

## Poster #14

### Research Study

Title: “Incidence of Sudden Infant Death Syndrome in Infants Delivered by Cesarean Section vs Vaginal Birth in the United States”

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**Introduction and Objective.** A clear mechanism of the cause of sudden infant death syndrome (SIDS) has not been defined. SIDS is rare but tragic and hard to prevent. The specific role of preventative factors is understudied. On the other hand, there has been an increase in elective c-sections, and the effect of abuse of c-sections has not been identified. Objective: To investigate if there is an association between method of delivery (vaginal vs c-section) and incidence of SIDS.

**Methods.** A historical cohort study was conducted using data of all live births in the United States from the 2017 Period/2016 Cohort Linked Birth-Infant Death Data File from the CDC. Both unadjusted and adjusted for potential confounders (multiple logistic regression). Odds ratio (ORs) and 95% confidence intervals were computed. Variables controlled for were mother’s age, race/ethnicity, education level, cigarette use during pregnancy, and Kotelchuck Index.

**Results.** Prior to adjustment the OR of SIDS between infants delivered by c-section versus vaginally, was not different from one (OR 0.91, 95% CI: 0.75-1.09). After adjusting for mother’s age, race/ethnicity, education level, cigarette use during pregnancy, and Kotelchuck index, the odds of an infant dying from SIDS remained not statistically significant (OR 0.95, 95% CI: 0.79-1.15). In the adjusted model, significant differences in the incidence of SIDS were found for mother’s age, race/ethnicity, education level, cigarette use during pregnancy and Kotelchuck index.

**Conclusions-Implications.** We did not find evidence of an association between method of delivery and SIDS in the United States. Additional research that includes more potential confounders should be done. In addition, further research that looks at the consequences for infants in regard to the increased frequency of elective C-sections as well as investigates potential risk factors for SIDS should be done.