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Heat stroke risk in China quantified by web-based data

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Heat stroke is a serious heat-related health outcome that can eventually lead to death. Due to the poor accessibility of heat stroke data, the large-scale relationship between heat stroke and meteorological factors is still unclear. We collected daily heat stroke search index and meteorological data for the period 2013–2020 in 333 Chinese cities to quantify the threshold of people may suffer from heat stroke by Random Forest model. When the daily mean temperature exceeded 23.5°C, heat stroke cases may occur in China. Then, we calculated the total heatwave duration exceeding the threshold quantified aforementioned and population exposure to heatwave in China using four scenario combinations, namely SSP1SSP1-2.6, SSP2SSP2-4.5, SSP3SSP3-7.0, SSP5SSP5-8.5, for 1986-2005, 2041-2060 and 2081-2100 periods.