



Hospital Cardiovascular Event Rate in Barbados

Briefing created by the Barbados National Chronic Disease Registry, The University of the West Indies.

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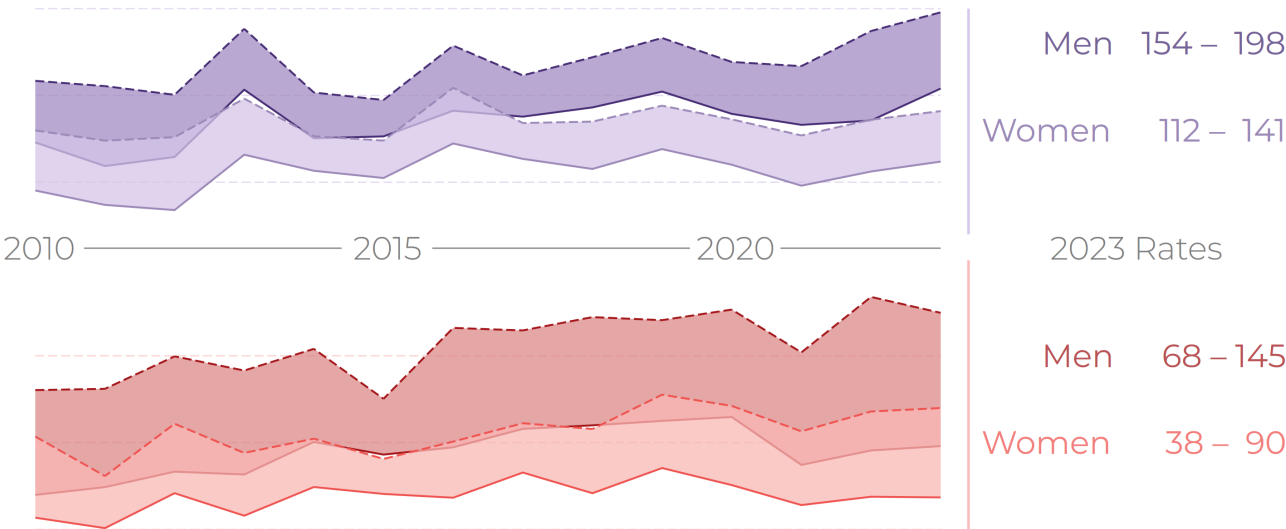
Why This Matters

Heart attacks and strokes remain the leading causes of serious illness and death in Barbados. Tracking how often these events occur in hospital helps us see whether prevention and treatment efforts are working. Measuring rates—not just counts—lets us compare fairly over time, even as the population grows and ages. This approach helps us tell whether apparent increases reflect real changes in cardiovascular risk, or simply demographic shifts. By following these patterns, we can see where progress is being made and where renewed attention is needed.

What We Did

We looked at all heart attack and stroke events that were treated in hospital or recorded as the main cause of death. Using Barbados population estimates, we calculated how many people per 100,000 experienced these conditions each year. We then adjusted rates for age so that figures from different years, or between men and women, could be compared on equal terms. These analyses give a clear, evidence-based picture of how cardiovascular disease is affecting Barbadians over time.

Heart Attacks Leave More Deaths Unseen Than Strokes



Heart Attacks Claim More Lives Before Hospital Care: Age-Adjusted Rates in Barbados, 2010–2023

The figure above tracks rates of heart attack and stroke in Barbados between 2010 and 2023 for men and women. Each solid line shows the number of hospital-treated events per 100,000 people, while the dotted line adds in deaths identified only through death certificates. The shaded areas between the lines highlight the “hidden” events that occur outside the hospital system. Across all years, men had higher rates than women for both conditions, reflecting their greater cardiovascular risk. But the size of the gap between the solid and dotted lines tells an additional story. That gap—representing deaths that never reached hospital—is consistently wider for heart attacks than for strokes, and wider for men than for women. On average, including these out-of-hospital deaths raised rates by about 77 per 100,000 for men with heart attacks, 51 for women, 44 for men with stroke, and 29 for women. These findings suggest that heart attacks are more likely than strokes to be fatal before hospital care is reached, especially among men. This pattern likely reflects differences in how quickly symptoms are recognised and treated. Fewer lives will be lost through faster public response, improved awareness, and rapid treatment pathways—particularly for men.

Hospital Rates Show a Decade of Rising **Strokes** and Persistent Excess Among Men



Strokes outpace Heart Attacks: Incidence Rate Ratios, 2010–2023

The figure above summarises how hospital-based rates of stroke and heart attack have changed in Barbados since 2010. Each bar shows a rate ratio comparing one group or time period with another, with values above one indicating higher rates. Because almost all serious cardiovascular events are treated at the island’s single public tertiary hospital, these figures provide a reliable picture of national trends, even though they reflect hospital events only. Across the full period, strokes occurred at more than twice the rate of heart attacks (rate ratio 2.34; 95% CI 2.27–2.41), confirming stroke’s heavier burden in Barbados. Men consistently experienced higher cardiovascular event rates than women (1.39; 1.33–1.44), a difference that has changed little over time and continues to signal the need for greater focus on men’s prevention and early treatment. Both conditions showed clear increases over the past decade. Stroke rates rose most sharply, almost doubling between 2010–2011 and 2018–2019 (1.97; 1.77–2.20), before easing slightly in recent years to about 60 percent above baseline (1.61; 1.43–1.80 in 2022–2023). For heart attacks, increases were smaller but still evident—around 20–25 percent higher than at the start of the decade (1.22; 1.14–1.30 in 2022–2023). Some of the fluctuations after 2020 likely reflect changes in healthcare access and hospital use during the COVID-19 pandemic, when fewer people sought emergency care for milder events. Strengthening hypertension and diabetes control, improving recognition of stroke and heart-attack symptoms, and sustaining rapid emergency response remain critical steps to reducing avoidable deaths and long-term disability.

What This Means

Taken together, these findings show that while heart attacks still claim more lives before reaching hospital, strokes are now the more frequent event treated within it—and their numbers continue to rise. Some of this increase may reflect better recognition, but it also points to a real and growing stroke burden in Barbados. Men remain at greater risk across both conditions, underscoring the need for stronger prevention, faster response to symptoms, and continued public awareness to save lives and reduce disability.