WINTER DAMAGE IN GERMANY SIGNIFICANT EVENTS BETWEEN 1970 AND 2009 - THE 10 MOST EXPENSIVE EVENTS FOR THE ECONOMY

Period	Event	Affected Area	Losses (US\$m,) original values		Deaths	Explanations, descriptions
			Overall	Insured		
			losses	losses		
JanFeb. 1985	Cold wave	Entire country	350	200		Temperatures -30°C. 150,000 water pipes broken. Number of claims: 170,000
26.12.1996-8.1.1997	Cold wave	Entire country, esp. Saxony, Leipzig; Saxony-Anhalt, Magdeburg	300	200	45	Temperatures -20 °C, ice. Water pipelines burst. Waterways, rivers blocked by ice, shipping affected (Elbe, Danube, Elbe-Havel canal, Danube-Main canal), ferry services (North Sea, Baltic Sea) disrupted. 743 vessels ice bound. Significant uninsured losses to shipping industry. Road and air traffic disrupte Also affected: Eastern Europe.
2527.11.2005	Winter Storm Thorsten, winter damage	NW, W, Northrhine Westphalia, Münsterland, Borken, Laer, Steinfurt, Coesfeld, Düsseldorf; Lower Saxony, Osnabrück	300	150		Wind speeds up to 100 km/h, heavy rain and snowfall, freezing rain, icing. Power lines downed, 50 pylons damaged/destroyed, 250,000 people without electricity. Air/rail/ road traffic severely affected, >2,000 traffic accidents (180 injured). Also affected: Belgium, France, Netherlands, Spain, United Kingdom.
22.12.1986-17.3.1987	Winter damage, frost	N, C, S, Berlin, Bremen, Lower Saxony, North-Rhine Westphalia, Hesse, Bavaria	200	100		Temperatures -25.6°C recorded (Munich). 5 frost periods. Rivers frozen over. Losses to infrastructure. River traffic disrupted, partially suspended. Major losses to agriculture (winter kill).
1820.1.1997	Winter damage	C, S, esp. Hesse, Frankfurt	140	110		Freezing rain, ice. Air traffic disrupted, road traffic affected, many road accidents. Losses to agriculture (winter kill).
713.2.2006	Winter damage	S, Bavaria, Passau, Regen, Straubing, Toeging, Deggendorf, Zwiesel, Traunstein, Ruhpolding, Schwandorf, Freyung-Grafenau, Bischofsgrün	100	15	2	Heavy snowfall, snow pressure. Several storage buildings, shopping centres damaged/destroyed. Road traffic affected, traffic accidents. Schools closed. Injured: >13. Also affected: Austria, Czech Republic, Poland.
28.12.1978-4.1.1979	Winter damage, winter storm	N, E, Schleswig-Holstein, Nordfriesland, Schleswig-Flensburg, Flensburg, Rends- burg-Eckernförde, Plön, Ostholstein, Fehmarn; Lower Saxony; Saxony; Thu- ringia; Mecklenburg-Western Pomerania	80		17	Heavy snowfall (87 hours), high wind speeds, storm surge, flood, frost (-25 °C), snowdrifts up to 5 metres high, ice. 150 villages cut. Road traffic disrupted/restricted, trains derailed, train services disrupted. River traffic affected, boats capsized. Power lines, 26 pylons downed, 80 villages without electricity, communication lines cut. Coal and steel production disrupted. Major losses to livestock (pigs, chickens, cattle). Also affected: Denmark.
18.2.1996	Cold wave	N, E, W, esp. Main-Danube-Canal	30	15		Temperatures -25 °C, extreme dry conditions. Rivers, channels, locks frozen, river traffic over a strech of 100 km suspended. Losses to barley and winter rape seed crops (winter kill).
24.4.1980	Winter damage	W, E, S, North-Rhine Westphalia, Saxony, Bavaria	20	5		Severest snowfall and rain since 1848, snow drifts, floods. Roads, motorways blocked, train services disrupted, many road accidents. Trees, high voltage pylons downed, losses to power plants, power failures.
1719.12.1997	Winter damage	W, SW, NE, C, Baden-Württemberg; Rhineland-Palatinate, Mainz; Hesse; Saarland, Saarbrücken; Lower Saxony; Brandenburg; Bavaria, Nuremberg	6		7	Freezing rain, ice, frost. Water pipelines damaged. Roads, motorways blocked, road traffic affected, >1,000 road accidents. Schools closed. Injured: hundreds Also affected: United Kingdom, France, Switzerland.