

CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Project Number

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S0916

Project Title

An Analysis of the Relationship between Climate Change and Lyme Disease

Abstract

Objectives

The objective of this study is to demonstrate the connections between climate change and Lyme disease.

Methods

Using online databases, such as data from NASA, NOAA, the National Weather Service, and CDC, we compiled information regarding Lyme disease cases, temperature, etc. This data was used to do a comparative analysis.

Results

Although a general trend was shown when comparing cases and temperature anomaly, no clear connection was demonstrated when studying temperature, further research into factors such as humidity and precipitation is necessary to create a predictive model.

Conclusions

Further studies would allow us to estimate the number of cases of Lyme disease that would be expected if the change in climate stays on the same trend and if nothing is done to prevent the number of infections from going up.

Summary Statement

We demonstrated the relation between climate change and the rise in cases of Lyme disease.

Help Received

All data was taken from online resources that are publicly available. Besides small amount of advice from our science teacher, our project was done independently at home.