

Trends in Acute MI and Stroke in the ED During COVID-19

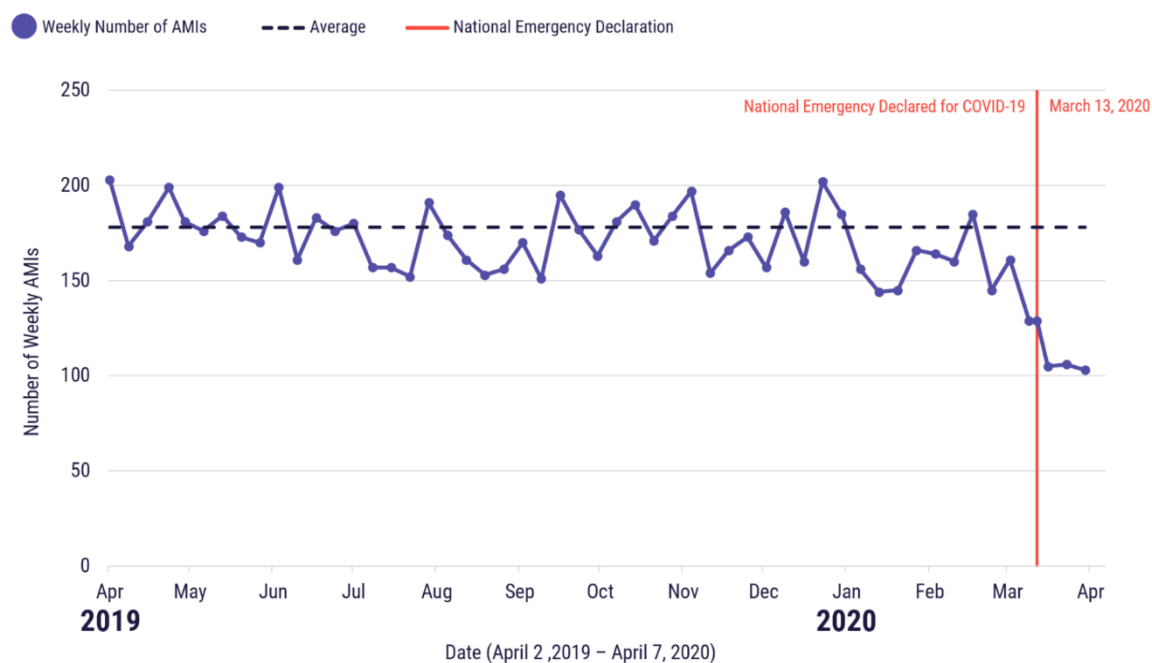
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As the COVID-19 pandemic continues, there are growing concerns that patients with urgent conditions are not seeking the care they need for fear of exposure to COVID-19. Recent EHR data show that the weekly incidence of acute myocardial infarctions (AMI), commonly known as heart attacks, has decreased by 45% since the United States declared a national emergency for COVID-19 on March 13, 2020. Similarly, the weekly incidence of strokes decreased by 38% relative to the average number of strokes prior to March 13, 2020.

This sample includes data aggregated from electronic medical records at 22 health systems in the United States, spanning 17 states and covering 3.5 million patients. These data were used to examine the yearly trend in emergency department (ED) visits from April 2, 2019 – April 7, 2020.

