More than 2 in 5 Medicare beneficiaries in nursing homes and skilled nursing facilities were diagnosed with COVID-19 or likely COVID-19 in 2020, according to a new report from the Office of Inspector General (OIG) of the Department of Health and Human Services, with cases spiking during surges in April and December.

The report, which described COVID-19 in nursing homes as having a “devastating impact,” found the overall mortality rate among such patients climbed 32% in 2020, with 169,291 more deaths in 2020 compared with 2019, before the first US case was confirmed. In 2020, each month had a higher mortality rate than the corresponding month in 2019.

“The toll that the COVID-19 pandemic has taken on Medicare beneficiaries in nursing homes demonstrates the need for increased action to mitigate the effects of the ongoing pandemic and to avert such tragedies from occurring in the future,” the OIG report notes.

The analysis reportedly is the most comprehensive assessment of the pandemic’s toll in nursing homes to date from the federal government. Medicare did not require nursing homes to report COVID-19 cases and deaths occurring before early May.

In conducting the analysis, the researchers compared overall deaths among all Medicare enrollees in nursing homes in 2020 with overall deaths among Medicare beneficiaries in nursing homes the previous year, with “excess deaths” providing an indication of COVID-19’s toll.

Of the approximately 3.1 million Medicare beneficiaries living in nursing homes in 2020, 1.3 million, or 42%, had or likely had COVID-19, the OIG analysis found, compared with 6% of the US population reported to have been infected with SARS-CoV-2 in 2020.

Confirmed or likely cases of COVID-19 among the nursing home residents grew exponentially in the spring of 2020, from 492 new cases per day in March to an average of 4700 new cases per day in April. After easing somewhat during the summer, new cases surged again at the end of the year, to an average of 6679 daily cases in December 2020.

Overall mortality rates among Medicare beneficiaries in nursing homes in 2020 were also higher compared with rates during corresponding months in 2019, especially in April and December. In April 2020, 81,484 beneficiaries died, nearly 1000 more deaths per day than in April 2019—an overall mortality rate of 6.3% in April 2020 vs 3.5% in April 2019. In December 2020, before vaccines became widely available, the overall mortality rate in this population was 6.2%, compared with 3.8% in December 2019.

The authors said they found similar COVID-19 infection rates among all age groups of Medicare beneficiaries in nursing homes and similar infection rates for men and women. However, as previous research has found, Black or Hispanic individuals were at greater risk of developing COVID-19 compared with White individuals. The OIG analysis found that 51% of Black and 49% of Hispanic beneficiaries in nursing homes had or likely had COVID-19 vs 41% of their White counterparts. The analysis also found an elevated COVID-19 rate among Asians (47%), a new finding.

The extent to which overall mortality rates increased in 2020 compared with 2019 also differed among these racial and ethnic groups. Asian Medicare beneficiaries in nursing homes experienced the highest increase, with 27% dying in 2020 compared with 17% in 2019. For Black and Hispanic Medicare beneficiaries, the mortality rate rose from 15% to 23%, whereas the rate among White Medicare enrollees increased from 18% in 2019 to 24% in 2020.
“Dually eligible” patients in nursing homes—those enrolled in both Medicare and Medicaid—were especially vulnerable to COVID-19; more than half (56%) contracted COVID-19 compared with 29% of Medicare-only beneficiaries. Previous research has found dually eligible patients are more likely to be poorer and sicker and spend longer periods in nursing homes than Medicare-only enrollees. This vulnerable group also experienced a larger increase in overall mortality rate between 2019 to 2020, from 19% to 26%, compared with a more modest increase of 16% to 19% from 2019 to 2020 among Medicare-only beneficiaries.

“Understanding how many beneficiaries in nursing homes were affected, who they were, and what characteristics may have put some at greater risk can help prevent future tragedies,” the report says, noting that “this data snapshot” is intended to provided information to help protect vulnerable seniors as well as the general population.

Since COVID-19 vaccines have become available in the United States, nursing home COVID-19 cases have substantially declined. However, as of June 13, vaccination rates of nursing home residents and staff within the 50 states, the District of Columbia, and Puerto Rico varied widely, according to data from the Centers for Medicare & Medicaid Services. On average, 78% of nursing home residents are fully vaccinated, varying from 61% in Nevada to 95% in Vermont. Among nursing home staff members, the national average of fully vaccinated individuals is only 55%, with the lowest proportion in Louisiana (41%) and the highest proportion in Puerto Rico (93%).

A federal government report issued in May found that the majority of US nursing homes experienced multiple COVID-19 outbreaks from May 2020 through January 2021, two-thirds of which began with a staff member. Studies by the Centers for Disease Control and Prevention of more recent nursing home outbreaks after COVID-19 vaccines became available reported that even though vaccination offered substantial protection against COVID-19 infection and serious illness, a small percentage of fully vaccinated residents experienced breakthrough infections, pointing to the importance of continued infection control practices.