

Authors and Title	Data			Short description	
	Investigation period	Variables	Temporal resolution		
Burkart et al. 2013: Interactive short-term effects of equivalent temperature and air pollution on human mortality in Berlin and Lisbon.	1998-2010	Deaths; all causes	Day	State of Berlin	Investigation of effects of heat, cold and air pollutants; calculation of mortality risks
		Universal Thermal Climate Index (UTCI), calculated on the basis of meteorological parameters		DWD station Tempelhof	
		PM ₁₀ , ozone		BLUME stations Neukölln, Wedding, Buch	
Fenner et al. 2015: Inner-city air temperature as indicator of health-related loads in cities, using the example of Berlin ("Innerstädtische Lufttemperatur als Indikator gesundheitlicher Belastungen in Großstädten am Beispiel Berlins").	2001-2010	Deaths; all causes; age groups (in total, 0 – 64, 65+)	Day	State of Berlin	Investigation of thermal effects dependent on climatic conditions differing across the inner-city; quantification of excess mortalities on the basis of the heat event based risk model by Scherer et al. 2013
		Air temperature		DWD stations Tegel, Tempelhof, Urban Climate Observation Network stations (TU Berlin) Dahlemer Feld, Dessauer Straße	
Gabriel and Endlicher 2011: Urban and rural mortality rates during heat waves in Berlin and Brandenburg.	1990-2006	Deaths; all causes; age groups (< 50, > 50); gender	Day	State of Berlin; boroughs	Epidemiological study; investigation of thermal effects; calculation of heat-related excess mortalities
		Meteorological parameters; perceived temperature		DWD stations Tempelhof, Dahlem	
		Land use (degree of imperviousness)	Year	State of Berlin	
Jehn et al. 2013: Telemonitoring reduces exacerbation of COPD in the context of climate change—a randomized controlled trial.	June 1-August 31, 2012	Lung function, clinical status (CAT), 6-min walking test	Day	State of Berlin	Clinical study with 62 COPD patients; investigation of thermal effects; telemedical study
		Days of thermal load based on the air temperature		DWD station Tempelhof	
Jehn et al. 2014: Heat Stress is Associated with Reduced Health Status in Pulmonary Arterial Hypertension: A Prospective Study Cohort.	April 1-September 30, 2011	Steps, symptom score	Day	State of Berlin	Prospective cohort study with 15 PAH patients; investigation of thermal effects by means of activity and symptom monitorings
		Days of thermal load based on the air temperature, humidity		DWD station Tempelhof	
Scherber 2014: Impacts of thermal load and air pollution on fully inpatient admissions and deaths in hospitals during summer months in Berlin and Brandenburg ("Auswirkungen von Wärme- und Luftschadstoffbelastungen auf vollstationäre Patientenaufnahmen und Sterbefälle im Krankenhaus während Sommermonaten in Berlin und Brandenburg").	1994-2010	Patient admissions and deaths in hospitals; all causes, RS, CVS; age groups (in total, 0-14, 15-44, 45-64, 65-74, 75+)	Day	State of Berlin	Investigation of thermal and air pollutant effects; spatial analyses; projections for heat-related morbidity and mortality
		Universal Thermal Climate Index (UTCI), calculated on the basis of meteorological parameters		DWD stations Tempelhof, Tegel, Schönefeld	
		Ozone, PM ₁₀ , NO ₂		BLUME stations Buch, Wedding, Neukölln	
Scherber et al. 2014: Spatial analysis of hospital admissions for respiratory diseases during summer months in Berlin taking bioclimatic and socio-economic aspects into account.	2000-2009	Patient admissions in hospitals; RS; age group 65+	Month	Postcode areas	Spatial analysis of the risk for RS hospital admissions taking socio-economic factors and thermal load into account
		Social index	Year		
		Annual mean days of thermal load			
Scherer et al. 2013: Quantification of heat-stress related mortality hazard, vulnerability and risk in Berlin.	2001-2010	Deaths; all causes; age groups (in total, 0 – 64, 65+)	Day, month	State of Berlin	Investigation of thermal effects; quantification of excess mortalities on the basis of a heat-event-based risk model
		Air temperature		DWD station Tempelhof	
Schuster et al. 2014: Heat mortality in Berlin – Spatial variability at the neighbourhood scale.	2006-2010	Deaths; all causes	Month	Planning areas	Inner-city spatial analysis of heat-related excess mortality risks
		Air temperature; DWD heat alerts		DWD stations Tempelhof, Tegel, Schönefeld	
Turowski and Haase 1987: Meteoropathological study of the climate and weather dependency of mortality ("Meteoropathologische Untersuchung über die Klima- und Wetterabhängigkeit der Sterblichkeit").	1958-1967	Deaths; differentiated according to causes, age groups, gender	Day, month	East Berlin, inner and outer boroughs	Investigation of the weather influence; calculation of excess mortalities
		Meteorological parameters			

Abbreviations

RS: diseases of the respiratory system
BLUME: Berlin Air Quality Monitoring Network
CAT: COPD Assessment Test
COPD: chronic obstructive pulmonary disease
DWD: German Meteorological Service
CVS: diseases of the cardiovascular system
PAH: pulmonary arterial hypertension