disproportionate burden of COVID-19 infections, hospitalizations, and deaths.<sup>4</sup>

### Prevalence and Hospitalization Rates

The Mapping Medicare Disparities (MMD) Tool<sup>5</sup> developed by the Centers for Medicare & Medicaid Services (CMS) Office of Minority Health (OMH) shows the COVID-19 prevalence and hospitalization rates varied by demographic characteristics and geography. Overall COVID-19 prevalence and hospitalization rates among Medicare fee-for-service (FFS) enrollees in 2022 by state/territory are presented in **Figures 1 and 2**, with more detailed data available in the MMD Tool. (Results presented in this data snapshot are based on analysis of preliminary 2022 Medicare FFS claims.)



<sup>1</sup>CDC. COVID Data Tracker. [CDC COVID Data Tracker: Daily and Total Trends](#)

<sup>2</sup>CDC. Symptoms of COVID-19. [Symptoms of COVID-19 | CDC](#)

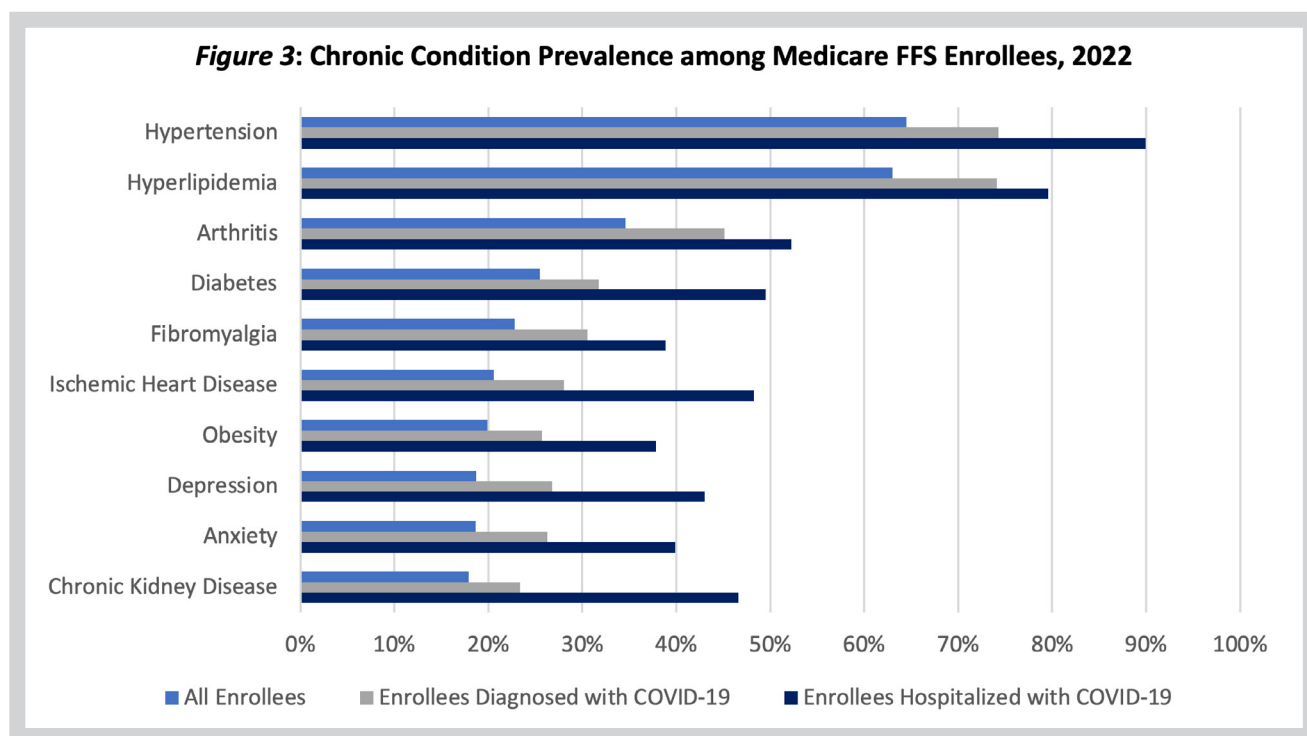
<sup>3</sup>CDC. COVID-19: People with Certain Medical Conditions. [People with Certain Medical Conditions | CDC](#)

