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## **Hessian action plan for the prevention of heat induced health impairments of the population**

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### **Background**

In his 4th Assessment Report, the Intergovernmental Panel of Climate Change (IPCC) concludes that the frequency and the duration of hot days and heat waves will increase even in Germany within the next decades. Targeted prevention measures can reduce heat related morbidity and mortality. The World Health Organization (WHO) recommends the implementation of heat-health action plans. The stated aim of the HEAT project was to develop a proposal for a heat-health action plan for Hesse.

### **Methods**

34 interviews with representants of the public administration and the health care system were analysed focusing the success factors and the fields of structural weakness of the existing heat-health warning system in Hesse.

Based on a review of the literature, on specific informations available on governmental websites and on expert interviews, heat-health action plans and health protecting measures of seven EU member states were assessed. Examples of best practice were identified and their transferability into Hesse was discussed.

We conducted a feasibility study of a heat-related health monitoring of mortality and morbidity in Hesse exploring the views of data owners on barriers and options for data transfer and contrasting the results with the current legal framework for the use of personal data.

On this basis a concept for a heat-health action plan for Hesse was developed, discussed, and modified.

### **Results**

At the time the survey was conducted the heat warnings of the German weather service reached the public health authorities reliably. Nursing homes work systematically along a tailored heat-health action plan and are evaluated by the relevant authority. There is evidence that the other health care providers do not receive the heat-health warnings systematically.

Heat-health action plans in Europe include a heat-health warning system, action plans on different levels and a monitoring or surveillance system of heat-related mortality resp. morbidity. The action plans of the EU states address health care authorities and health care providers from national to regional level. They consider regional factors that modulate climate and weather and are based on empirical evidence concerning the special characteristics of vulnerable groups in the very member state or special circumstances that modify the exposure or the susceptibility to heat. The action plans include mandatory measures as well as recommendations for further development.

Developing and implementing a monitoring system for heat-related mortality require the adaptation of the legal framework as well as the implementation of structures for secure data transfer and the allocation of adequate resources.

**Conclusion**

Within the given structures the heat-health warning system in Hesse could be developed further into a heat-health action plan. A legal framework for monitoring heat-related mortality and / or morbidity should be established. Preventive and health protection measures should meet the needs of vulnerable groups and should be developed involving local actors of the health care sector.