

Canadian newborns are routinely exposed to antibiotics

Canadian newborns are routinely exposed to antibiotics immediately before or after birth.

“This was the finding published August 2014 in *The Journal of Maternal-Fetal & Neonatal Medicine* by then-trainee **Ryan Persaud** and CHILD researchers Drs **Meghan Azad, Radha Chari, Malcolm Sears, Allan Becker, and Anita Kozyrskyj**.

The article, “[Perinatal antibiotic exposure of neonates in Canada and associated risk factors: a population-based study](#)”, describes direct and indirect (via the mother) in-hospital antibiotic exposures and their associated risk factors.

From a review of the hospital charts of 449 mother-newborn pairs enrolled in the CHILD Cohort Study, the authors concluded that 45% of newborns were exposed to antibiotics during the perinatal period.

The main indication for direct antibiotic treatment of newborns was a suspected infection, while the main reason for maternal antibiotic use was routine treatment for a cesarean section delivery.

Previous research has indicated that infant antibiotic use is a risk factor for childhood asthma, allergy and obesity, and suggested that a disruption of the gut microbiota may be at play.

Ongoing research in CHILD will examine the impact of antibiotic use on the development of infant gut microbiota and immunity, and address the long-term consequences of the perinatal antibiotic exposure documented in the present study.