<sup>4</sup>CDC. Risk for COVID-19 Infection, Hospitalization, and Death by Race/Ethnicity. [Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity | CDC](#)

<sup>5</sup>CMS. Mapping Medicare Disparities Tool. [Mapping Medicare Disparities \(MMD\) Tool | CMS](#)

## Chronic Condition Prevalence

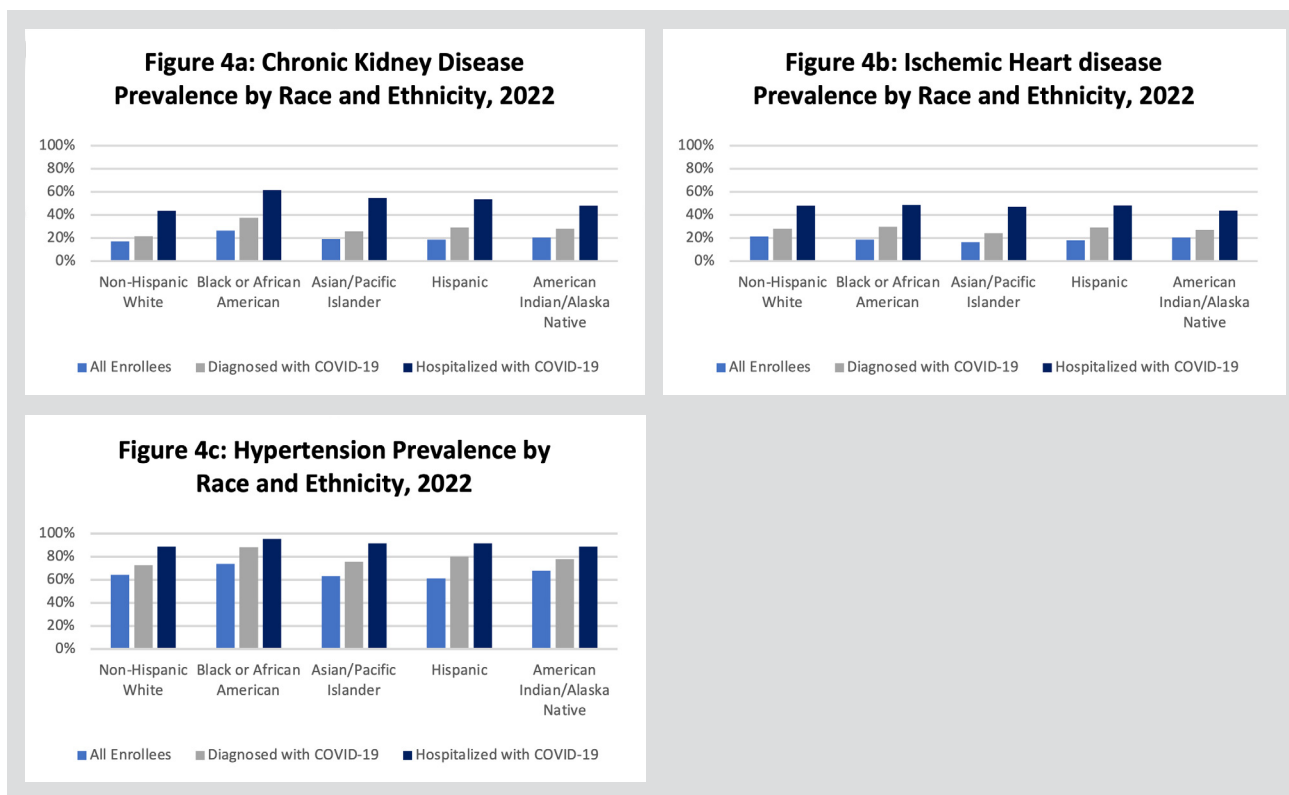
Using data from CMS's Chronic Conditions Data Warehouse, **Figure 3** presents the top ten most prevalent chronic conditions among the overall Medicare FFS population in 2022, along with the prevalence rates of these conditions among enrollees who were diagnosed with COVID-19 and those who were hospitalized for COVID-19 (a subset of those who were diagnosed with COVID-19). Compared to overall Medicare FFS population, enrollees who were diagnosed with COVID-19 or hospitalized for COVID-19 had a higher prevalence rate across all of these top ten chronic conditions. The elevated prevalence rates were more pronounced among Medicare enrollees who were hospitalized for COVID-19. This finding is consistent with the observation in the literature that people with chronic conditions are more likely to experience symptoms and severe illness from COVID-19.



