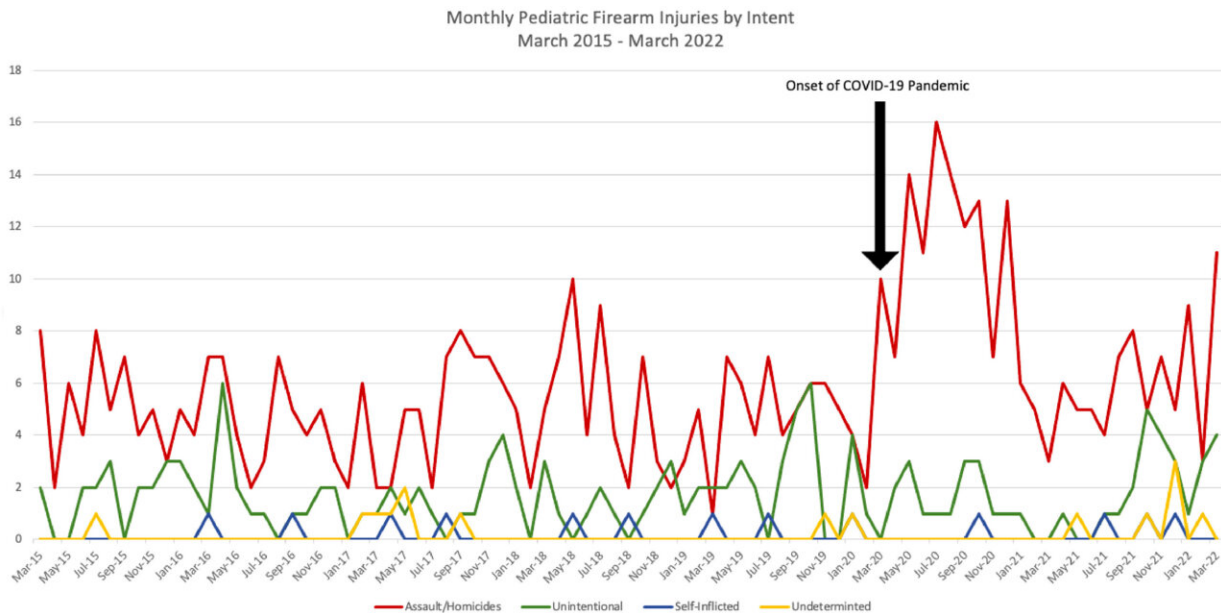


# Firearms killing and injuring more children during pandemic: Study

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Average monthly pediatric firearm injuries by intent, March 2015-March 2022.  
Credit: *Journal of Pediatric Surgery* (2022). DOI:  
10.1016/j.jpedsurg.2022.10.007

The COVID-19 pandemic is associated with an increase in the frequency and mortality of pediatric firearm injuries, according to a researcher from the University of Missouri School of Medicine.

Previous studies have examined the link between the pandemic and

increased [firearm](#) injuries among adults, but few studies have evaluated the impact on children. This study was conducted at St. Louis Children's Hospital and retrospectively reviewed pediatric firearm injuries before the onset of the COVID-19 pandemic from March 2015 to February 2020 and compared the data to injuries that happened during the pandemic from March 2020 through March 2022.

"We found a significant increase in pediatric firearm injury rates during the pandemic compared to the five preceding years," said lead author Mary Bernardin, MD, assistant professor of clinical emergency medicine and pediatric emergency medicine. "The escalation in injuries was driven by a significant increase in firearm assaults and homicides as well as increased frequency of innocent children injured as bystanders amidst adult crime."

Bernardin's team reviewed 672 pediatric firearm injuries during the study timeframe, including 413 pre-COVID-19 and 259 during the pandemic. The monthly [injury](#) rate increased by 51.5% during the pandemic from an average of 6.8 shootings per month prior to the pandemic to 10.3 shootings per month during the pandemic. Pediatric firearm deaths also increased 29% during the pandemic.

"While Black children were the most frequently victimized both prior to and during the pandemic, there was a significant increase in black victims during the pandemic relative to other races," Bernardin said. "The proportion of victims having Medicaid or self-pay insurance status also significantly increased during the pandemic."

Bernardin said another interesting finding revealed three spikes in monthly pediatric firearm assault/homicide rates occurred during the [pandemic](#), each happening within three months of a surge in COVID-19 deaths.

"This trend is particularly noteworthy because as surges from future COVID-19 variants are likely to occur, one may infer that these surges may be related to future spikes in firearm injuries," Bernardin said. "This threat highlights the need for increased violence-intervention services, particularly amongst marginalized communities more likely to be seriously affected by firearm violence."

In addition to Bernardin, the study co-authors included researchers from Washington University School of Medicine in St. Louis, St. Louis Children's Hospital and the University of Vermont Larner College of Medicine.

Their study, "COVID-19 Pandemic effects on the epidemiology and mortality of pediatric [firearm injuries](#); A single center study," was recently published in the *Journal of Pediatric Surgery*.

**More information:** Mary Elizabeth Bernardin et al, COVID-19 Pandemic effects on the epidemiology and mortality of pediatric firearm injuries; A single center study, *Journal of Pediatric Surgery* (2022). [DOI: 10.1016/j.jpedsurg.2022.10.007](#)

Provided by University of Missouri

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