

# Benefit of newer NICU ventilation strategies questioned

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(HealthDay)—From 1991 to 2005, there was an increase in the duration

of assisted ventilation among survivors of extremely preterm birth, but no improvement in lung function in childhood, according to a study published in the July 26 issue of the *New England Journal of Medicine*.

Lex W. Doyle, M.D., from the University of Melbourne in Australia, and colleagues conducted longitudinal follow-up of survivors of extremely preterm birth who were born in 1991 and 1992 (225 infants), 1997 (151 infants), and 2005 (170 infants). Perinatal data were collected prospectively and expiratory airflow was measured at 8 years of age.

The researchers observed an increase in the [duration](#) of assisted ventilation over time, with a large increase in nasal continuous positive airway pressure duration. Although the use of less invasive ventilation increased over time, there were increases in the duration of [oxygen therapy](#) and rate of oxygen dependence at 36 weeks, and airflows at age 8 years were worse in 2005 than earlier periods. For the ratio of forced expiratory volume in one second to forced vital capacity, the mean difference in the z scores was  $-0.75$  and  $-0.53$  for 2005 versus 1991 to 1992 and 1997, respectively.

"Despite substantial increases in the use of less invasive [ventilation](#) after birth, there was no significant decline in oxygen dependence at 36 weeks and no significant improvement in [lung function](#) in childhood over time," the authors write.

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