

## **Cardiac Mortality Rates Postpandemic**



Studies from 15 countries show a 20–34% drop in acute myocardial infarction (AMI) hospitalisations after COVID-19 began, along with fewer cardiac procedures and, in some places, higher inpatient STEMI mortality. However, it's unclear if this reflects true changes in cardiac events, altered hospital use, or data limitations.

To clarify, researchers analysed population-based cardiac mortality using state death certificate data to compare actual and expected monthly cardiac death rates during and after the pandemic.

This cohort study analysed Massachusetts death certificate data from January 2014 to July 2024 to assess monthly cardiac deaths, stratified by location of death. Using U.S. Census data, researchers calculated age- and sex-standardised death rates based on the 2014 population. Expected monthly cardiac death rates were estimated using negative binomial regression models from 2014–2019, accounting for age, sex, month, year, and population size. Analyses were repeated by death location.

Among 127,746 individuals (mean age 77; 47.9% female), annual cardiac mortality rates from 2020 to 2023 were consistently higher than expected—16% higher in 2020, 17% in 2021 and 2022, and 6% in 2023. Stratified data showed that cardiac deaths at home exceeded expected rates from 2020 to 2022, while hospital deaths were higher than expected from 2020 to 2023.

The study found a sustained increase in cardiac deaths in Massachusetts beginning in 2020, with more deaths occurring at home and exaggerated seasonal patterns. These findings contrast with reports of fewer hospital admissions for cardiac emergencies during the pandemic, suggesting that many events may have occurred outside hospitals. Similar trends have been reported in the UK.

While limitations include possible misclassification of cause of death, standardised death certificate data remain reliable. The study highlights a long-term rise in cardiac mortality and changing death locations post-COVID-19, underscoring the need for more resilient cardiac care and caution in relying solely on hospital data to assess public health trends.

Source: <u>JAMA</u> Image Credit: iStock

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