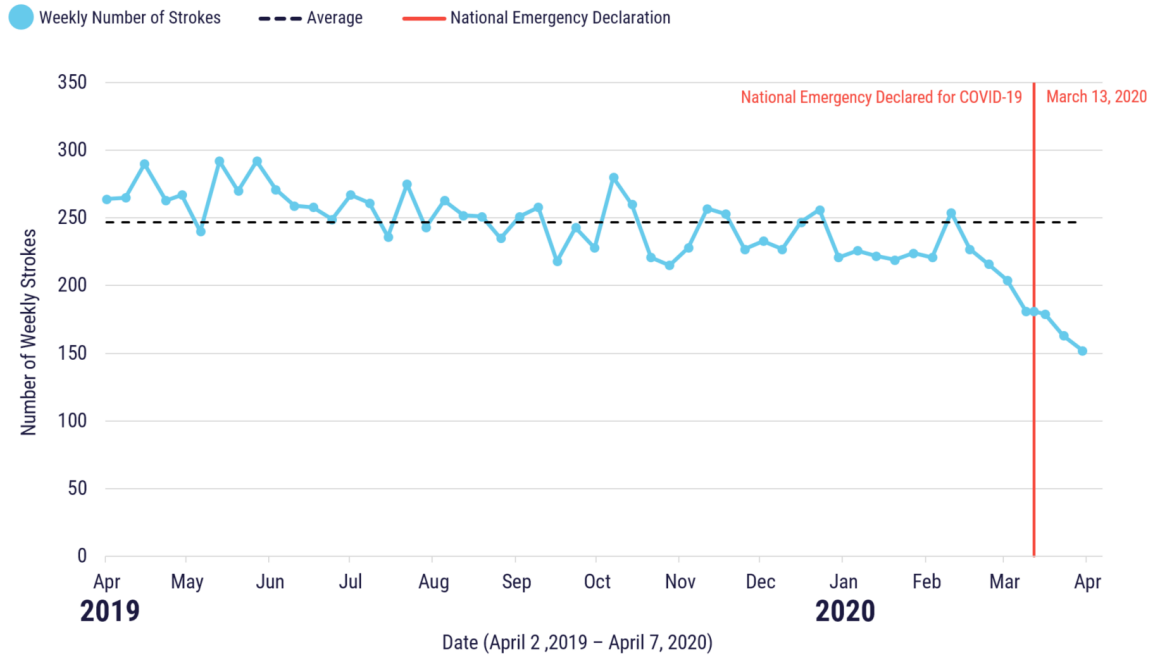
Weekly Trend in AMI Presentation

n = 3.5 million



Weekly Trend in Stroke Presentation

n = 3.5 million



Further investigation is necessary to determine the expected number of AMI and stroke events that occurred during COVID-19, given the large-scale lifestyle changes associated with social distancing. It is not yet clear whether there are fewer people experiencing AMIs and strokes, or whether fewer patients are seeking care due to fear of COVID-19 exposure. Policy makers and clinicians may find this information useful as they continue working to understand the broader impact of the pandemic.

| Term | Definition |
|--------|--|
| AMI | An ED encounter with a diagnosis from SNOMED CT 7678767 |
| Stroke | <p>An ED encounter with a diagnosis from one of the following ICD-10-CM codes:</p> <p>I60.00 - I60.02, I60.10 - I60.12, I60.2, I60.30 - I60.32, I60.4, I60.50 - I60.52, I60.6, I60.7, I60.8, I60.9, I61.0 - I61.6, I61.8, I61.9, I62.00 - I62.03, I62.1, I62.9, I63.00, I63.011 - I63.013, I63.019, I63.02, I63.031 - I63.033, I63.039, I63.09, I63.10, I63.111 - I63.113, I63.119, I63.12, I63.131 - I63.133, I63.139, I63.19, I63.20, I63.211 - I63.213, I63.219, I63.22, I63.231 - I63.233, I63.239, I63.29, I63.30, I63.311 - I63.313, I63.319, I63.321 - I63.323, I63.329, I63.331 - I63.333, I63.339, I63.341 - I63.343, I63.349, I63.39, I63.40, I63.411 - I63.413, I63.419, I63.421 - I63.423, I63.429, I63.431 - I63.433, I63.439, I63.441 - I63.443, I63.449, I63.50, I63.511 - I63.513, I63.519, I63.521 - I63.523, I63.529, I63.531 - I63.533, I63.539, I63.541 - I63.543, I63.549, I63.59, I63.6, I63.81, I63.89, I63.9</p> |

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Check for [updates](#) at
<https://ehrn.org/wp-content/uploads/AMI-Stroke-Trends.pdf>