In 2020, the first year of the COVID-19 pandemic, homicides in the US involving a firearm climbed to the highest rate in more than 25 years, according to a new analysis from the Centers for Disease Control and Prevention (CDC). The overall firearm-related suicide rate remained nearly level.

Firearms were involved in 79% of all homicides in 2020, increasing from 14,392 to 19,350 deaths, a 35% increase (from 4.6 to 6.1 deaths per 100,000 persons) between 2019 and 2020.

The CDC investigators noted that the economic and social challenges that have accompanied the COVID-19 pandemic may have exacerbated risks associated with homicide and suicide, including income inequality, unemployment, and housing and economic instability. In their analysis, they examined changes in rates of firearm-related homicide and suicide during the COVID-19 pandemic in conjunction with inequalities by race and ethnicity and poverty level. They integrated national vital statistics and population data with measures of urbanization and poverty at the county level to examine firearm homicide and suicide rates by age, sex, race and ethnicity, geographic area, level of urbanization, and level of poverty.

Gun-related homicides increased in 2020 across all demographics, among both men and women, and in metropolitan and rural areas. The report notes, however, that the rise in firearm homicides was not equally distributed, with groups that consistently have the highest gun-related homicide rates (young persons, males, and Black individuals) experiencing the largest increases in 2020.

Among males, firearm-related homicides increased from 12,108 in 2019 to 16,396 in 2020 (a nearly 36% increase, from 7.6 to 10.4 deaths per 100,000 persons). Gun-related homicides also rose substantially in 2020 among women, from 2,284 deaths in 2019 to 2,954 deaths in 2020 (a 29% increase, from 1.4 to 1.9 deaths per 100,000 in 2019 vs 2020).

The largest rates and increases in firearm homicides occurred among Black males aged 10 to 24 years (from 54.9 to 77.3 deaths per 100,000 in 2019 vs 2020) and 25 years to 44 years (66.5 to 90.6 deaths per 100,000 in 2019 vs 2020), followed by American Indian and Alaska Native men aged 25 years to 44 years (18.9 to 28.7 deaths per 100,000 in 2019 vs 2020). Among females, the highest rates of firearm-related homicides occurred among Black females aged 10 to 24 years (6.4 to 9.1 deaths per 100,000 in 2019 vs 2020) and 25 to 44 years (6.9 to 10.2 deaths per 100,000 in 2019 vs 2020).

"These increases represent the widening of long-standing disparities in firearm homicide rates" along racial, ethnic, and income divides, the authors wrote, noting that a number of factors, such as income inequality, unemployment, and housing and economic instability are associated with risks for both homicide and suicide.

Roughly one-quarter of the US population in 2020 lived in the most impoverished counties. However, disproportionate numbers of some racial and ethnic groups—about 29% of the Hispanic population, 39% of the Black population, and 44% of the American Indian and Alaska Native population—reside in the poorest counties, the report found.

"Racial and ethnic minority groups are more likely to live in communities with high surrounding poverty, and firearm homicide and suicide are also associated with poverty," the authors said.

The highest firearm homicide rates occurred at higher poverty levels, with 7.7 deaths per 100,000 persons living in counties with the highest poverty level in 2019, rising to 10.8 deaths per 100,000 persons in 2019. In contrast, the lowest firearm homicide rates occurred among people...
living in counties with the lowest poverty level, with 2.0 deaths per 100,000 persons in 2019 and 2.4 deaths per 100,000 persons in 2020.

In 2020, counties with the highest poverty level had firearm homicide and firearm suicide rates that were 4.5 and 1.3 times as high, respectively, as counties with the lowest poverty level. When race and ethnicity were factored in, firearm homicide rates were highest and increased most among Black persons at the 2 highest poverty levels.

The majority of suicides in 2020 involved a firearm (53%), and the number of such deaths remained nearly level, increasing from 23,888 in 2019 to 24,245 in 2020. As with homicides, however, some populations were disproportionately affected, with suicides involving a firearm increasing most among non-Hispanic American Indian and Alaska Native males.

Poverty was also associated with firearm-related suicide, with the lowest yearly rates found at the lowest poverty level and the highest firearm suicide rates at the highest poverty level for the US population overall and among Hispanic, Black, and White individuals. The largest rate increases occurred among American Indian and Alaska Native persons at the 2 highest poverty levels.

The study's findings highlight the importance of focusing on disproportionately affected populations and implementing comprehensive strategies to address factors that contribute to homicide and suicide, the authors said. “For example, policies that enhance economic and household stability (eg, temporary assistance to families, child care subsidies, tax credits, housing assistance, and livable wages) can reduce family poverty and other risk factors for homicide and suicide (eg, family stress and substance use),” they wrote.

The report also highlighted examples of approaches that communities have taken to address factors contributing to gun violence, such as enhancing and maintaining green spaces and remediation of vacant buildings in communities. For example, an effort to restore vacant lots in a major US city by clearing debris or adding vegetation was associated with significant reductions in gun violence, with the largest reduction (29%) occurring in areas with the highest poverty.

Other examples of violence-prevention strategies the authors pointed to include the White Mountain Apache Suicide Surveillance and Prevention System, which was associated with a reduction in suicides and suicide attempts; and community and street outreach programs, such as Cure Violence, which have demonstrated a reduction in firearm violence by connecting populations at risk for violence with community services and by preventing retaliatory shootings, mediating ongoing conflicts, and continuing to follow up to reduce tensions.

“Firearm deaths are preventable—not inevitable—and everyone has a role to play in prevention,” said Debra Houry, MD, MPH, the CDC’s acting principal deputy director and director of the CDC’s National Center for Injury Prevention and Control, in a statement. “Resources like CDC’s violence prevention technical packages and surveillance systems can give leaders tools to lay the foundation for healthier and safer communities.”