



Heat and Health Forecasts in the Netherlands

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Even in a small country by the sea heat related health problems may occur. In 2006 two people died in a major International Four-Day Walking Event (40000 people walk 40km per day around the city of Nijmegen) because of temperatures close to 35 degrees. The event was cancelled after the first day and 40000 people were asked to go home (for some as far as Boston or Tokyo !). This, as well as the general heat problems during 2003 and 2006, for mainly elderly people, triggered the Government to develop a Heat Plan: a set of actions to be taken in case of extreme heat conditions.

Part of the Heat Plan is a Heat and Health Warning System (HHWS). This summer the Netherlands Weather Service KNMI and the National Health Institute RIVM have started such an HHWS. KNMI is responsible for the meteorological part whereas RIVM will judge the health consequences, resulting in a joint warning bulletin. The early warning, in probabilistic form, is based on the ECMWF ensemble system and will be distributed to all the Health Stakeholders. The final warning, when the Heat Wave is imminent, will also be issued to the General Public.

In this presentation we will discuss experiences sofar, the selection of the proper heat-wave thresholds and the selection of the probability thresholds for the early warning system. We will compare our system with the HHWS in other countries, and the link of the Dutch HHWS to Meteoalarm and Euroheat. Currently we have an absolute temperature threshold for the heatwave (for a 5-day interval), but we like to move over to a relative system.