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Physical Injuries in Children Following a Mother's Assault or Homicide: A Population-Based Matched Cohort Study

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Violence against women can impact the health of their children through disrupted caregiving, psychological trauma, or exposure to the same perpetrator. The objective of this study was to test the association between a mother's experience of assault and her child's risk of physical injury. This matched cohort study was conducted in Ontario, Canada using province-wide, linked health administrative data. Children born in Ontario, ages 0–18 from 2005–2023, and had public health insurance, were eligible for inclusion. The exposure was a mother's assault-related injury (index event) resulting in an emergency department (ED) visit, hospitalization, or death. Exposed children were matched 1:4 with unexposed children based on sex, maternal age, and child age at index. The primary outcome was a child's ED visit, hospitalization,

or death from assault within five years. A modified Poisson regression estimated adjusted rate ratios (aRRs), controlling for child sociodemographics, child health conditions, and maternal factors. We included 79,496 exposed and 315,775 unexposed children (48.5% female, median age at index 7 years [IQR 3–11]). Exposed children were more likely to be assaulted within five years (3.7% or 9.6/1,000 person-years v. 1.3% or 3.0/1,000 person-years). Maternal assault was associated with an increased rate of child assault resulting in ED visits (aRR 2.34 95% CI 2.20–2.48), ED/hospitalization/death (aRR 2.34 95% CI 2.21–2.48), and hospitalization/death (2.40 95% CI 1.94–2.97). A mother's assault increases her child's risk of serious physical injury. Healthcare-based interventions should target a mother and her children following her assault.

