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## HEALTH AT BIRTH STRONGLY LINKED TO HOW PREPARED KIDS ARE FOR SCHOOL

*Study finds that kids living in poorer areas of Manitoba not as ready for school as those in wealthier areas*

A new report from the University of Manitoba's Faculty of Medicine shows differences in potential are apparent at a very early age—even as early as when they're born. Children's performance potential at school is also related to where they live.

The Early Development Instrument (EDI) is a survey filled out by almost all Kindergarten teachers in Manitoba. The tool was developed in Canada and is used throughout the world. It measures school readiness in five areas or domains (physical health and wellbeing, social competence, emotional maturity, language and cognitive development, as well as communications skills and general knowledge). When scores are below the cutoff in a specific domain, children are said to be not ready or vulnerable in that area.

The EDI does not assess individual students. It provides planners with a sense of how prepared groups of children are for school.

By anonymously linking EDI results to health records, the report found that right from birth, differences in children's health can impact how prepared they may be for school. For example, after adjusting for things like socioeconomic status, children who had a low birth weight were more likely to not be ready in one or more of the EDI domains five years later.

The study looked deep into social circumstances. It identified three factors associated with poor EDI scores. "Children born to teen moms, in families on income assistance, or in the care of Child and Family Services, were found to be more at-risk," says Rob Santos, lead researcher for the report at MCHP, who is also executive director of science and policy at the Healthy Child Manitoba Office. "These kids were up to four times more likely than children who were not in any of these at-risk groups to show vulnerability in one or more EDI domains."

Researchers from the Manitoba Centre for Health Policy also used anonymized

results of the EDI surveys from 2005-2007, then linked them with areas of residence. Out of nearly 22,000 children included, they found that EDI scores seemed to be strongly related to how rich or poor the area was.

“Children living in the poorest areas in Manitoba, for both urban and rural settings, were about one and one-half times as likely to be not ready in at least one EDI domain when compared with children living in the wealthiest areas,” says Marni Brownell, MCHP co-investigator.

Interventions designed for the most vulnerable kids may have the largest impact in closing the gap. Breastfeeding, for example, seemed to equalize EDI scores, regardless of whether or not kids were born healthy at birth, and seemed to have a larger impact in those children who were more vulnerable at birth. Among children breastfed at infancy, about 25 per cent of children born less healthy were not ready in one or more EDI domain, compared to 22 per cent of the children born healthy.

“The EDI results show that groups of children facing multiple risks require more attention, and as early in life as possible, to get the help they need to succeed at school and later in life,” says Santos. “This report provides planners with insights about when and where resources should be applied.”

*MCHP is a research unit in the department of community health sciences in the Faculty of Medicine at the University of Manitoba. Research scientists and their collaborators at MCHP study health services, population and public health, and the social determinants of health using data from the entire population of Manitoba. Most of the research answers questions of interest to policy makers based on a formal association with Manitoba Health and input from other government departments.*



**Drs. Rob Santos and Marni Brownell are available for interviews.**

**For more information, please contact Jack Rach, communications officer, Manitoba Centre for Health Policy, Community Health Sciences, Faculty of Medicine, at: 204-789-3669.**

**The summary and full report will be available for download on May 11 from <http://mchp-appserv.cpe.umanitoba.ca/deliverablesList.html>**