

Breastfeeding and Reduced Risk of Sudden Infant Death Syndrome: A Meta-analysis

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KEY WORDS

SIDS, sudden infant death syndrome, risk factors, breastfeeding

ABBREVIATIONS

SIDS—sudden infant death syndrome

OR—odds ratio

SOR—summary odds ratio

CI—confidence interval

The authors had full access to all of the data in the study and take responsibility for the integrity of the data and the accuracy of the data analysis. The results, conclusions, and recommendations presented in this article are endorsed by the Epidemiology Working Group of the International Society of the Prevention of Infant Deaths.

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abstract

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CONTEXT: Benefits of breastfeeding include lower risk of postneonatal mortality. However, it is unclear whether breastfeeding specifically lowers sudden infant death syndrome (SIDS) risk, because study results have been conflicting.

OBJECTIVE: To perform a meta-analysis to measure the association between breastfeeding and SIDS.

METHODS: We identified 288 studies with data on breastfeeding and SIDS through a Medline search (1966–2009), review articles, and meta-analyses. Twenty-four original case-control studies were identified that provided data on the relationship between breastfeeding and SIDS risk. Two teams of 2 reviewers evaluated study quality according to preset criteria; 6 studies were excluded, which resulted in 18 studies for analysis. Univariable and multivariable odds ratios were extracted. A summary odds ratio (SOR) was calculated for the odds ratios by using the fixed-effect and random-effect inverse-variance methods of meta-analysis. The Breslow-Day test for heterogeneity was performed.

RESULTS: For infants who received any amount of breast milk for any duration, the univariable SOR was 0.40 (95% confidence interval [CI]: 0.35–0.44), and the multivariable SOR was 0.55 (95% CI: 0.44–0.69). For any breastfeeding at 2 months of age or older, the univariable SOR was 0.38 (95% CI: 0.27–0.54). The univariable SOR for exclusive breastfeeding of any duration was 0.27 (95% CI: 0.24–0.31).

CONCLUSIONS: Breastfeeding is protective against SIDS, and this effect is stronger when breastfeeding is exclusive. The recommendation to breastfeed infants should be included with other SIDS risk-reduction messages to both reduce the risk of SIDS and promote breastfeeding for its many other infant and maternal health benefits. *Pediatrics* 2011; 128:103–110