The difference in chronic condition prevalence rates between overall Medicare FFS population and those who were diagnosed with or hospitalized for COVID-19 varied considerably across conditions. The three conditions that were associated with the largest difference in prevalence between the overall enrollee population and those hospitalized for COVID-19 were chronic kidney disease, ischemic heart disease, and hypertension. Among enrollees hospitalized for COVID-19, 47.9% were diagnosed with chronic kidney disease, compared with 17.9% among the overall enrollee population, a difference of 30 percentage points. This finding shows that chronic conditions do not affect the risk of severe illness with COVID-19 in a uniform way.

## Chronic Condition Prevalence by Racial and Ethnic Groups

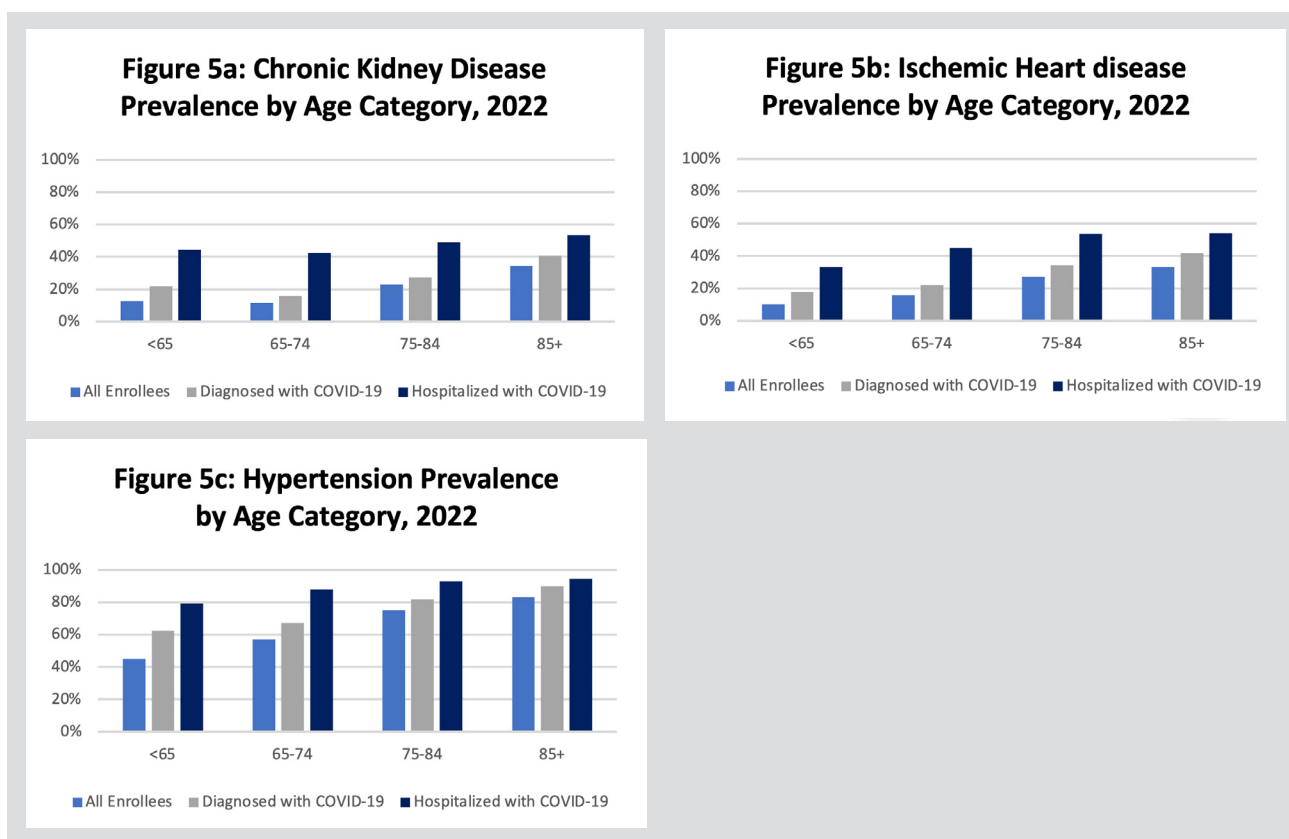
In addition to variation among chronic conditions, there are significant variations in COVID diagnosis and hospitalization rates across demographic groups. **Figures 4a, 4b, and 4c** shows the age-standardized prevalence of chronic kidney disease, ischemic heart disease, and hypertension by race and ethnicity as well as COVID-19 status among Medicare FFS enrollees. In general, the prevalence rate is higher among those who were either diagnosed or hospitalized with COVID-19, relative to the overall enrollee population, across all race/ethnicity groups and all three conditions.



