The Impact of COVID-19 on Cardiovascular Disease in the US

The COVID-19 pandemic has had far-reaching implications on the health of all Americans, including those living with cardiovascular disease (CVD). A growing body of evidence suggests the pandemic has led to worsening CVD outcomes in the US – both directly, through infection-related cardiovascular complications, and indirectly, through reduced utilization of cardiovascular care and services.

Link between CVD and COVID-19

Research demonstrates a link between CVD and COVID-19. Potential long-term cardiovascular complications exist for hospitalized patients, those with mild cases of the disease, and even people with no prior heart-related condition.

25%

1/4 of those hospitalized with COVID-19 experienced cardiovascular complications[1]

40%

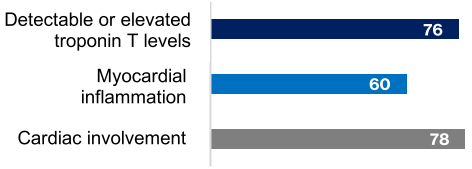
Cardiovascular complications, contributed to 40% of all COVID-19 related deaths[1]

25-38%

In-hospital COVID-19 mortality rate for patients with pre-existing CVD – **a rate roughly 3X higher than patients without CVD**[2]

Cardiac imaging showed complications for majority of COVID-19 patients[3]

Number of Patients in a Prospective Observational Cohort of 100 German Patients



COVID-19 indirectly worsened cardiovascular outcomes

Early evidence shows that the COVID-19 pandemic has also had a significant indirect toll on cardiovascular outcomes in the US, resulting in increased deaths. Experts attribute this impact to:

- **Avoidance of hospitals** out of fear of exposure to the virus;
- **Increased health care system strain**; and
- **Deferral of** semi-elective cardiovascular **procedures, risk factor screening, and care**.[4]

Compared to before the pandemic:

Decrease in daily acute cardiovascular hospitalizations (March 2019 vs. 2020)[5] — **43%**

Decrease in semi-elective cardiac catheterization laboratory STEMI activations[6] — **38%**

Decrease in cholesterol testing weekly volume (March-September 2019 vs. 2020 in one health system)[7] — **39%**

Disproportionate impact on communities of color

The indirect impact of COVID-19 on CVD outcomes was **more pronounced among minority communities** compared to the non-Hispanic White population.

20%

Relative increase in heart disease deaths for Black, Hispanic and Asian American populations during the pandemic[8]

13%

Relative increase in cerebrovascular disease deaths for Black, Hispanic and Asian American populations during the pandemic[8]

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