



EPIDEMIOLOGY


PERINATAL EPIDEMIOLOGY

- 591 **Beta Approach for Risk Summarization: An Empirical Bayes Method for Summarizing Pregnancy History to Predict Later Health Outcomes**
 Mary V. Diaz-Santana, Molly Rogers, and Clarice R. Weinberg
- 599 **Use of Health Administrative Data to Identify Migraine in Individuals With a Recognized Pregnancy: A Validation Study in Ontario, Canada**
 Carmela Melina Albanese, Susan J. Bondy, Christine Lay, Deyin Li, Jan Guan, and Hilary K. Brown

ENVIRONMENTAL EPIDEMIOLOGY

- 606 **Medium-term Exposure to Wildfire Smoke $PM_{2.5}$ and Cardiorespiratory Hospitalization Risks**
 Ningsong Wei, Edgar Castro, Karhua Yin, Alexandra Steen, Bryan N. Vu, Mahesh Dhanesh Yanki, Longxiang Li, Yun Liu, Adjani A. Prudka, and Joel D. Schwartz
- 616 **Spatial Variability and Clustering of Life Expectancy in the United States: 1990–2019**
 Isabel P. De Ramos, Tara P. McAlexander, and Uzama Iqbal
- 625 **Potential Impact of Maternal Nighttime Light Exposure and Its Interaction With Sociodemographic Characteristics on the Risk of Various Congenital Heart Diseases**
 Shundezhong Tuohetozon, Yanji Qiu, Philip K. Hopfe, Kai Zhang, Yong Liu, Shao Lin, Huiqiao Gu, Ximeng Wang, Sam S. S. Lau, Xian Lin, Xiangmin Gao, Yong Wu, Xinkai Zhou, Ziqiang Lin, Man Zhang, Yongqiang Sun, Xiaoping Liu, Jimei Chen, and Wenguan Zhang

INFECTIOUS DISEASES

- 636 **Early Detection of Dengue Outbreaks: Transmission Model Analysis of a Dengue Outbreak in a Remote Setting in Ecuador**
 Hannah Van Wyk, Andrew F. Brauer, Georjani O. Lee, Sally Munguz, Paulina Andrade, Edward L. Similes, Josefin Coloma, and Joseph N. S. Eisenberg

contents continued inside

Retrospective Analysis of an Outbreak of Nonsuccessful Pregnancies in a Community Nearby a Melon Plantation

Cordoba L; van Wendel de Joode, B; Ramirez, F; Herrero, M; Wesseling, C

Epidemiology. 18:p S166, September 2007.

doi: 10.1097/01.ede.0000276843.92899.0a

Author Information

Universidad Nacional, Costa Rica.

ISEE-689

[Back to Top](#)

Objective:

The objective of this study was to identify risk factors of nonsuccessful pregnancies in a Costa Rican community during 2004. Out of 20 pregnancies, 4 resulted in stillbirths, 3 in miscarriages, and 1 in a congenital malformation. The community inhabitants attributed this outbreak to the pesticide use in a nearby melon plantation.

[Back to Top](#)

Materials and Methods:

Environmental, occupational, social, genetic, and health factors were compared between the nonsuccessful pregnancies (cases, n = 8) and successful (controls, n = 12). Sociospatial data were obtained through

Geographical Information System (GIS) and a questionnaire about the location and characteristics of the cases and controls houses, and the melon plantation. In addition, cases and controls were interviewed using a structured questionnaire about problems during the pregnancy, working conditions, pesticide exposure, among others.

Odds ratios were estimated to identify risk factors. At present, we are interpreting the socio-spatial data.

[Back to Top](#)

Results:

Preliminary results showed an increased risk for stillbirth (OR 1.71, 95% CI 1.06, 2.76) for parents whose direct family members suffered from hypertension. For stillbirths, increased (OR 1.5–3.0), but far from significant (95% CI 0.12–37.7) risks were observed for being conceived during periods of high pesticide use, living nearby the melon plantation and/or working at the melon plantation (one, or both parents), and pesticide use at home. For all nonsuccessful pregnancies, increased but far from significant risks (OR 1.5–2.1, 95% CI 0.30–15.36) were observed for being conceived during periods of high pesticide use, living in the melon community, parents whose direct family members suffered from hypertension, and pesticide use at home.

[Back to Top](#)

Conclusions:

Results from our study are nonconclusive due to small study population, but the risk estimates were increased in some of the variables.

© 2007 Lippincott Williams & Wilkins, Inc.