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**Unveiling the Unseen Illness:  
Public Health Warnings and Heat Stroke**

**Lester Lusher, Tim Ruberg**

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**DP2024-020**

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Keio University



Institute for Economic Studies, Keio University  
2-15-45 Mita, Minato-ku, Tokyo 108-8345, Japan  
[ies-office@adst.keio.ac.jp](mailto:ies-office@adst.keio.ac.jp)  
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## Abstract

We utilize region-day variation in actual vs. forecasted wet bulb globe temperatures (i.e. forecasting errors) to investigate the effects of the first comprehensive heat-health warning system in Japan. We find that heat alerts led to an increase in heat stroke counts of 17%. An analysis of mechanisms utilizing several datasets suggests the effect is due to increased reporting, as opposed to potential “adverse” behaviors or substitution in health diagnoses. We further find that four times as many heat strokes are detected in low-income neighborhoods compared to high-income neighborhoods, highlighting severe environmental inequalities in health reporting behavior.

Lester Lusher

Department of Economics, University of Pittsburgh

lesterlusher@pitt.edu

Tim Ruberg

Department of Economics, University of Hohenheim

tim.ruberg@uni-hohenheim.de

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