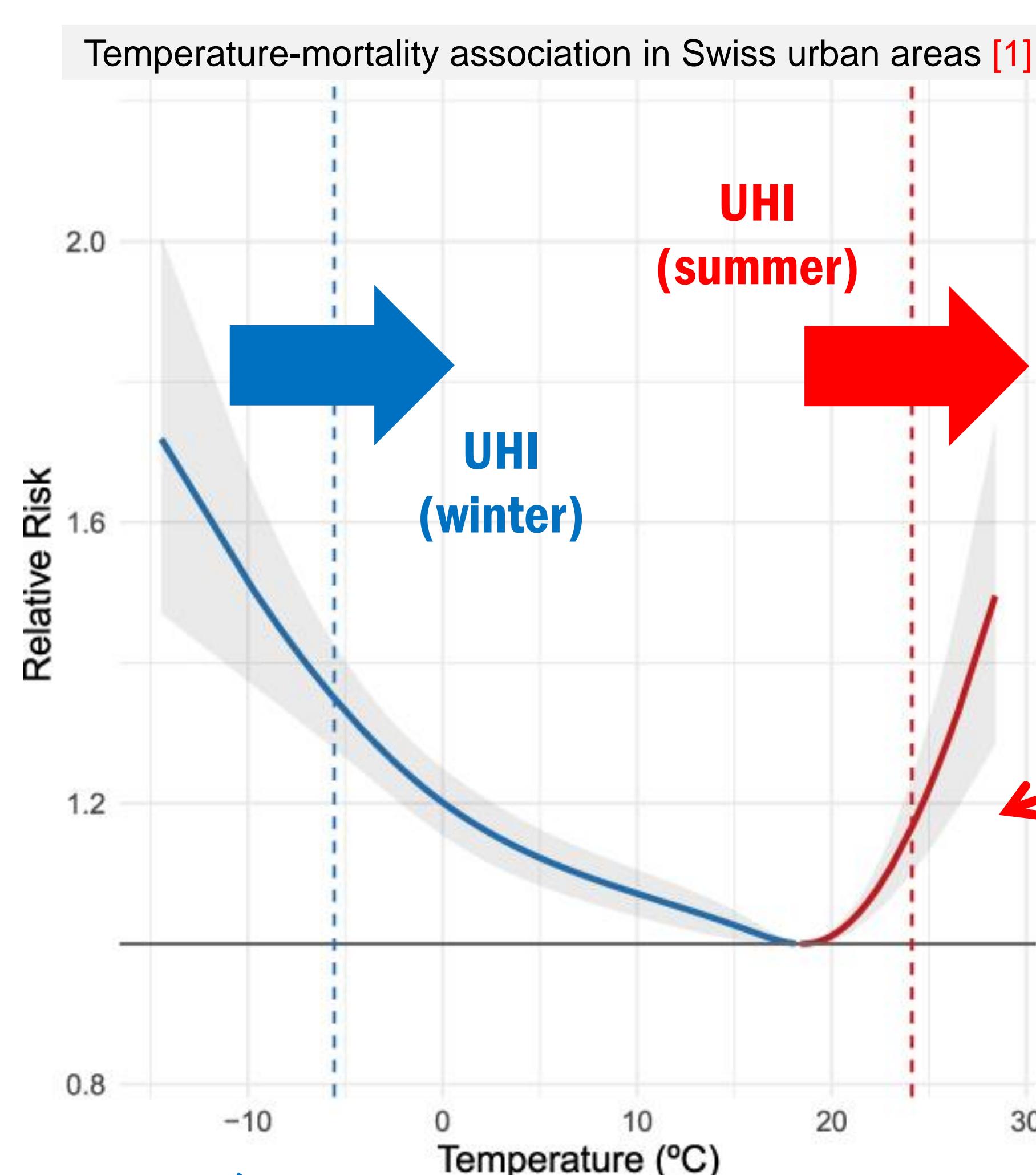
