

PAPER ABSTRACTS

Health outcomes and mitigation strategies

Long-Term Effect of Extreme Temperature on Health: Evidence from Nepal

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This paper examines how exposure to the extreme temperature in-utero affects the health of children later in life using a Multiple Indicator Cluster Survey of Nepal. Using a nationally representative sample of 4951 children under the age of 5 years, I employ ordinary least square method to estimate the effect of extreme temperature on height-for-age of the children. The extreme temperature in-utero is an indicator variable, which is equal to 1 if the monthly mean of the daily maximum temperature is greater than 2 standard deviations. Prior work has identified that extreme temperature exposure has a detectable negative contribution in health production function. Consistent with the literature, I find that the exposure to extreme temperature in-utero has negative effect on long-term health measured in terms of height-for-age. The extreme temperature in-utero is an indicator variable, which is equal to 1 if the monthly mean of the daily maximum temperature is greater than 2 standard deviations. In other words, the effect decreases as the age of the children increases. Contributing to initial findings, I explore the underlying mechanism by also focusing on nutritional intake, disease prevalence and behavioral mechanisms (adaptation and avoidance behavior). The finding suggests that the nutritional intake is the most likely mechanism driving the results.

Keywords: Temperature, Fetal origins, Height-for-age

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