



## Weather-related fatalities in Poland

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Every year in Poland severe weather phenomena such as severe wind gusts, lightnings, heavy rain and tornadoes kill on average 8 people. Hence, it is essential to research the particular death circumstances to set the proper way of education for better weather-related fatalities mitigation. This kind of research was not analysed in Poland yet. Furthermore, the number of people injured or dead can be considered as a better climatological measure of the severe weather phenomena variability. In this study we investigated all severe weather-related fatalities to obtain which particular cause makes the highest percentage of deaths.

In our research we used ESWD data concerning severe weather reports from Poland from the period 2010-2018. Our analysis didn't reveal clear spatial patterns in the fatalities and injuries. ESWD data was thoroughly analysed using source information (mostly from media) of the particular death cause. Annual and diurnal distribution of the victims strongly correlates with the storm distribution in Poland. Severe weather associated with deep moist convection were responsible for majority of deaths. The highest number of victims is linked to strong wind gusts. Lightnings led to the second highest number of deaths. The particular death causes were mostly related to safety rules breaking. The multiannual distribution of injuries is highly variable, while the death number keeps the similar level. The injuries number is more variable. Nevertheless, the study period is too short to conclude on it.

Within the group of all severe weather reports, the highest number concerns severe wind gusts. Significant part of reports refers to excessive rain, large hail and damaging lightnings. Other severe phenomena make only a few percent of all severe weather reports.