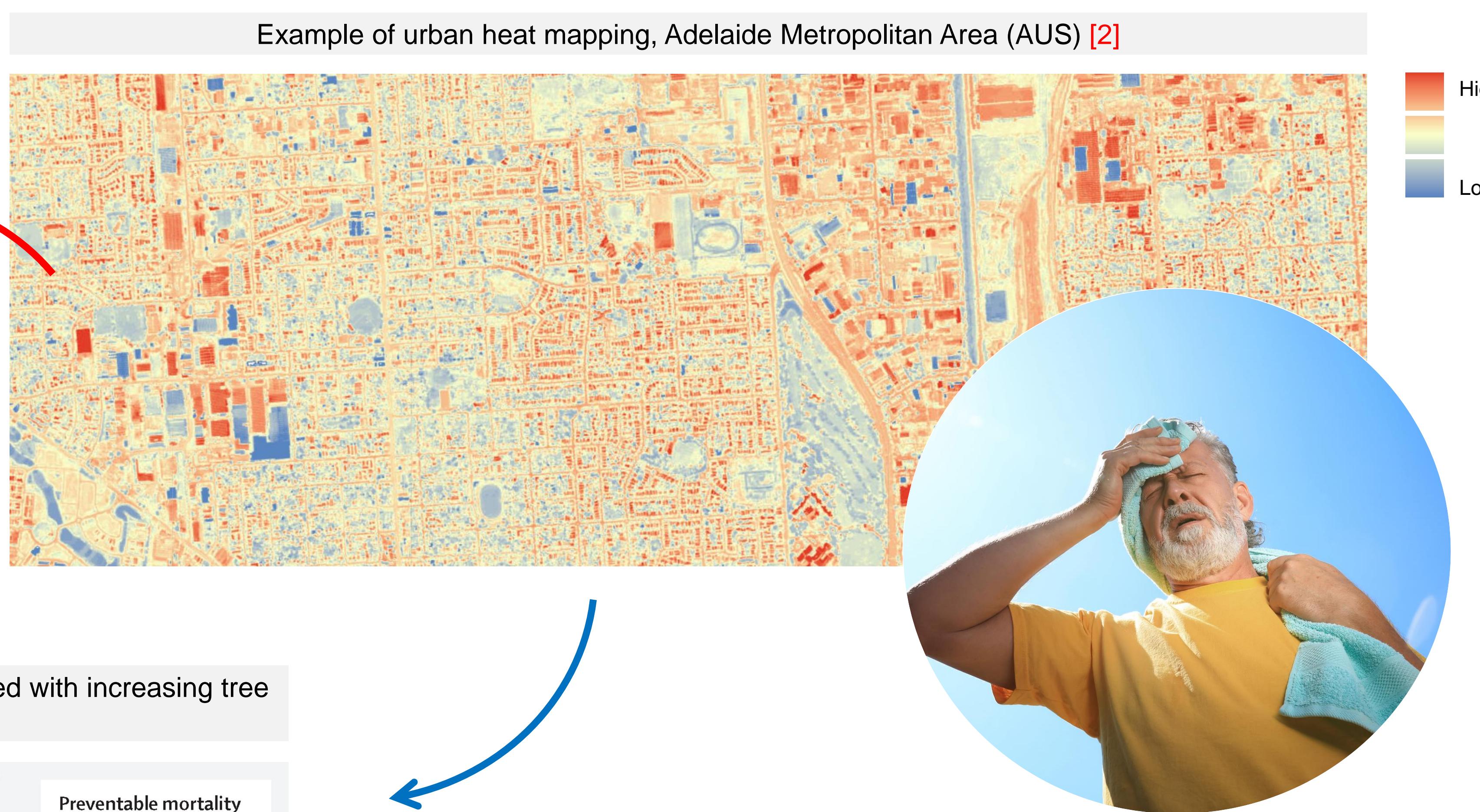


