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22.6 Hospital admissions due to high temperature during extreme heat events

Project Name: UNaLab (Grant Agreement no. 730052)

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Hospital admissions due to high temperature during extreme heat events		Health and Wellbeing
Description and justification	Heat waves are the most significant weather-related cause of human mortality worldwide (Agarwal, Dwivedi & Ghanshyam, 2018).	
Definition	The number of hospital admissions per 100 000 inhabitants due to high temperature during extreme heat events from baseline values	
Strengths and weaknesses	+ Easy to measure - Difficulties in ruling out other causes for hospital admissions	
Measurement procedure and tool	This metric can easily be evaluated using public health data regarding daily emergency room admissions. These data can be used either to evaluate total emergency room admissions, or to assess hospital admissions for specific disease categories such as heat stroke, dehydration and cardiac arrest (e.g., Davis & Novicoff, 2018). Further disaggregation of data may include separation by population demographic (e.g., Gronlund, Zanobetti, Schwartz, Wellenius & O'Neill, 2014).	
Scale of measurement	District to metropolitan scale	
Data source		

Required data	Public health data regarding either total emergency room admissions or hospital admissions for specific disease categories. Population data.
Data input type	Quantitative
Data collection frequency	Before and after NBS implementation
Level of expertise required	Low to moderate
Synergies with other indicators	Synergies with the indicator group <i>Temperature</i> indicators
Connection with SDGs	SDG 3 Good health and well-being, and SDG 13 Climate action
Opportunities for participatory data collection	No opportunities identified
Additional information	
References	<p>Agarwal, A.K., Dwivedi, S. & Ghanshyam, A. (2018). Summer heat: Making a consistent health impact. <i>Indian Journal of Occupational and Environmental Medicine</i>, 22(1), 57-58.</p> <p>Davis, R.E., & Novicoff, W.M. (2018). The impact of heat waves on emergency department admissions in Charlottesville, Virginia, U.S.A. <i>International Journal of Environmental Research and Public Health</i>, 15(7) 1436.</p> <p>Gronlund, C.J., Zanobetti, A., Schwartz, J.D., Wellenius, G.A., & O'Neill, M.S. (2014). Heat, heat waves, and hospital admissions among the elderly in the United States, 1992-2006. <i>Environmental Health Perspectives</i>, 122(11), 1187-1192.</p>

22.7 Heat-related mortality

Project Name: CONNECTING Nature (Grant Agreement no. 730222)

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Heat-related mortality		Health and Wellbeing
Description and justification	A built-up environment has significant influence on urban air temperature, which has been found to be considerably warmer than its surrounding rural or peri-urban areas. This phenomenon is called the urban heat island (UHI) effect,	