

# In preemies, maternal smoking tied to necrotizing enterocolitis

June 11 2012

---



Image courtesy of Blausen Medical

Maternal smoking has been identified as a risk factor associated with the development of necrotizing enterocolitis in premature infants, according to a study published June 11 in *Pediatrics*.

(HealthDay) -- Maternal smoking has been identified as a risk factor associated with the development of necrotizing enterocolitis (NEC) in premature infants, according to a study published June 11 in *Pediatrics*.

Cynthia D. Downard, M.D., from the University of Louisville in Kentucky, and colleagues reviewed the medical records of infants with NEC identified from a [neonatal intensive care](#) unit database as well as the prenatal and delivery record of the patient's mother. Each of 73 neonates with NEC was matched to two neonate controls who were treated at the same institution.

The researchers found that maternal cigarette smoking correlated

significantly with the development of NEC ( $P = 0.02$ ). There was no correlation seen between maternal gestational diabetes, maternal hypertension, formula feeding, and pathologic chorioamnionitis or uteroplacental insufficiency and NEC.

"These data identified maternal cigarette smoking as the only risk factor that is associated with the development of NEC in premature infants," the authors write. "Our data imply that smoking delivers toxins and nicotine to the uterine microenvironment that can affect microvascular development and may predispose the fetus to future NEC."

The study was funded by the James R. Petersdorf Fund of Norton Healthcare.

**More information:** [Abstract](#)  
[Full Text \(subscription or payment may be required\)](#)

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: In preemies, maternal smoking tied to necrotizing enterocolitis (2012, June 11)  
retrieved 24 April 2024 from  
<https://medicalxpress.com/news/2012-06-preemies-maternal-tied-necrotizing-enterocolitis.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--