

Even mildly premature infants have increased risk of a common respiratory tract infection

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Even mildly premature infants (gestational ages of 33 weeks through 36 weeks) have an increased risk of medically attended respiratory syncytial virus infection, which is the leading cause of lower respiratory tract infection in infants and young children and can lead to pneumonia in babies, according to a Kaiser Permanente Division of Research study. The RSV infection risk is higher among infants exposed to supplemental oxygen or assisted ventilation during the neonatal period, said the researchers, explaining that the need for oxygen is sometimes unavoidable for babies who need intensive care.

The results of the study are being presented at the Pediatric Academic Societies Annual Meeting to be held in Baltimore on Tuesday, May 5.

"Although extreme prematurity is a known risk factor for severe RSV [infection](#), this study helped us to learn more about risk factors for RSV infection among mildly premature infants. We detected an increased risk even in babies born at 37 weeks," said the study's lead investigator Gabriel J. Escobar, MD, a hospital-based pediatrician and research scientist with the Kaiser Permanente Division of Research in Oakland, Calif. "Further research is needed to determine whether strategies to prevent or mitigate RSV infections are indicated in late preterm [infants](#)."

The study included 108,794 babies at least 33 weeks gestation discharged from six Kaiser Permanente hospitals between January 1996

and December 2002. Compared to babies 38-40 weeks, babies born at 37 weeks had a 37 percent increased odds of RSV infection, while babies born at 34-36 weeks had a 70 percent increased odds. In contrast, babies born at 41 or more weeks had 14 percent decreased odds. Even after controlling for prematurity, babies who received supplemental oxygen during the birth hospitalization had a 50 to 120 percent increased odds of medically attended RSV infection in the first year of life.

Researchers used a retrospective cohort study design using logistic regression and Cox proportional hazards modeling to control for varying follow-up lengths.

Source: Kaiser Permanente ([news](#) : [web](#))

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