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☆ **Spotlight on Special Topics**

**NATIONWIDE TEMPORAL EVOLUTION OF PRE-HOSPITAL CARDIAC EVENTS DURING THE COVID-19 PANDEMIC**

Poster Contributions  
Sunday, May 16, 2021, 2:45 p.m.-3:30 p.m.

Session Title: Spotlight on Special Topics: COVID 6  
Abstract Category: 61. Spotlight on Special Topics: Coronavirus Disease (COVID-19)

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**Background:** Early in the COVID-19 pandemic, clinicians noted a decrease in the number of acute cardiovascular events, including STEMIs and Strokes. Some have hypothesized that this reduction is due to patients being reluctant to interact with the healthcare system during the pandemic. Any changes in the prevalence of acute cardiovascular events might be best summarized through data from the emergency medical services (EMS) perspective.

**Methods:** To understand the prevalence of acute cardiovascular events during COVID-19, we surveyed the National Emergency Medical Services Information System (NEMSIS), a database of millions of EMS runs in the US. We examined the monthly incidence of cardiac calls, STEMIs, strokes, and cardiac arrests from January to August 2020.

**Results:** Cardiac calls decreased significantly to a year-to-date low in April and have only slightly risen since. Strokes and STEMIs decreased sharply in March and April, before rebounding to near-pre-pandemic levels in May, June, July, and August. Alarmingly, calls for asystole rose astronomically in April and May.

**Conclusion:** These data suggest patients were hesitant to seek medical care during the initial stages of the pandemic. The increase in asystole that occurred after the initial decrease in calls might reflect patients experiencing worse outcomes as a result of not seeking care. Planning for future pandemics should involve developing ways to encourage community members to seek care for possibly life-threatening conditions.

