



**1<sup>st</sup> ICOS-PH**  
INTERNATIONAL CONFERENCE  
ON SAFETY AND PUBLIC HEALTH



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# ABSTRACT BOOK



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## Climate Factors and Dengue Fever Occurrence in Makassar during Period of 2011-2017

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### Abstract

**Objective:** Dengue fever is a global burden because of high cases number. Climate factors became determinant of the mosquito's growth. Mosquito as a vector is very sensitive to their environment especially climate condition which are temperature, rainfall, humidity and wind speed. The aim of this study was to analyze the correlation between climate factors (temperature, rainfall, humidity, wind speed) and dengue fever cases in Makassar 2011-2017.

**Methods :** It was quantitative study and analyzed by using General Estimating Equation (GEE). Gee was used to know the correlation of independent and dependent variable and also showed the model of variables. This study located in Makassar by using secondary data from Health District Office of Makassar Dengue Fever Cases Data and Meteorological, Climatological, and Geophysical Agency of Makassar for climate data from January 2011 to December 2017.

**Results :** The result showed significant correlation between climate variables that has been researched which were temperature, humidity, rainfall, and wind speed to dengue fever cases.

**Conclusions :** As a conclusion, humidity had strongest correlation to dengue fever cases. It also showed positive correlation, while other showed negative correlation.

**Keywords:** Dengue, temperature, rainfall, humidity, wind speed.