Forum Suisse Romande 2024

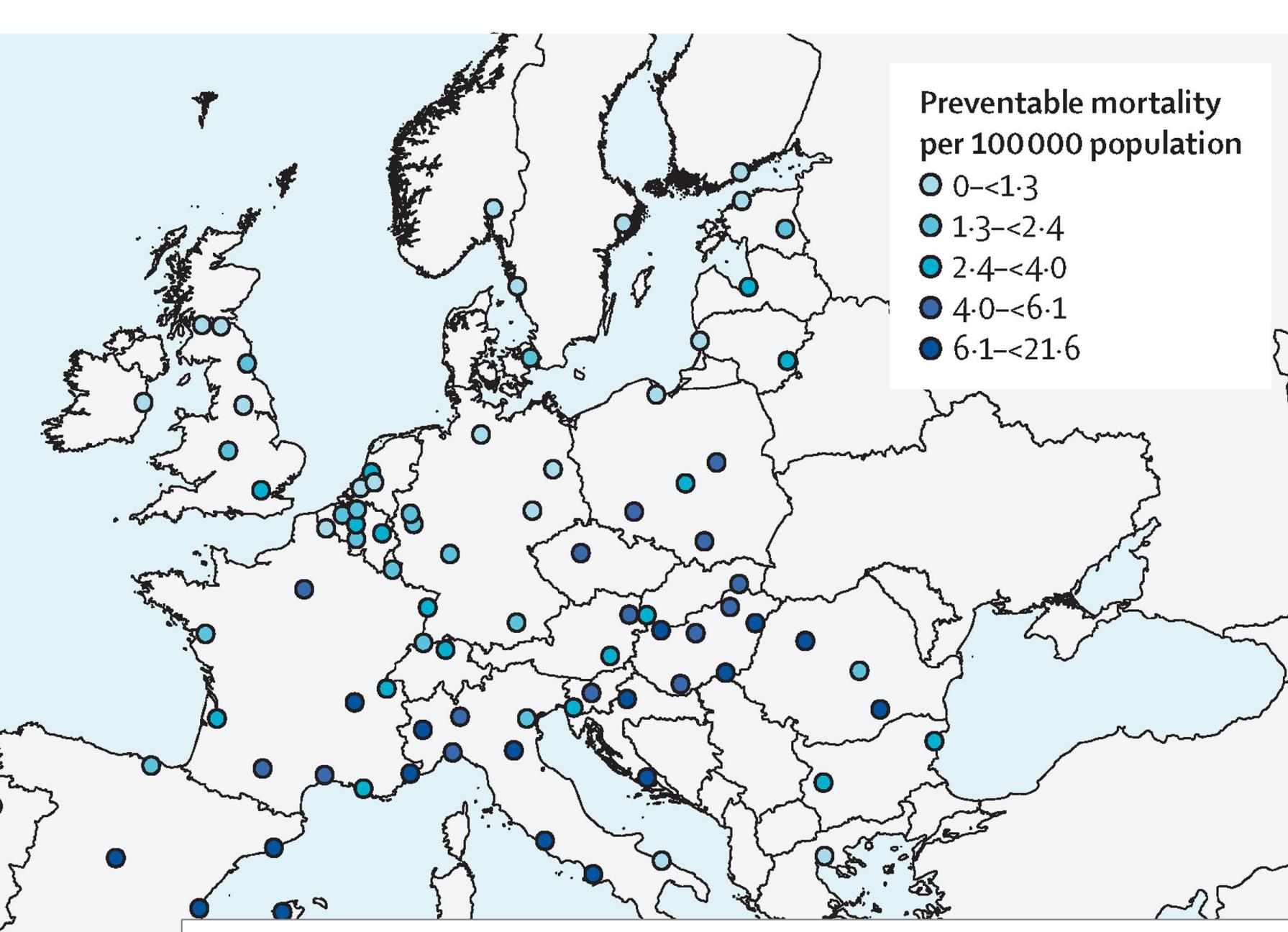
Urban heat, trees, & health: Risk, challenges, & opportunities



Cities are generally warmer than the surrounding, a phenomenon called the Urban Heat Island (UHI) effect. Such temperature increase can exacerbate heat-related morbidity and mortality



Mean standardised preventable mortality associated with increasing tree coverage to 30% [3]



Increasing tree coverage to 30% in European cities could reduce deaths linked to urban heat island effect

Urban vegetation provides a cooling effect that can mitigate the UHI effect and reduce health risks during summer. Hence, investing in nature is an investment in health ...

BUT ...



- UHI can protect against extreme cold during winter (and reduce heating demand in buildings) [4]
- Vulnerable populations may have unequal access to the benefits of green interventions [5]
- Vegetation is also at risk during extreme heat and drought events [6]



References

[1] de Schrijver et al. (2023), Environmental Research: Health 1.2: 025003; [2] Lungman et al. (2023), The Lancet 401.10376: 577-589; [3] <https://www.adaptwest.com.au/mapping/heat-maps>; [4] Huang et al. (2023), Nature communications 14.1: 7438; [5] Anguelovski et al. (2019), Proceedings of the national academy of sciences 116.52 (2019): 26139-26143; [6] Esperon-Rodriguez et al. (2022), Nature Climate Change 12.10: 950-955.