

# CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

**Project Number** 

S0412

Name(s)

Lindsey E. Greenwood

# **Project Title**

# How Childproof Are Childproof Medicine Bottles?

# **Objectives/Goals**

#### Abstract

The objective of my project is to determine if childproof medicine bottles are actually childproof. **Methods/Materials** 

Informed consent was given by parents of 20 kindergarteners. Each subject was given 5 different types of medicine bottles, and given 1 minute to attempt to open bottle without being shown. Then without verbal prompt each subject was shown how to open each different bottle, and given another minute to attempt to open bottle. (1 minute per bottle given) Success was measured in male vs. female and success of opening after being shown.

Materials included: stop watch, 20 subjects, 5 different medicine bottles.

#### Results

Childproof medicine bottles are not childproof and a child can get a childproof medicine bottle open in less than 1 minute. Out of the 5 different types of childproof containers, Children's Motrin was the the most childproof. Males had a higher success rate in opening the bottles without being shown. Success rate for both male and females went up after being shown how to open. Longs Drugs was the least childproof, Children's Motrin brand was the most childproof.

# **Conclusions/Discussion**

Childproof medicine bottles are not childproof and a child can get a childproof bottle open in less than 1 minute. Out of the 5 different type of childproof bottles, Children's Motrin brand bottle was the most childproof. Males had a higher success rate in opening all bottles without being shown. All medicine bottles should be kept out of reach of children.

#### **Summary Statement**

This project was performed to determine if childproof medicine bottles are actually childproof.

# Help Received

Father helped glue items to board, mother typed report, and Mr. Whittington advised on project.