However, the impact of chronic conditions on severe illness of COVID-19 (as measured by COVID-19 hospitalizations) appears to vary by race/ethnicity groups. For chronic kidney disease, Asian/Pacific Islander enrollees have the largest difference of prevalence rate (35.7 percentage points) between overall enrollee population and those hospitalized with COVID-19 (19.1% vs. 54.8%), closely followed by Black or African American and then Hispanic enrollees (with 34.9 and 34.6 percentage point differences, respectively). In contrast, Non-Hispanic White enrollees have the smallest difference of prevalence rate (26.3 percentage points) between overall enrollee population and those hospitalized with COVID-19 (17.2% vs. 43.5%). Asian/Pacific Islander enrollees also experienced the largest difference for ischemic heart disease (30.7 percentage points), closely followed by Hispanic (30.3 percentage points) and Black or African American (30.0 percentage points) enrollees, while American Indian/Alaska Native enrollees displayed the smallest difference (23.3 percentage points) between the two groups (20.7% vs. 44.0%). For hypertension, Hispanic enrollees experienced the largest difference in prevalence (30.4 percentage points) between the general enrollee population and the COVID-19 hospitalized enrollees (61.3% vs. 91.7%), followed by Asian/Pacific Islander enrollees (28.8 percentage points). Both of these groups experienced a substantially larger difference than any other race/ethnicity group, which varied between 20.7 percentage points (American Indian/Alaska Native enrollees) and 24.6 percentage points (Non-Hispanic White enrollees).

## Chronic Condition Prevalence by Age groups

There is also variation between different age groups for each chronic condition. **Figure 5a, 5b, and 5c** displays the prevalence rate of chronic kidney disease, ischemic heart disease, and hypertension by age group as well as COVID-19 status among Medicare FFS enrollees. The prevalence rate increases considerably in older age groups across all three conditions, particularly in the 75–84 and 85+ age groups. This same trend is observed consistently across the overall population, the COVID-19 diagnosed population, and the COVID-19 hospitalized population. Within each age group, the prevalence rate is always higher among those who were either diagnosed or hospitalized for COVID-19, compared with the overall enrollee population. For all three of the selected chronic conditions, the percentage point difference in prevalence between the COVID-19 hospitalized and overall enrollee population was smallest among the 85+ population, likely due to the higher baseline prevalence for almost all chronic conditions within this group.



Overall, chronic conditions tend to be more prevalent among Medicare FFS enrollees who were diagnosed or hospitalized for COVID-19. Data in **Figures 4 and 5** show that demographic characteristics, such as race/ethnicity and age, could play an important role in influencing how chronic conditions affect the risk of severe illness from COVID-19. For more information regarding COVID-19, please see the COVID-19 Updates page on the CMS website ([COVID-19 Updates | CMS](#)). For more information on COVID-19 vaccinations, please see the COVID-19 Vaccine Policies & Guidance page ([COVID-19 Vaccine Policies & Guidance | CMS](#)), which includes relevant information for enrollees, providers, state Medicaid programs, and health plans.



## Enrollee Resources

- [What is COVID-19?](#)
- [Coronavirus \(COVID-19\) Testing](#)
- [COVID Data Tracker](#)
- [COVID-19 Nursing Home Data](#)
- [Medicare COVID-19 Hospitalization Trends Report](#)
- [CMS Fact Sheet: How You Can Take Action](#)

## Provider Resources

- [CDC: Information on COVID-19](#)
- [CMS: COVID-19 Vaccine Toolkit](#)
- [Infection Control: Severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\)](#)
- [American Medical Association: Managing Mental Health During COVID-19](#)
- [IHI: A Guide to Promoting Health Care Workforce Well-Being During and After the COVID-19 Pandemic](#)



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