

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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Project Number

J1328

Project Title

There's a Germ Out There. Can You Tell Me Where?

Objectives/Cools

Objectives/Goals

Does the Kitchen, the Bedroom, the Bathroom or the Living Room harbor the most germs? If the Living Room harbors the most germs, is there a relationship between the amount of germs and the frequency of touch?

Abstract

Methods/Materials

Materials: Shoebox, 7 petri dishes, Agar, sterile cotton swabs, Neosporin for control. Wipe samples from four rooms of the house were collected and observed during Phase I. Three wipe samples from areas in the room with the most germs were collected that receive a lot of touch (computer mouse, remote control, telephone) and three wipe samples from relatively untouched areas (window sill, and fan, and lamp shade) were collected using sterile cotton swabs. One control (neosporin) sample was collected. The wipe samples were grown in petri dishes and observed for eight days. Colonies, sizes, and types of bacteria and fungi were recorded in data tables.

Results

The areas that had a lesser frequency of touch grew more bacteria and fungi.

Conclusions/Discussion

The living room (the remote control) had the most germs in the Phase I sampling. Because the remote control had the most germs, I thought it was because it was touched a lot. However, in Phase II, the untouched areas grew the most bacteria and fungi. My conclusion is that areas that are not touched so often grew more microbes because they were not disturbed, while the areas that are touched might have grown less since they are cleaned every so often.

Summary Statement

My project is about which areas of the house have the most germs and if there is a relationship between the amout of germs and how frequently the areas are handled or touched.

Help Received

My mother helped cut out display title letters.