Abusive head trauma (AHT) is one of the most severe forms of child maltreatment, with high morbidity and mortality. Because its incidence is known to increase when families experience stressors and financial strain, it has been the focus of several studies to date on the COVID-19 pandemic. In their new study, Lázârescu et al examined whether the pandemic was associated with any changes in AHT incidence in metropolitan Paris. Focusing on infants younger than 12 months seen for subdural hemorrhage from AHT at the regional pediatric neurosurgery center, they conducted a population-based, time-series cohort study. They included 99 infants with AHT with a median age of 4 months. Seventy-five percent had retinal hemorrhages, 20% had skin injuries, and 32% of the 72 infants who had a skeletal survey were found to have fractures. Thirteen percent of all infants died from their injuries. Although the relative incidence of AHT in 2020 was comparable with that seen in the 2017 to 2019 prepandemic period (adjusted incidence rate ratio, 1.02; 95% CI, 0.59-1.77), in 2021, the relative incidence almost doubled (adjusted incidence rate ratio, 1.92; 95% CI, 1.23-2.99). They also found the mortality from AHT increased in 2021 compared with the prepandemic period (odds ratio, 9.39; 95% CI, 1.88-47.00). Monthly interventions for hydrocephalus, which served as a control diagnosis, were not found to have changed during the same period.

Although the population-based study design is a substantial strength that provides information about AHT in a large metropolitan area, the study by Lázârescu et al has several limitations. The exact nature of the relationship between AHT incidence and the pandemic remains unclear. There are reasons to suspect that the pandemic and its associated stressors might be to blame for the 2021 increase of AHT in Paris; however, that conclusion cannot be drawn from this study alone. Additionally, there may have been missed cases because the study definition of AHT only included those with subdural hemorrhage younger than 12 months, and more minor cases may not have presented for care at the single center included in the study or been correctly diagnosed.

Other studies looking at AHT in the pandemic have found inconsistent results. One study looking at AHT with subdural hemorrhage in all of France found that there were fewer hospitalizations for AHT in May of 2020, but more in December of 2020 when compared with 2018 to 2019. Another study of AHT at 49 children's hospitals in the US found lower mean monthly admissions for AHT in 2020 compared with 2017, 2018, and 2019. Finally, a study using the same children's hospital data set did not find any significant differences in the proportion of infants admitted with AHT in the first few months of the pandemic compared with the same months in previous years. However, none of these studies included data after 2020 and all relied on administrative code diagnoses rather than a review of medical records.

The findings from these studies on AHT and others that have looked at child maltreatment outcomes in general in the pandemic serve as humbling reminders of how much we still have to learn about when and why abuse occurs. There was great concern at the beginning of the pandemic that we would witness a rapid uptick in physical abuse cases. The anticipated surge failed to materialize in the expected time frame. Now that many have started resuming prepandemic activities, we might be fooled into thinking the period of increased risk is over when it comes to the pandemic’s child maltreatment outcomes. This study from Paris suggests wariness is indicated. The increase in AHT incidence in Paris occurred after the first 2 lockdowns were completed and after schools and daycares had resumed more normal operations.
Although stressors for families have been present since the start of the pandemic, the absence of the overall expected increase in maltreatment in the first year shown in the study by Lãzãrescu et al⁴ may provide some suggestions for how to prevent further child maltreatment going forward. In an effort to mitigate the impacts of the pandemic, many countries rolled out financial relief packages, including increased unemployment benefits and rental assistance.⁵,⁶ Some of these have had direct positive impacts on families’ finances and stress.⁷ Since AHT and other forms of maltreatment are associated with increased family stress, it follows that the relief measures might be associated with these outcomes.

AHT prevention has long proven elusive. Programs targeting caregiver education on the harms of shaking an infant seem to impact knowledge but not AHT itself. For example, a study⁸ of the 2004 California paid parental leave policy showed that paid leave was associated with lower rates of AHT hospital admissions in California compared with several other states without such policies. If pandemic relief measures helped reduce rates of AHT, the mechanism by which this occurred might be similar to that for California's paid leave experience and both would be in line with a growing number of studies demonstrating an association between social policies that benefit families and child maltreatment outcomes.

The increase in AHT in Paris in 2021 may of course be an isolated finding by Lãzãrescu et al.⁴ It is possible that AHT and child maltreatment in general in other communities are still being positively affected by COVID-19 relief measures. If that is the case, then there is a natural experiment to exploit by comparing what those areas are doing differently from Paris.

If, however, the AHT experience in Paris is an indicator for what may already be occurring or coming in other communities, there is still an opportunity to learn and act. The most important questions Lãzãrescu et al⁴ raise are (1) why did the expected increase in AHT not occur in Paris in 2020, and (2) why did the factors that worked in 2020 start to fail? By determining which policies or factors may have helped delay the expected child maltreatment surge, we might prevent future harm to children. Even after this pandemic concludes, some families will continue to experience its economic ramifications for years to come. In addition, because families’ lives are often stressful even outside of a pandemic, once we determine which preventive measures were the most effective at reducing AHT and other forms of maltreatment during the last couple years, we may want to advocate to keep them permanently.

ARTICLE INFORMATION
Published: August 30, 2022. doi:10.1001/jamanetworkopen.2022.26188
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Conflict of Interest Disclosures: Dr Brown reported providing expert testimony, as part of her clinical responsibilities, in cases of alleged maltreatment.

REFERENCES

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