

Layne McCaleb

Junior Division Microbiology

Purell, Does It Really Kill 99.99% Bacteria?

The purpose of this project is to see if Purell hand sanitizer really kills 99.99 % of bacteria. The materials used in this project are Petri dishes, quarters, agar, cue tips, a microscope, a hand lens, computer, and a camera. The researcher hypothesizes that the Purell hand sanitizer does kill 99.99% if bacteria. The procedure of this project was as follows: The researcher swiped the quarters with cue tips and rubbed these of the agar. The researcher waited four days and then counted the number of bacteria on the agar. The researcher than swabbed the Purell on the quarters and then swiped that with a cue tips and rubbed these on agar. After waiting four days the researcher concluded that her hypothesis was incorrect. The data showed that the Purell only killed 72% of the bacteria. The researcher found that many diseases can be caused by bacteria. The diseases are: diphtheria, meningitis, strep throat, toxic shock syndrome, cholera, Lyme diseases, salmonella, tuberculosis, chicken pox, hepatitis, influenza, measles, and mumps.