

# CALIFORNIA SCIENCE & ENGINEERING FAIR 2018 PROJECT SUMMARY

Name(s)

Anna I. Nunez

**Project Number** 

J0419

## **Project Title**

# **Education and Exposure to Overcome Medical Phobia**

## **Abstract**

# **Objectives/Goals**

The objective of this study is to determine the effect of education and exposure on stress levels, as measured by blood pressure.

#### Methods/Materials

One sphygmomanometer, two full body Tyvek biohazard suits, safety goggles, face masks, latex gloves, two volunteers, and 7th and 8th grade male and female test subjects with consent forms. Took preliminary blood pressure. Gave half the subjects education and exposure to the Tyvek biohazard suit and procedures. Blood pressure taken again with volunteers in full protective gear.

#### Results

When blood pressure was taken by volunteers in Tyvek suits, nearly all test subjects blood rose. A single session of education and exposure had no effect on blood pressure.

#### **Conclusions/Discussion**

Limited education and exposure revealed no statistical difference on blood pressure. All test subjects showed stress. It is concluded that the amount of education and exposure was not sufficient to have a significant effect on test subjects.

# **Summary Statement**

As measured by blood pressure, I found that a single exposure to biohazard suits and education in their use did not reduce stress levels in test subjects.

### Help Received

I developed the idea by myself after watching a documentary by Samaritan's Purse, a humanitarian aid organization. My science teacher gave me materials and access to test subjects.